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Bioshares

20 July 2022
Edition 921

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

Companies covered: **Half Year Review,
NII**

	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)	-35.8%
Year 8 (May '08 - May '09)	-7.4%
Year 9 (May '09 - May '10)	50.2%
Year 10 (May '10 - May '11)	45.4%
Year 11 (May '11 - May '12)	-18.0%
Year 12 (May '12 - May '13)	3.1%
Year 13 (May '13 - May '14)	26.6%
Year 14 (May '14 - May '15)	23.0%
Year 15 (May '15 - May '16)	33.0%
Year 16 (May '16 - May '17)	16.8%
Year 17 (May '17 - May '18)	-7.1%
Year 18 (May '18 - May '19)	-2.3%
Year 19 (May '19 - May '20)	39.5%
Year 20 (May '20 - May '21)	86.8%
Year 21 (May '21 - May '22)	-15.6%
Year 22 (May '22 - Current)	-7.8%
Cumulative Gain	1483%
Av. Annual gain (21 yrs)	19.0%

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Worst Biotech Half on Record – Sector Down 41%

The first half of 2022 has seen the worst share price performance on record for the Australian biotech sector. The 129 small-medium cap listed biotech companies fell by 41.5% over the last six months.

The response is due to the obvious fallout from the Russian invasion of the Ukraine with escalating costs of fuel and food as well as uncertainty around social and economic stability, initially in the European region. The appetite for risk has plummeted if the bitcoin price can be used as its surrogate measure, falling by 63% over the period.

The biotech sector performance now eclipses the fall from the start of the pandemic when the Bioshares Index fell by 28% over the October 2019 - March 2020 period, and the 39% fall in the first half of 2008 during the GFC. However, it is worth noting that in the 12 months following these periods, the biotech sector bounced back strongly by 68% and 102% respectively.

Index Performance

	Q3 2021	Q4 2021	1H 2022	Change in 12 mths
Bioshares Index	1.3%	-3.8%	-41.5%	-44.7%
Bioshares Large Cap Index	5.2%	-2.2%	-10.9%	-8.3%
Bioshares Botanicals Index	0.2%	10.8%	-53.3%	-40.3%
Nasdaq Biotech Index	-1.2%	-7.0%	-20.7%	-27.2%
ASX 300 Index	0.3%	1.7%	-12.2%	-10.4%

Continued over

Positive Phase II Study Results for Neurotech International in Autism

Neurotech International (NTI: \$0.071) has released the results from its Phase II study in children with moderate autism spectrum disorder (ASD). The study involved 14 children who were treated with the proprietary medicinal cannabis strain which contains less than 0.3% THC, which is the main psychoactive constituent of cannabis.

Thirteen of the 14 children showed an improvement in the main measure of the Global Improvement scale (93%), with two thirds having a 'much improved' outcome. There were over 2,000 assessment points which included anxiety, irritability and participation. Importantly there were no effects of drowsiness observed. Only one child recorded no improvement.

The study was conducted at Monash University under Professor Michael Fahey. Professor Fahey said the trial had a rigorous design with encouraging outcomes achieved.

Continued over

– Half year review cont'd from page 1

The extreme volatility in the sector is surprising given the increasing maturity of programs (see clinical trial update on pages 4-5) and the record level of cash that has been raised by biotechs (\$1.8 billion in 2021). Only 12 of the 156 biotechs recorded an elevated share price in the first half of 2022.

The Bioshares Large Cap Index was down just 10.9% for the half, similar to the broader market (-12.2%) and the Nasdaq Biotech Index was down 20.7%, just half of the fall in the local small-medium cap biotechs. Medicinal Cannabis companies were down 53%, with Neurotech International being one of the positive stocks over the half, up 16.7%.

Capital Raises

There was a strong start to capital raises this year with Telix Pharmaceuticals raising \$175 million at \$7.70 per share. It was fortuitous timing executed one month before the Russian invasion. However, Telix cancelled its share purchase plan due to the deteriorating market conditions.

A total of \$387 million was raised (see page 3) in the half (the Alcidion and EBR Systems raises were not included in the previous Sector Review), with Telix's raise making up 45% of the total raise. Other significant raises were by Trajan Group Holdings, which raised \$30 million following on from its IPO last year (raising \$50 million) to fund the purchase of Chromatography Research Supplies for \$62 million.

Anteris Technologies made a placement to raise \$28 million to fund its aortic heart valve program. Universal Biosensors raised \$25 million through a rights issue at \$0.77 a share, Next Science raised \$15 million and Chimeric Therapeutics raised \$14 million to fund its novel CAR-T programs. Kazia has implemented an At-the-Market facility as an alternative fund-raising mechanism.

There were two IPOs completed in the half. One by microbiome company Microba Life Sciences, which raised \$30 million (at \$0.45 per share) and the other by Firebrick Pharma, which raised \$7 million (at \$0.20 per share). Firebrick Pharma is developing an antiviral for the treatment of the common cold and Covid-19.

Companies Exiting the Sector or Reducing Operations or Costs

Sleep oral appliance company Oventus has placed itself into voluntary administration. Palla Pharma has moved into liquidation. StemCell United remains in voluntary suspension. Hexima's future direction is unknown following its failed study with its lead drug candidate for the treatment of onychomycosis.

Exopharm has announced significant cost cuts citing the deteriorating financial markets. The COO and VP of Finance have left the company. Lumos Diagnostics is also implementing a cost reduction program, reducing its staff by 55% to 55 people. It is also reviewing all future discretionary spending. Osprey Medical is restructuring its business, reducing its workforce across all areas.

Continued on page 13

– Neurotech cont'd from page 1

According to Neurotech CEO Alexandra Andrews, all of the children are continuing on treatment in an extension study following requests from parents who were 'delighted' with the outcome. The severity of illness was judged by caregivers as having improved over the treatment period (from an average score of 4.4 to 3.6). The therapy was well tolerated up to the highest daily dose of 20mg/kg. Side effects noted were minor and mainly digestive related.

Next is a Phase II/III study in Australia that will seek to recruit between 50 – 100 children with ASD. That study is expected to start this quarter. Strong demand to participate is expected from patient families at Monash Children's Hospital according to Neurotech chairman Brian Leedman.

