

# Healthcare

## Micro to mid-cap catalyst table (3Q'CY22)

October 18, 2022

### Highlighted companies

#### List of ASX tickers mentioned

1AD, 4DX, ACW, ADO, AGN, AHX, ALC, ANP, ANR, ARX, AT1, ATX, AUA, AVH, AVR, BGT, BIT, BNO, BOD, BOT, CAN, CDX, CMP, CU6, CYC, CYP, DXB, EBR, EMV, EOF, EYE, GLH, GSS, HMD, IBX, IMC, IME, IMM, IMU, IPD, IVX, IXC, KZA, LBT, LCT, LDX, M7T, MAP, MDC, MEM, MX1, NEU, NOX, NSB, NTI, NXS, NYR, OCC, OIL, OPL, OPT, OSL, OSX, PAA, PAB, PGC, PIQ, PTX, PXS, PYC, RAC, RAD, RCE, RGS, RHY, RNO, RSH, SHG, SOM, TLX, TRP, TRU, UCM, VHT, VTI, ZLD

#### Iain Wilkie

+61 7 3334 4521

iain.wilkie@morgans.com.au

#### Scott Power

+61 7 3334 4884

scott.power@morgans.com.au

Analyst(s) own shares in the following stock(s) mentioned in this report:

– Antisense Therapeutics, Audeara, Clinuvel Pharmaceuticals, EBR Systems, ImexHS, ImpediMed, Mach7 Technologies, Neuren Pharmaceuticals, Opyl, Pharmaxis, Proteomics International Laboratories, Rhythm Biosciences, Telix Pharmaceuticals, Volpara

The information contained within this report has been compiled based on best endeavours from a scan through recent Company updates as well as company input. While the list is not exhaustive with likely subsequent milestones and timing estimates dependent on the progress of preceding events, we see this as a simple snapshot on a broad range of healthcare companies and some of the major news flow events and timing as anticipated by the market.

- In this report we list ~90 micro to mid-cap healthcare/life science companies and highlight key catalysts expected to read out over the next 18 months. We view the information as a guide around timing of major events while adding a market impact overlay to highlight potentially significant event reactions (good or bad).
- Since our last report in mid-June, the sector has slightly outperformed the broader market over the quarter but pressure remains on growth / pre-revenue / pre-profit / concept stocks in the absence of positive news flow. As such, we continue to view clear and meaningful catalysts remain key for the sector for some time.
- Sector observations: 1) well-funded stocks are weathering far better; 2) recruitment is sluggish (expect delays to timelines); and 3) there a bit more interest coming back into medicinal cannabis companies (S3 registration).
- Regardless, it's a difficult market right now with good news often short-lived and bad news being punished more than usual. It pays to remain nimble.

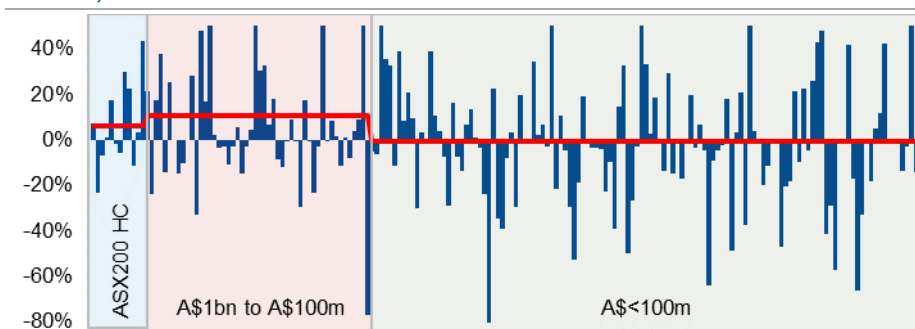
### Major catalysts our team is watching (ordered by assumed timing)

- **Impedimed (IPD):** Potential inclusion in NCCN guidelines.
- **Clinuvel (CUV):** Potential competitor Ph3 (Mitsubishi Tanabe: MT-7117) results released Oct/Nov.
- **Telix (TLX):** ZIRCON Ph3 study readout / BLA submission process update.
- **Immutep (IMM):** TACTI-003: Ph2b HNSCC operational and data / TACTI-002: Ph2 – interim data read out.
- **Proteomics (PIQ):** Conversion of binding letter of intent to exclusive license with Sonic Healthcare USA / First sales ProMarkerD in EU.
- **Rhythm Biosciences (RHY):** TGA approval / commence distribution partnerships (AU/EU/US).
- **EBR Systems (EBR):** Top-line results - SOLVE trial.
- **Neuren Pharma (NEU):** FDA approval / Milestone payout.