Neurotech is capitalised at \$50 million with \$2.3 million in cash at the end of March. A longer and larger study will help strengthen the data package around this asset. That patients are continuing on treatment supports the potential safety-benefit profile of this drug candidate. The distinctive aspect of NTI164, from other medicinal cannabis therapies, is that due to its very low THC levels – THC is responsible for the mood-altering characteristics of cannabis – its safety profile has been confirmed to be benign. Andrews said that other medicinal cannabis studies in autism have shown signs of sedation which NTI164 did not.

Autism is a large unmet need with the lack of patient-friendly, long-term therapies available. Neurotech is also looking to start a trial in cerebral palsy early next year. Other indications, such as ADHD, which are prescribed the same therapy as ASD, are also a potential indication for NTI164.

A larger US study in autism is planned for the end of 2023.

Bioshares recommendation: **Speculative Buy Class B**

Bioshares

Capital Raisings by ASX-listed Life Science Companies, 1H 2022

Company	Code	Investment Manager or Investor	Type of Raising	Funds Raised (\$M)	Share price
Telix Pharmaceuticals	TLX	Jefferies (Aust), Talyor Collison, Wilson Corp Finance	Placement	\$175	\$7.70
Alcidion*	ALC	Canaccord Genuity (Aust) & Henslow	Placement & Rights Offer	\$55.00	\$0.25
Trajan Group Holdings	TRJ	Canaccord Genuity (Aust) and Ord Minnett	Placement	\$29.70	\$2.00
Anteris Technologies	AVR	Perceptive Life Sciences Maser Fund	Placement	\$28.00	\$15.00
Universal Biosensors	UBI	Underwritten by Viburnum Funds	Rights Offer	\$25.2	\$0.77
Next Science	NXS	Canaccord Genuity & Wislon Corp Finance	Placement & Rights Offer	\$14.80	\$0.87-\$0.90
Chimeric Therapeutics	CHM	Bell Potter Securities	Rights Offer	\$14.40	\$0.17
Lumos Diagnostics	LDX	Bell Botter Securities and Wilson Corp Finance	Rights Offer	\$11.20	\$0.19
Oncosil Medical	OSL	Forrest Capital	Placement & Rights Offer	\$10.00	\$0.05
Rhythm Biosciences	RHY	Bell Potter Securities	Placement	\$6.50	\$1.40
Argenica Therapeutics	AGN	Euroz Hartleys	Placement	\$5.50	\$0.40
Rhinomed	RNO	Bell Potter Securities	Rights Offer	\$4.90	\$0.19
Creso Pharma	CPH	EverBlu Capital	Placement	\$4.70	\$0.07
Arovella Therapeutics	ALA	Baker Young	Placement	\$4.60	\$0.038
Painchek	PCK	Canaccord Genuity	Placement	\$3.00	\$0.028
Arovella Therapeutics	ALA	Baker Young	Rights Offer	\$2.00	\$0.038
Tali Digital	TD1	Taylor Collison	Rights Offer	\$1.70	\$0.011
Bio-Gene Technology	BGT	'strategic investor'	Placement	\$1.50	\$0.20
Tali Digital	TD2	Taylor Collison	Placement	\$1.50	\$0.011
Total Brain	TTB	Zoltan Varga	Convertible Note	\$1.30	\$0.138
Living Cell Technologies	LCT	Alignment Capital	Placement	\$1.30	\$0.005
Adalta	1AD	Lodge Partners	Rights Offer	\$1.25	\$0.073
Medibio	MEB	-	Rights Offer	\$0.70	\$0.005
Epsilon Healthcare	EPN	-	Placement	\$0.60	\$0.034
Chimeric Therapeutics	CHM	L1 Capital (up to \$30M facility)	Equity Placement Facility	\$0.50	\$0.10
Medibio	MEB	CPS Capital Group	Placement	\$0.50	\$0.0015
total				\$405.4	

Capital Raisings by ASX-listed Life Science Companies, Q4 2021 (Cont'd)**IPOs**

EBR Systems*	EBR	Bell Potter /Morgans/Wilson Corp Finance	IPO	\$110	\$1.08
Microba LifeSciences	MAP	Bell Potter Securities / Canaccord Genuity (Au)	IPO	\$30	\$0.45
Firebrick Pharma	FRE	Euroz Hartleys	IPO	\$7	\$0.20

Total raised in 1H 2022 **\$552**

Total raised in Q4 2021 **\$358**

Total raised in Q3 2021 **\$488**

Total raised FY2022 \$1,398

* Completed in December quarter

Selected Clinical Trial Developments & Product Launches - 1H 2022

Company	Code	Product/Application	Event
Imugene	IMU	HER-Vaxx Phase Ib/II OS results	13.9 months OS compared to 8.3 months for control arm
Imugene	IMU	Vaccinia (CF33-hNIS)	First patient dosed in Phase I study in patients with solid tumours
Imugene	IMU	PD1-Vaxx in NSCLC	Of 12 patients, 1 CR, 1 PR and 7 SD
Imugene	IMU	CHECKvacc (CF33-hNIS-antiPDL1)	First three patients safely treated. Second cohort started.
Telix Pharmaceuticals	TLX	TLX591	First patient dosed in ProstACT SELECT Phase I study in prostate cancer
Telix Pharmaceuticals	TLX	TLX250-CDx	Enrolment completed (252 patients) in Phase III renal cancer imaging study
Telix Pharmaceuticals	TLX	Illuccix	Prostate cancer imaging product launched in US
Clinuvel Pharmaceuticals	CUV	Afamelanotide	Stroke study in 6 patients. 5 patients showed considerable improvement
EBR Systems	EBR	Pivotal study of WISE wireless pacemaker system	Completion of enrolment (183 patients). Results expected 1Q2023.
Mesoblast	MSB	remestemcel-L in ulcerative colitis and Crohn's colitis	12 of 48 patients treated. All patients with UC showed remission at 6 weeks. All patients with Crohn's showed remissions or positive responses at 3 months.
Paradigm Biopharmaceuticals	PAR	Zilosul	First patients treated in 938 patient Phase III study in Us and Australia with knee osteoarthritis
Immutep	IMM	IMP321	Final data from 114 patient Phase II study in NSCLC. ORR of 38.6%
Rhythm Biosciences	RHY	ColoSTAT	Study 7 in colorectal cancer detection in 737 patients: Sensitivity of 71%, specificity of 91%. (35% more accurate than gold standard FIT)
Rhythm Biosciences	RHY	ColoSTAT	ColoSTAT filed for approval in Australia
Impedimed	IPD	L-Dex	PREVENT study published: 7.9% lymphedema with L-Dex test, compared to 19.2% lymphedema cases with tape measure test
Clovercorp	CLV	Omega 3 fatty acid DHA	In study with 656 premature babies: those on DHA achieved a 3.5 point higher IQ than those receiving placebo
Genetic Signatures	GSS	3base SARS-Co-V-2 diagnostic	TGA approval for saliva test
Recce Pharmaceuticals	RCE	R327 novel anti-infective	Phase 1: Good safety data in Cohort 6 at 4000mg
Kazia Therapeutics	KZA	Paxalisib	30 patients with glioblastoma. Median OS of 15.7 months (compared to 12.7 months historically reported)
Kazia Therapeutics	KZA	Paxalisib + metformin + keto diet	Phase II study started: 30-60 patients with glioblastoma (one of eight studies in glioblastoma)
Lumos Diagnostics	LDX	ViraDx for COVID19/Flu A/Flu B test	Interim order authorisation received in Canada
Lumos Diagnostics	LDX	FebriDx to distinguish between viral and bacterial infections	Approval granted in Brazil. Approved also in Europe, UK, Canada, Australia and UAE. (FDA declined approval post June 30)
Bionomics	BNO	BNC210 (225mg and 675mg)	Phase II study started in anxiety in 150 patients. Results due end of 2022
Proteomics Int. Laboratories	PIQ	Endometriosis biomarker test	857 subjects: Statistically significant but no specificity or sensitivity data. Results to be presented in one month.
Clarity Pharmaceuticals	CU6	Prostate cancer diagnostic targeting PSMA	First of 50 patients treated in US study.
Anteris Technologies	AVR	DurAVR 3D aortic heart valve	Second cohort of 8 patients at 30 days: 81% decrease in pressure gradient, with 300% increase in effective orifice area
Anteris Technologies	AVR	DurAVR 3D aortic heart valve	Cohort 1 of 5 patients at 6 months: Marked improvement since 3 months, peak mean pressure gradient down 86%, 6 min walk test improved 46%

Selected Clinical Trial Developments & Product Launches - 1H 2022 (cont'd)

Company	Code	Product/Application	Event
Noxopharm	NOX	Veyonda + doxorubicin in soft tissue sarcoma	Phase 1: First patient of 30 dosed as first line therapy
Orthocell	OCC	Remplir for nerve reconstruction	At 24 months, 85% repair of damaged nerves with functional recovery
Orthocell	OCC	Remplir for nerve reconstruction	Approved for use in Australia
Dimerix	DXB	DMX-200 for FSGS (kidney disease)	First patient of 286 dosed in Phase III study. Interim analysis in first 72 patients 1H 2023
Cynata Therapeutics	CYP	CYP-006TK in diabetic foot ulcers	First of 30 patients treated in Phase II study
Cynata Therapeutics	CYP	CYP-001 for GvHD	IND clearance received from FDA
Memphasys	MEM	Felix sperm separation device in IVF	First of 104 couples enrolled.
Biotron	BIT	HIV	Two Phase II studies commenced
Hexima	HXL	Peza defetide for onychomycosis	114 patient Phase II study. No effect. Program to be closed.
Pharmaxis	PXS	PXS-6302 for scar reduction	First of 50 patients treated in topical application of drug candidate
Chimeric Therapeutics	CHM	CORE NK	Phase I study in 9 patients completed. Moderately positive results. (See edition 914)
Chimeric Therapeutics	CHM	CLTX CAR T Phase I study	In second cohort, disease stability in 2 of 3 patients with glioblastoma
ResApp Health	RAP	COVID-19 test	941 patients. 92% sensitivity, 80% specificity
ResApp Health	RAP	COVID-19 test	1300 patients. 84% sensitivity, 58% specificity
NeuroScientific Biopharmaceuticals	NSB	EmtinB	Phase I study in healthy volunteers started. Candidate potential treatment for Alzheimer's disease and MS.
Invex Therapeutics	IXC	Presendin for treatment of 'idiopathic intracranial hypertension'	UK ethics approval to proceed with Phase III study in 240 patients treated for 6 months.
Bio-Gene Technology	BGT	Flavocide insecticide	Successful 9 month study to control 5 stored grain pests
Avecho Biotechnology	AVE	Topical CBD for pain relief	Small Phase II study. Significant improvement in pain and grip strength in patients with hand osteoarthritis and anxiety.
TrueScreen Group	TRU	Cervical cancer screening device measuring electrical and optical signals with algorithm	15,661 women over 3 years tested. 87.5% sensitivity and 88.4% specificity (better than liquid-based cytology on both measures).
Incannex Healthcare	IHL	IHL-42X (THC + acetazolamide)	10 patient study. At low dose, 62.5% reduced apneas by more than half. Statistical sig result in low and medium dose compared to baseline.
MGC Pharmaceuticals	MXC	CogniCann (medical cannabis oil) for dementia	22 patient study, average age 85, 6 weeks treatment. Result: stable using NPI-NH score. Placebo deteriorated. Improvement in aggressive behaviour.
Zelira Therapeutics	ZLD	Hope 1 cannabinoid for Autism	Close to 70% of patients (from 45 patients) achieved a moderate therapeutic effect. 25 adverse events in 9 patients.
Zelira Therapeutics	ZLD	Zenivol for insomnia	In real world setting assessing 94 patients, 44% achieved subthreshold insomnia levels.
Neurotech International	NTI	NTI164 medicinal cannabis strain for autism	Successful Phase I/II study in 14 children (see page1)
Bod Australia	BOD	CBG cannabinoid for fibromyalgia, IBD and anxiety	In 50 patient study, 74% noticed improvement in their condition.
Firebrick Pharma	FRE	Nasodine for COVID-19	Phase II trial started in 210 subjects
Firebrick Pharma	FRE	Nasodine for common cold	Phase III trial started, aiming to recruit 450 subjects

Phase I

Phase II

Failed study

Phase III

Approved or in approval stage

The ASX-Listed Life Sciences Sector
30 June 2022: Capitalisation \$206 billion, 156 companies