### Recent major catalysts and share price reactions

- **Imugene (IMU) - Positive:** HER-Vaxx overall survival results (27-Jun-22). Statistical significance achieved in overall survival hazard ratio. Reduces risk of death by 41.5% in combination versus chemotherapy alone (+45.5% on day).
- **Telix (TLX) - Negative:** Withdraws EU marketing application (28-Sep-22) for Illucix after additional CMC data request makes it unlikely to be delivered in time for review (-15.4% on day).
- **Hexima (HXL) - Negative:** Ph2 topline results (24-Jun-22). Results of pezadeftide in treatment onychomycosis shown to be inconclusive and not correlated with results from prior studies. Not supportive of move directly to Ph3 (-84.6% on day).
- **Kazia (KZA) - Negative:** Glioblastoma (GBM) study (1-Aug-22). Study sponsor for GBM study axes second stage following treatment arm not meeting pre-defined endpoints. (-53% on day).

Figure 1: ASX listed healthcare returns (185 stocks) since 16 June 2022 – favours middle markets, tail volatile



Source: Morgans Financial, IRESS

## Points of interest

### Biggest moves over the last quarter across the space

Below is a list of the largest movers across the space since 18 March 2022. The list comprises all ASX listed stocks with Global Industry Classification Standard (GICS) sector code 35 (healthcare). As at the time of print, this number was 185.

**Up:** 44% of the sector constituents

- 28 companies with positive movements >25%

**Down:** 48% of the sector constituents

- 21 companies with negative movements <-25%

**Even:** 8% of the sector constituents

**Figure 2: Top 10 +ve and -ve share price movements (18 March → 16 June)**

#### Largest gains

1: CAU +167.9%	3: NEU +83.0%	5: HIQ +62.8%	7: NTI +59.3%	9: 4DX +46.8%
2: IMR +140.0%	4: OSX +69.2%	6: ACW +62.3%	8: CU6 +50.6%	10: LCT +44.4%

#### Largest losses

1: HXL -95.3%	3: LDX -58.6%	5: TD1 -57.1%	7: NSB -48.4%	9: WFL -47.3%
2: KZA -76.3%	4: DOC -58.0%	6: MEB -50.0%	8: AMT -48.3%	10: ONE -35.9%

Source: IRESS

### New listings / delistings

- No new listings this quarter.
- ResApp (RAP) delisted following takeover by Pfizer.

## Biggest single-day moves – based on any news?

We view it common sense that large daily price swings indicate some news or a market-moving event to cause a reaction (or on many cases here the perception of an event). Below, we have listed the top ten largest daily share price swings in the space and if there was any company release that may have triggered the reaction.

Figure 3: Top 10 +ve and -ve share price movements

Top 10 single day <b>positive</b> SP movements			
Ticker	Date	% gain	Announcement / comments
IMU	27-Jun-22	45.5%	Positive HER-Vaxx Ph2 results
ZLD	14-Jul-22	44.2%	Partner receives German regulator approval
OSX	4-Aug-22	42.3%	US distribution agreement
EBR	1-Jul-22	41.3%	Complete enrolment / secures funding facility
IPD	28-Jul-22	37.0%	Qrly cashflow report
4DX	31-Aug-22	36.0%	+ve results for constrictive bronchiolitis
OCC	28-Jun-22	30.0%	Signs global exclusive license for resorbable collagen membrane Striate+
RCE	22-Jun-22	27.3%	Positive safety data from 6th cohort Ph1
OIL	28-Jul-22	27.3%	Signs strategic partnership in China
MEM	18-Aug-22	26.7%	

Top 10 single day <b>negative</b> SP movements			
Ticker	Date	% gain	Announcement / comments
LDX	11-Jul-22	-65.5%	FebriDX fails to demonstrate substantial equivalence. FDA knocks back 510(k)
NSB	7-Sep-22	-61.9%	HREC rejects plans for Ph1 trial. Risk / benefits support lacking
KZA	1-Aug-22	-52.9%	GBM trial fails to meet pre-defined criteria to progress
MEM	17-Aug-22	-33.3%	
MDC	5-Aug-22	-25.2%	
AUA	22-Aug-22	-20.0%	
TRU	27-Jun-22	-20.0%	
ZLD	20-Jul-22	-18.5%	
SHG	19-Aug-22	-18.2%	
OIL	29-Jul-22	-17.9%	

Source: Morgans estimates, company data, IRESS

## Volume momentum - what's hot, what's not?

We have run a volume screen across the stocks in the sector using 3-month volumes and use price changes as a direction flag. We view this as a simple and broad quantitative guide to highlight stocks the market may be heading towards or away from. We view these signals as a flag to investigate and see what has changed (if anything).