Bioshares Large Cap. Index

Company	Code	Cap. \$m	Principal Activities	Change - Quarter	Change - Year	Price 30/06/22
CSL	CSL	129,608	Manufactures pharmaceutical products including vaccines and human plasma fractions	-7.5%	-5.1%	\$269.06
Resmed Inc.	RMD	44,930	Manufactures diagnostic and treatment equipment for sleeping disordered breathing	-14.2%	-6.4%	\$30.69
Cochlear	COH	13,070	Manufactures cochlear hearing implants	-8.1%	-19.0%	\$198.70
Telix Pharmaceuticals	TLX	1,418	Development of molecularly-targeted radiation (MTR) therapies and diagnostics	-41.5%	-23.4%	\$4.53
Blackmores	BKL	1,368	Manufactures vitamin, mineral and herbal supplements and skin & hair products in Australia and N.Z.	-22.9%	-3.3%	\$70.40
Imugene	IMU	1,056	Developing two B-Cell cancer vaccines, HER-Vaxx and PD1-Vaxx, and an oncolytic virus technology, CF33	-55.0%	-49%	\$0.18
Nanosonics	NAN	1,014	Developing a novel disinfection technology. The first product, on the market, is a point of care ultrasound probe disinfection unit, branded Trophon EPR	-46.8%	-42.0%	\$3.36
Polynovo	PNV	897	Developing and selling novel polymer-based products for treating wounds and burns	-11.1%	-51.1%	\$1.36
Clinuvel Pharmaceuticals	CUV	734	Markets an analogue of the alpha-MSH protein, named Scenesse, as a photo-protective agent	-45.4%	-50.8%	\$14.85
Pacific Edge	PEB	502	Commercialising a suite of bladder cancer test, to diagnose, triage and monitor patients. (Listed Q3 2021, primary listing in NZ)	-50.2%	-50.2%	\$0.62

Capitalisation Total 194,596

Bioshares Index (Cont'd)

Company	Code	Cap. \$m	Principal Activities	Change - Quarter	Change - Year	Price 30/06/22
Sigma Pharmaceuticals	SIG	614	Pharmaceutical manufacturing and wholesaling	20.8%	-3.3%	\$0.58
Neuren Pharmaceuticals	NEU	479	Developing neuroprotective therapeutics	0.8%	131.7%	\$3.80
Anteris Technologies	AVR	475	Application of proprietary ADAPT technology to treat tissue used in the manufacture of cardiovascular prostheses	122.2%	309.7%	\$28.80
Mayne Pharma Group	MYX	398	Manufactures, develops and markets generic drugs, with operations in Australia and the USA	-15%	-23%	\$0.25
Mesoblast	MSB	396	Developing cellular medicines to treat advanced heart failure, chronic low back pain and acute graft versus host disease	-56.7%	-69.4%	\$0.61
Opthea	OPT	382	Developing OPT-302 to treat wet AMD (an eye disease)	-15.1%	-14.4%	\$1.10
AFT Pharmaceuticals	AFP	351	Development and sale of pharmaceuticals in Australasia and Rest-of-World	-14.8%	-20.2%	\$3.35
Race Oncology	RAC	339	Completing the development of a chemotherapy drug, called Bisantrene, which was the subject of more than 40 phase II clinical studies during the 1980s and 1990s.	-45.8%	-47.2%	\$1.95
Starpharma Holdings	SPL	301	Developer of pharmaceutical chemical scaffolds known as 'dendrimers'	-44.8%	-51.6%	\$0.74
Trajan Group Holdings	TRJ	299	Develops and manufactures scientific instruments for life sciences sector (Listed Q2 2021)	-48.7%	-14.2%	\$2.00
Cogstate	CGS	263	Markets cognitive performance diagnostic products	-37.0%	9.7%	\$1.53
Immutep	IMM	251	Developing immuno-oncology drug candidates IMP761 and IMP321 (eftilagimod alpha)	-40.8%	-45.8%	\$0.29

Company	Code	Cap. \$m	Principal Activities	Change - Quarter	Change - Year	Price 30/06/22
Rhythm Biosciences	RHY	246	Developing Colostat, a blood test for the early detection of colorectal cancer	-25.8%	27.8%	\$1.15
Aroa Biosurgery	ARX	226	Manufacture and sale of wound healing and soft tissue reconstruction products	-35.3%	-40.0%	\$0.66
Paradigm Biopharm.	PAR	220	Developing pentosan polysulphate sodium to treat bone marrow oedema, joint pain and mucopolysaccharidosis type I	-48.8%	-53.8%	\$0.97
PYC Therapeutics	PYC	207	Developing VP-001 to treat retinitis pigmentosa	-51.9%	-56.7%	\$0.07
Probiotec	PBP	183	Manufacturer, marketer and distributor of a range of over the counter (OTC) pharmaceuticals, complementary medicines and speciality ingredients	2.3%	3.7%	\$2.25
Avita Medical	AVH	173	Markets ReCell, a skin repair product. Redomiciled to the US. Now Nasdaq listed and trades as CDIs. (20:1 share consolidation)	-59.4%	-74.2%	\$1.39
Genetic Signatures	GSS	166	Development and sale of molecular diagnostics (MDx) kits and products.	-35.2%	4.5%	\$1.16
Clovercorp	CLV	166	Development and production of omega-3 food additives from tuna oil	-42.0%	-44.6%	\$1.00
Recce	RCE	158	Development of broad spectrum antibiotics	-13.6%	-6.8%	\$0.89
Next Science	NXS	155	Commercialisation of anti-biofilm products	-42.2%	-51.5%	\$0.72
Alcidion	ALC	139	Specialist health IT solution provider	-60.0%	-71.1%	\$0.11
AnteoTech	ADO	129	Developer of a biological coatings technology that can be applied to immunoassays, bio-separations, drug delivery and other medical devices	-78.7%	-74.5%	\$0.07
4D Medical	4DX	123	Commercialising a lung function imaging technology (XV) which uses existing x-ray imaging systems combined with image processing methods to image the lung in motion	-56.3%	-51.2%	\$0.59
Mach 7 Technologies	M7T	117	Development and sales of an enterprise imaging management platform	-40.2%	-54.2%	\$0.49
Emvision Medical Devices	EMV	116	Exploiting low energy non-ionising microwave radiation to create 3D images, with the goal of developing a device to support the diagnosis of the two main types of stroke	-44.0%	-50.3%	\$1.50
ResApp Health	RAP	112	Developing digital healthcare solutions to diagnose and manage respiratory conditions	100.0%	217.1%	\$0.13
INOVIQ	IIQ	110	Developing cancer diagnostics and therapies. (30 for 1 share consolidation conducted). Formerly Bard1. Acquired Sienna Cancer Diagnostics in 2020.	-67.4%	-79.8%	\$1.20
Impedimed	IPD	109	Markets products that aid the diagnosis of secondary lymphoedema, muscle wasting and other disorders	-65.1%	-44.5%	\$0.06
Volpara Health Technologies	VHT	106	Markets breast density assessment tools and analytics, for use with breast x-ray screening programs	-59.6%	-64.7%	\$0.42
Medical Developments	MVP	104	Commercialising the Pentrox inhaler for temporary pain relief. Used widely in ambulances across Australia.	-70.8%	-68.3%	\$1.46
Prescient Therapeutics	PTX	101	Developing compounds to treat various cancers	-32.6%	-32.6%	\$0.16
EBR Systems	EBR	101	Developing wireless cardiac pacing system. (Listed Q4 2021)	-54.8%	-65.3%	\$0.38
Somnomed	SOM	100	Markets oral devices for the treatment of sleep apnea and snoring	-48.5%	-47.4%	\$1.21
Proteomics International	PIQ	98	Provider of protein chemistry analytical services. Seeking to commercialise a diabetic kidney disease diagnostic.	-23.5%	0.5%	\$0.93
Vita Life Sciences	VLS	96	Development, manufacture and distribution of prescription and OTC medicines as well as complementary and alternative medicines, dietary supplements and health foods	-5.3%	60.0%	\$1.80