While we note momentum and shareholder engagement can change quickly as circumstances unfold both on a macro level and a company-specific level, we view this (3-month) broader view as better at potentially capturing enduring changes in sentiment versus daily or weekly “flash-in-the-pan” reactions to certain events.

Liquidity remains an issue for a range of stocks, particularly in micro-cap companies. As such, we have removed from the results companies with market capitalisations lower than A\$20m where trading volumes are typically more volatile.

We have divided the results into three main buckets, ranked by weighting of 3-month volumes vs 12-month average and 3-month share price movement:

- 1) Positive momentum (higher volumes + higher share price);
- 2) Negative momentum (higher volumes + lower share price); and
- 3) False positives (higher prices on lower volumes).

Below we provide the top 10 results from each bucket:

**Figure 4: Positive momentum – slim pickings this quarter (again)**

Rank	Ticker	Mkt Cap (\$m)	3m avg vol (m)	12m avg vol (m)	Vol Δ (3m / 12m)	3m price Δ
1	CAU	474	0.2	0.2	30.7%	226.4%
2	IMR	40	0.4	0.2	83.7%	76.7%
3	NTI	75	1.6	1.1	47.2%	94.4%
4	SIG	699	4.3	2.6	65.4%	29.1%
5	RAP		6.3	3.4	85.2%	20.6%
6	OSX	30	0.1	0.1	13.9%	96.2%
7	AGH	27	0.9	0.5	61.6%	18.6%
8	4DX	171	0.5	0.4	20.4%	50.6%
9	NEU	903	0.3	0.3	9.0%	98.9%
10	TLX	1,750	1.4	1.1	18.0%	43.3%

Source: Morgans estimates, IRESS

**Figure 5: Negative momentum – plenty to go around (and on higher volumes vs prior qtr)**

Rank	Ticker	Mkt Cap (\$m)	3m avg vol (m)	12m avg vol (m)	Vol Δ (3m / 12m)	3m price Δ
1	KZA	26	0.2	0.1	66.6%	-76.4%
2	ACL	682	1.2	0.8	59.1%	-15.0%
3	GSS	115	0.1	0.1	33.0%	-23.4%
4	DOC	26	0.5	0.5	12.7%	-52.7%
5	AFP	346	0.0	0.0	38.5%	-10.9%
6	TRJ	290	0.1	0.1	19.2%	-15.1%
7	RHC	12,827	0.6	0.6	6.6%	-22.7%
8	MVP	145	0.2	0.1	47.1%	-3.0%
9	EBO	6,111	0.0	0.0	24.6%	-4.4%
10	CTE	32	0.0	0.0	33.3%	-2.2%

Source: Morgans estimates, IRESS

**Figure 6: False positives (higher on lower volume)**

Rank	Ticker	Mkt Cap (\$m)	3m avg vol (m)	12m avg vol (m)	Vol Δ (3m / 12m)	3m price Δ
1	ACW	207	1.8	2.5	-27.4%	117.0%
2	RAC	410	0.1	0.2	-39.1%	67.5%
3	IVX	74	2.0	8.2	-75.8%	27.8%
4	EBR	150	0.1	0.2	-53.7%	38.8%
5	IIQ	51	0.1	0.1	-51.6%	34.1%
6	CYC	137	0.0	0.0	-52.7%	33.3%
7	CU6	153	0.1	0.2	-41.8%	38.8%
8	MSB	730	1.3	1.7	-20.7%	47.8%
9	AHC	35	0.0	0.1	-30.3%	32.3%
10	AYA	53	0.0	0.1	-45.3%	19.6%

Source: Morgans estimates, IRESS

## Pharmaceutical development success rates / timing / completion

### Success rates

Below we outline the results from a report (Biotechnology Innovation Organization, 2021) that has aggregated ~12k clinical trials between 2011 and 2020 to estimate the probability of success (POS) rates across various disease areas.