Company	Code	Cap. \$m	Principal Activities	Change - Quarter	Change - Year	Price 30/06/22
SDI	SDI	95	Manufacture & distribution of amalgam (fillings) & other dental materials and product R&D	-21.2%	-9.6%	\$0.80
Cyclopharm	CYC	94	A nuclear medicine company that markets the Technegas lung imaging system	-38.1%	-38.5%	\$1.02
Clarity Pharmaceuticals	CU6	92	A clinical stage radiopharmaceutical company focusing on the use of targeted copper theranostics. (Listed Q3 2021)	-31%	-64%	\$0.51
Actinogen Medical	ACW	89	Developing Xanamem for the treatment of dementia in Alzheimer's disease patients	-68.8%	-60.0%	\$0.05
Kazia Therapeutics	KZA	86	Developing GDC-084 for the treatment of glioblastoma multiform (a brain cancer)	-51.0%	-53.4%	\$0.62
Orthocell	OCC	80	Developing and marketing regenerative medicine products	-20.6%	-34.1%	\$0.41
Universal Biosensors	UBI	78	Development, manufacture and commercialisation of a range of in vitro diagnostic tests for point-of-care use	-62.6%	-58.9%	\$0.37
Optiscan Imaging	OIL	68	Manufactures confocal microscopes for clinical diagnosis	-38.9%	-50.0%	\$0.11
Bionomics	BNO	68	Discovery and development of drugs to treat CNS diseases	-54.5%	-73.7%	\$0.05
Immuron	IMC	66	Sales and development of hyper-immune bovine colostrum products for therapeutic use	-40.8%	-45.8%	\$0.29
Medadvisor	MDR	65	Medication adherence software platform company	-57.0%	-44.3%	\$0.17
Micro-X	MX1	64	Development of a mobile medical x-ray imager for hospitals, a version for deployed military use and a mobile security back-scatter imager	-45.1%	-58.2%	\$0.14
Invion	IVX	58	Development of Photosoft, a photosensitiser derived from chlorophyll, which it is believed can accumulate selectively in tumours and be manipulated for therapeutic purposes.	-57.1%	-30.8%	\$0.01
Noxopharm	NOX	57	Developing a cancer treatment, NOX66, a formulation of idronoxil, which targets NADH oxidase 2.	-50.0%	-70.5%	\$0.20
Botanix Pharmaceuticals	BOT	56	Developing BTX1503 for the treatment of acne. BTX1503 combines synthetic cannabidiol with a transdermal drug delivery system, Permetrex.	1.8%	-38.0%	\$0.06
Microba LifeSciences	MAP	55	Developing therapeutics using microbiome derived drug candidates. Provides personalised microbiome testing and assessment. (Listed in 1H 2022)	-55.6%	-55.6%	\$0.20
Cynata Therapeutics	CYP	52	Stem cell technology company aiming to produce unlimited uniform, pharmaceutical grade MSCs from a single donor.	-33.9%	-30.8%	\$0.36
Antisense Therapeutics	ANP	50	Developing antisense compounds to treat multiple sclerosis and Duchenne Muscular Dystrophy	-61.5%	-64.3%	\$0.08
Firebrick Pharma	FRE	45	Developing nasal spray treatment for common cold.	32.5%	32.5%	\$0.27
Biotron	BIT	43	Developing a drug to treat HIV. Testing drug library against SARS-CoV-2	-37.1%	17.3%	\$0.06
Respiri	RSH	42	Respiratory and pulmonary devices company. Markets Airsona, an ehealth product	-14.1%	-22.5%	\$0.06
Patrys	PAB	41	Developing novel antibody therapies for a range of oncology indications. Focussed on 3E10, a cell penetrating antibody.	-45.9%	-63.6%	\$0.02
Oncosil Medical	OSL	40	Developing Oncosil, a brachytherapy for pancreatic cancer and liver cancer	-11.1%	-36.5%	\$0.04
Chimeric Therapeutics	CHM	39	Developing CART T therapy for solid cancers licensed from the City of Hope Cancer Center (Listed Q1 2021)	-64.6%	-71.7%	\$0.09
Dimerix	DXB	39	Developing a combination therapy, DMX200, to treat chronic kidney disease.	-51.0%	-40.0%	\$0.12
Radiopharm Theranostics	RAD	38	Developing radiopharmaceutical products for diagnosis and treatment of disease. (Listed Q4 2021)	-62.0%	-75.0%	\$0.15

Company	Code	Cap. \$m	Principal Activities	Change - Quarter	Change - Year	Price 30/06/22
Argenica Therapeutics	AGN	37	Developing therapeutics to reduce brain damage following stroke (Listed Q2 2021)	-48.5%	109.8%	\$0.43
Painchek	PCK	36	Commercialising a smartphone app which uses facial recognition technology to detect indications of pain. TGA cleared and CE Marked.	-47.2%	-53.3%	\$0.03
Vectus Biosystems	VBS	36	Developing an anti-fibrotic compound, VB0004, with applications in heart and kidney disease	-30.1%	-24.2%	\$0.99
Pharmaxis	PXS	36	Developer of Bronchitol, which is approved in Europe and the USA for the management of cystic fibrosis. Developing a suite of compounds from amine oxidase platform.	-45.8%	-24.4%	\$0.07
Imricor	IMR	35	Design, manufacture and sales of MRI-compatible products for cardiac ablation procedures to treat arrhythmias	-75.6%	-87.8%	\$0.25
CardieX	CDX	34	Development of wearable blood pressure measurement devices	-55.1%	-58.7%	\$0.31
Invex Therapeutics	IXC	33	Developing a formulation of the diabetes drug exanatide to treat idiopathic intracranial pressure and other indications	-29.8%	-21.4%	\$0.50
Rhinomed	RNO	33	Developing nasal stent technologies with applications for sport performance, sleep and drug delivery	-62.9%	-25.8%	\$0.12
Atomo Diagnostics	AT1	32	Manufactures rapid diagnostic test devices for OEM customers	-81.3%	-70.5%	\$0.06
Memphasys	MEM	32	Developing a sperm separation technology, Sperm Sep	-57.0%	-41.2%	\$0.04
Alterity Therapeutics	ATH	31	Developing PBT434 for synucleinopathies	-38.1%	-56.7%	\$0.01
Cryosite	CTE	31	Provides specialised storage services, especially for umbilical cord blood	35.5%	61.5%	\$0.63
Imagion Biosystems	IBX	30	Developing MagSense, a diagnostic technology which exploits the principles of superparamagnetic relaxometry	-64.5%	-72.7%	\$0.03
Lumos Diagnostics	LDX	29	Develops and sells POC diagnostics for inflammatory diseases and infections. Lead product, FebriDx, is a finger prick test to differentiate between bacterial & viral infection.	-86%	-89%	\$0.14
IDT Australia	IDT	28	Manufacturer of pharmaceutical ingredients to international standards for major pharmaceutical groups.	-54.9%	-64.6%	\$0.12
Genetic Technologies	GTG	28	Markets cancer risk tests	-40.0%	-66.7%	\$0.00
Compumedics	CMP	27	Develops, manufactures and markets sleep diagnostic and monitoring equipment.	-58.1%	-60.3%	\$0.16
Nova Eye Medical	EYE	27	Developing devices to treat glaucoma	-45.6%	-43.1%	\$0.19
Neuroscientific Biopharm.	NSB	26	Developing EmtinB, an LRP-1 receptor agonist for the treatment of Alzheimer's disease	-46.3%	-44.6%	\$0.18
Resonance Health	RHT	26	Markets FerriScan, a non-invasive tool for measuring liver iron levels	-60.0%	-68.9%	\$0.06
LBT Innovations	LBT	25	Developer of innovative products which deliver productivity benefits across a range of life science settings	-32.2%	-2.5%	\$0.08
Avecho Biotechnology	AVE	24	Commercialising a drug delivery system	-13.3%	-27.8%	\$0.01
Bio-Gene Technology	BGT	23	Commercialisation of the insecticides Flavocide (synthetic) and Qcide (plant-derived), in the fields of human health and crop protection.	-36.6%	-23.5%	\$0.13
PharmAust	PAA	22	Developing a veterinary anti-parasitic compound (PPL-1) as a human and animal cancer therapy	-30.0%	-24.7%	\$0.07
The Hydration Pharmaceutical Co.	HPC	21	Sells hydration liquids, powders and tablets in North America. Sold ANZ rights to Hydralyte in 2014 to Care Pharmaceuticals. (Listed Q4 2021)	-56.7%	-55.2%	\$0.13

Company	Code	Cap. \$m	Principal Activities	Change - Quarter	Change - Year	Price 30/06/22
Nyrada	NYR	21	Developing drugs to treat cardiovascular, neurological and chronic inflammatory diseases	-43.8%	-57.8%	\$0.14
Star Combo Pharma	S66	21	Develops, manufactures and markets nutritional and OTC products	-39.2%	-39.2%	\$0.16
Heramed	HMD	21	Commercialising a home pregnancy monitoring technology	-59.6%	-64.7%	\$0.10
Exopharm	EX1	20	Development of technology for improving the purification of exosomes, which are extra-cellular vesicles which transport bioactive molecules through out the body.	-75.0%	-78.3%	\$0.13
Allegra Orthopeadics	AMT	19	A developer and manufacturer of prosthetic implants and medical devices.	20.0%	-10.0%	\$0.18
Control Bionics	CBL	19	Design, manufacture and sale of wireless wearable electromyography (EMG) based augmentative and alternative communication (AAC) technology (Listed Dec 2020)	-47.1%	-67.6%	\$0.23
Regeneus	RGS	19	Commercialisation of autologous adipose derived stem cells and factors. Markets HiQCell for human use and CryoShot for veterinary use.	-23.8%	-17.6%	\$0.06
Amplia Therapeutics	ATX	19	Developing drug candidates to treat fibrotic cancers and fibrosis. Formerly Innate Immunotherapeutics.	-41.8%	-60.0%	\$0.10
Adalta	1AD	17	Developing AD-214 for the treatment of idiopathic pulmonary fibrosis (IPF) and other human fibrotic diseases	-32.5%	-62.8%	\$0.05
BCAL Diagnostics	BDX	17	Developing an in vitro diagnostic for breast cancer using fingerprints of lipid biomarkers. (Listed Q3 2021)	-36%	-68%	\$0.08
Bluechiip	BCT	16	Development, manufacture and commercialisation of a tracking system for biological samples	-44.9%	-43.8%	\$0.03
Adherium	ADR	15	Commercialising personal digital medication monitoring systems to improve patient compliance and medication efficacy	-36.4%	-58.8%	\$0.01
Arovella Therapeutics (Formerly Suda Pharm.)	ALA	15	Developing drugs for oro-mucosal administration. Recently acquired IP for anagrelide, with intent to develop it as an anti-cancer therapy	-41.0%	-67.1%	\$0.02
Truscreen	TRU	15	Commercialising cervical cancer screening device for real time detection of cancerous and pre-cancerous tissue (Listed Q1 2021)	-42.5%	-39.1%	\$0.04
Tissue Repair	TRP	15	Developing a biologically active pharmaceutical to stimulate wound repair pathways. Phase III trials to start in 2022. (Listed Q4 2021)	-54.1%	-78.3%	\$0.25
Biome Australia	BIO	15	Develops and sells evidence-based complementary medicines, including probiotics, 10 at listing. (Listed Q4 2021)	-37.5%	-62.5%	\$0.08
Acruz	ACR	15	Developer of topical generic drugs	-48.0%	-62.9%	\$0.05
IMEXHS	IME	15	Markets a radiology and imaging platform, in Latin and South America, and uses SaaS and PaaS revenue models. (Completed 50:1 consolidation)	-56.5%	-71.9%	\$0.45
Asian American Medical Group	AJJ	15	Manages liver treatment centres in Asia; expanding into radiation oncology	0.0%	15.2%	\$0.04
Osteopore	OSX	13	Manufacture of 3D bioresorbable implants. Three products are FDA cleared and CE Marked for cranio-facial indications	-48.9%	-75.3%	\$0.12
EZZ Life Science Holdings	EZZ	13	Distributor of skin care products (EAORON brand) and develops consumer health products for Au, NZ and China. (Listed Q2 2021)	-39%	-30%	\$0.31
Nutritional Growth Solutions	NGS	13	Development and sale of nutritional supplements for children. (Listed Q4 2020)	-40.5%	-56.9%	\$0.11
USCOM	UCM	13	Markets Uscom, a non-invasive heart output function monitor, BP+ non-invasive central blood pressure product and digital ultrasonic spirometry products	-43.5%	-61.8%	\$0.07
IhaleRx (formerly Lifespot Health)	IRX	13	Commercialising the Bodytel diagnostic software, which is deployed with its Medihale medical cannabis vaporiser system, as well as with patients with metabolic syndrome	-16.7%	-31.8%	\$0.08

Company	Code	Cap. \$m	Principal Activities	Change - Quarter	Change - Year	Price 30/06/22
Island Pharmaceuticals	ILA	12	A drug repurposing company that focuses on the development of antivirals for infectious diseases (Listed Q2 2021)	-43.1%	-52.5%	\$0.15
Living Cell Technologies	LCT	10	Development of NTCELL for the treatment of Parkinson's Disease, and potentially for eye and ear diseases	60.0%	-38.5%	\$0.01
Singular Health Group	SHG	10	Developing medical imaging software (Listed Q1 2021)	-65.7%	-70.0%	\$0.10
Holista Colltech	HCT	9	Markets dietary supplements and disinfectant products	-34.0%	-47.5%	\$0.03
Bioxyne	BXN	8	Sale and distribution of probiotics	-58.6%	-57.1%	\$0.01
TALI Digital	TD1	7	Software company developing tools for assessment and improvement of attention in children. Formerly Novita Healthcare.	-72.7%	-80.0%	\$0.01
Visioneering Technologies	VTI	6	Markets a next-generation contact lens (100:1 share consolidation)	-69.7%	-80.4%	\$0.27
Total Brain	TTB	6	Development and commercialisation of functional brain analysis techniques.	-65.9%	-85.2%	\$0.05
Osprey Medical	OSP	5	Markets DYEVERT, a device which reduces the amount of dye needed in imaging procedures. (In voluntary suspension)	-67.7%	-85.7%	\$0.20
Anagenics (formerly Cellmid)	AN1	5	Health and beauty business focusing on sale of anti-aging and wellness products.	-61.7%	-61.7%	\$0.02
Hexima	HXL	5	Developing HXP124 to treat fungal infection of toenails (Re-listed Q4 2020). Program cancelled due to poor results (July 2022).	-92.8%	-82.4%	\$0.03
Analytica	ALT	5	Markets the Pericoach product to aid in the management of female urinary incontinence.	-50.0%	-50.0%	\$0.00
HitIQ	HIQ	5	Develops and sells head impact mouthguards to assist in assessment of sport related concussion injuries (Listed Q2 2021)	-74.2%	-78.9%	\$0.04
Dorsavi	DVL	4	Commercialising a wireless sensor movement monitoring system and products for use in the Elite Sports, OH&S and medical/physiotherapy markets	-40.0%	-58.6%	\$0.01
Anatara Life Sciences	ANR	4	Developing a gastrointestinal dietary supplement	-60.7%	-64.5%	\$0.06
Medibio	MEB	3	Commercialising a test for depression and anxiety	-80.0%	-85.7%	\$0.00
Jayex Healthcare	JTL	1	Commercialisation of the Enlighten patient workflow platform	-74%	-81%	\$0.01

Capitalisation Total **10,951**

Continued over

Botanical Product Companies (Cultivated Production)

Company	Code	Cap. \$m	Principal Activities	Change - Quarter	Change - Year	Price 30/06/22
Incannnex	IHL	269	Developing medical cannabis products to treat OSA, TBI and ARDS and TMD	-66.4%	-19.2%	\$0.21
Cronos	CAU	138	Medicinal cannabis health and wellness business	25.0%	127.3%	\$0.25
Cann Group	CAN	96	Medicinal cannabis company focused on the breeding, cultivation and production stages. Holds Australian ODC cultivation (MC) and research license (CR). Acquired Satipharm in 2021.	-5.2%	-27.6%	\$0.28
Elixinol Global	EXL	59	A supplier of hemp and medicinal cannabis products. To Acquire CansaCare Health GmbH	-45.6%	-43.1%	\$0.19
Little Green Pharna	LGP	54	Sale and distribution of medicinal cannabis products	-62.2%	-75.8%	\$0.23
Neurotech International	NTI	49	Has acquired proprietary cannabis strains for treating autism, epilepsy and ADHD	16.7%	29.6%	\$0.07
Creso Pharma	CPH	45	Development of cannabis and hemp derived therapeutic, nutraceutical, and life style products with wide patient and consumer reach for human and animal health.	-57.3%	-74.1%	\$0.04
MGC Pharmaceuticals	MXC	44	A medical and cosmetic cannabis company with growing operations in Slovenia. Acquired Czech company Panax Pharma.	-56.8%	-57.9%	\$0.02
Althea Group	AGH	19	Supply of branded medicinal cannabis products in Australia. To cultivate, extract and manufacture medicinal cannabis. Holds ODC manufacturing license.	-73.8%	-82.4%	\$0.06
Medlab Clinical	MDC	16	Development, production and marketing of nutraceuticals cannabis product to treat cancer patients with intractable pain	-68.0%	-69.0%	\$0.05
Auscans Group Holdings	AC8	16	Developing medical cannabis products for the Australian market. (Acquired CansPal Animal Therapeutics in 2021)	-54.3%	-66.4%	\$0.04
Zelira Therapeutics	ZLD	9	Developer of medicinal cannabis therapeutic products (175 for 1 consolidation 1H 2022)	-83.2%	-88.0%	\$0.97
Bod Australia	BOD	7	Developer and distributor of natural, evidence-based cosmetics and natural medicines. Holds medicinal cannabis import license. Overseas partner is Linsea SA.	-70.8%	-80.3%	\$0.07
Epsilon Healthcare (Formerly named THC Global Group)	EPN	6	A diversified global cannabis company with operations in Australia and Canada	-62.0%	-79.2%	\$0.03
Fiji Kava	FIJ	6	Cultivation and development of kava (piper methysticum) as an alternative treatment for anxiety, pain and insomnia.	-56.4%	-67.6%	\$0.03
Cann Global	CGB	5	Operates a hemp seeds business and conducts medical cannabis research (25 for 1 share consolidation 2022)	-60.0%	-84.0%	\$0.02
Capitalisation Total		840				

Listed Biotech Investment Funds or Companies

Company	Code	Cap. \$m	Principal Activities	Change - Quarter	Change - Year	Price 30/06/22
BTC Health	BTC	11	Provides capital and management expertise to high-growth Australian biotech, medtech and pharmaceutical companies	-47%	-46%	\$0.04
Capitalisation Total		11				

Capitalisation Total - All Indices 206,397

Bioshares Model Portfolio (20 July 2022)

Company	Code	Price (current)	Price added to portfolio	Recommendation	Cap'n (\$M)	Date added
Telix Pharmaceuticals	TLX	\$5.57	\$7.85	Spec Buy A	\$1,743	December 2021
Clinuvel Pharmaceuticals	CUV	\$16.35	\$20.31	Buy	\$808	November 2020
Neuren Pharmaceuticals	NEU	\$4.13	\$3.25	Spec Buy A	\$520	December 2021
Opthea	OPT	\$1.21	\$0.16	Spec Buy A	\$421	November 2014
Immutep	IMM	\$0.33	\$0.32	Spec Buy A	\$282	March 2019
Cogstate	CGS	\$1.62	\$0.24	Buy	\$281	April 2019
Aroa Biosurgery	ARX	\$0.77	\$1.11	Spec Buy A	\$264	November 2021
Genetic Signatures	GSS	\$1.00	\$1.24	Buy	\$143	May 2022
Somnomed	SOM	\$1.18	\$2.05	Spec Buy A	\$98	January 2022
Micro-X	MX1	\$0.140	\$0.38	Spec Buy A	\$64	May 2017
Antisense Therapeutics	ANP	\$0.085	\$0.22	Spec Buy A	\$62	November 2021
Chimeric Therapeutics	CHM	\$0.14	\$0.27	Spec Buy B	\$57	December 2021
Rhinomed	RNO	\$0.165	\$0.27	Spec Buy B	\$47	December 2021
Patrys	PAB	\$0.022	\$0.013	Spec Buy B	\$45	July 2020
Dimerix	DXB	\$0.140	\$0.09	Spec Buy A	\$45	December 2018
Pharmaxis	PXS	\$0.073	\$0.26	Spec Buy A	\$40	December 2016
LBT Innovations	LBT	\$0.083	\$0.09	Spec Buy B	\$27	April 2022
Acruz	ACR	\$0.053	\$0.31	Spec Buy B	\$15	July 2017

Portfolio Changes

IN:
None

OUT:
None

– Half year review cont'd from page 2

Acquisitions

ResApp Health has received a bid for its business by Pfizer at \$127 million (\$0.146 per share). The deal will be voted on by shareholders later this month.

CSL continues to wait for regulatory approval for its US\$11.7 billion bid for nephrology company Vifor Pharma, which is now expected to take several more months. ResMed is buying German health software company Medifox Dan for US\$1 billion. Cochlear is paying \$170 million for hearing implant company Oticon Medical.

Wesfarmers has acquired Australian Pharmaceutical Industries for \$764 million. Incannex Healthcare has acquired APIRx Pharmaceutical USA for US\$93 million. APIRx is developing cannabinoid-based medicines with 22 clinical and preclinical programs. LBT Innovations has acquired the outstanding 50% interest in its joint venture with German group Hettich called Clever Culture Systems. And Genetic Technologies has acquired DNA testing business AffinityDNA (for £555,000) which provides health and allergy testing.

Bioshares

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 Some 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 of commercialisation.

Speculative Buy – Class A

These stocks will have more than one technology, product or investment in development, with perhaps those same technologies offering multiple opportunities. These features, coupled to the presence of alliances, partnerships and scientific advisory boards, indicate the stock is relative less risky than other biotech stocks.

Speculative Buy – Class B

These stocks may have more than one product or opportunity, and may even be close to market. However, they are likely to be lacking in several key areas. For example, their cash position is weak, or management or board may need strengthening.

Speculative Buy – Class C

These stocks generally have one product in development and lack many external validation features.

Speculative Hold – Class A or B or C

Sell

Corporate Subscribers: Cogstate, Opthea, ResApp Health, Pharmaxis, Dimerix, Adalta, Patrys, Antisense Therapeutics, Imugene, Chimeric Therapeutics, Neuren Pharmaceuticals, Neurotech International, Aroa Biosurgery, Radiopharm Theranostics, Imricor

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