*Note: this information is limited to pharmaceutical (drug development) assets.*

All clinical assets and timeframes vary significantly but we find this a useful guide when scanning across assets which, prior to final protocol and design, we can apply to give us a reasonable expectation on timing and risk for major clinical catalysts.

We note that these are broad averages by indication and do not account for the variation between the different drug classes / mechanisms of action a drug asset may have on success rates, or the status of a drug or indication (new chemical entities, biosimilars, generic, rare disease / orphan indication, etc).

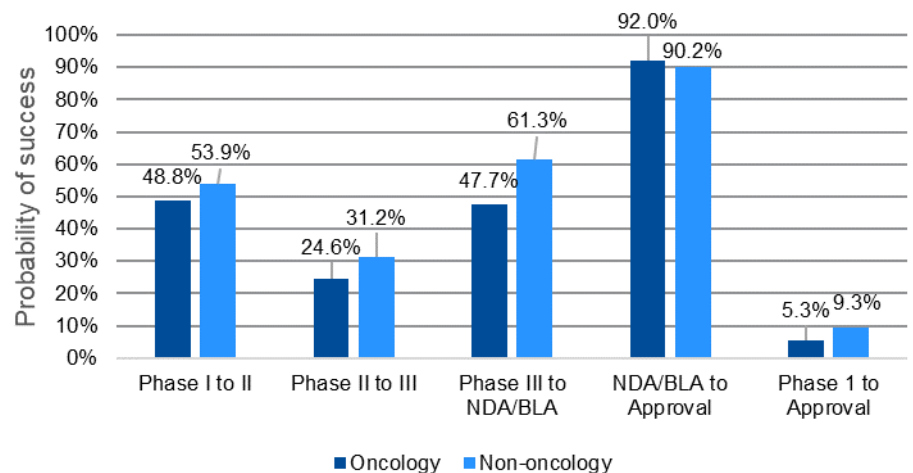
Figure 7: Phase transition by disease area (2011 – 2020)

Phase transition success rates by disease area

Phase Success	Phase I to II		Phase II to III		Phase III to NDA/BLA		NDA/BLA to Approval	
	n	Phase POS	n	Phase POS	n	Phase POS	n	Phase POS
Hematology	92	69.6%	106	48.1%	82	76.8%	72	93.1%
Metabolic	136	61.8%	149	45.0%	66	63.6%	48	87.5%
Infectious disease	403	57.8%	414	38.4%	197	64.0%	156	92.9%
Others	154	63.6%	228	38.6%	90	60.0%	69	88.4%
Ophthalmology	88	71.6%	200	35.5%	82	51.2%	45	91.1%
Autoimmune	413	55.2%	471	31.4%	219	65.3%	202	94.1%
Allergy	55	56.4%	92	28.3%	34	64.7%	20	100.0%
Gastroenterology	45	46.7%	73	34.2%	35	57.1%	33	90.9%
<b>All indications</b>	<b>4414</b>	<b>52.0%</b>	<b>4933</b>	<b>28.9%</b>	<b>1928</b>	<b>57.8%</b>	<b>1453</b>	<b>90.6%</b>
Respiratory	179	55.9%	215	21.9%	62	64.5%	45	95.6%
Psychiatry	150	52.7%	164	26.8%	71	56.3%	57	91.2%
Endocrine	319	43.3%	293	26.6%	151	66.2%	124	86.3%
Neurology	516	47.7%	504	26.8%	226	53.1%	165	86.7%
Oncology	1628	48.8%	1732	24.6%	495	47.7%	324	92.0%
Cardiovascular	214	50.0%	252	21.0%	105	55.2%	80	82.5%
Urology	22	40.9%	40	15.0%	13	69.2%	13	84.6%

Source: Biomedtracker, Pharmapremia, 2020

Figure 8: Oncology vs non-oncology phase transition success rates and likelihood of approval (LOA)



Source: Biomedtracker, Pharmapremia, 2020

### Phase timing

Looking to typical regulatory progression timelines, a study performed in 2019 (Wong, Siah, Lo, 2019) has assessed the time to advance between trial phases. The study was based on >40k clinical trials between 2000 and 2015.

The results highlighted the median time in each of the three main phases in the clinical setting of:

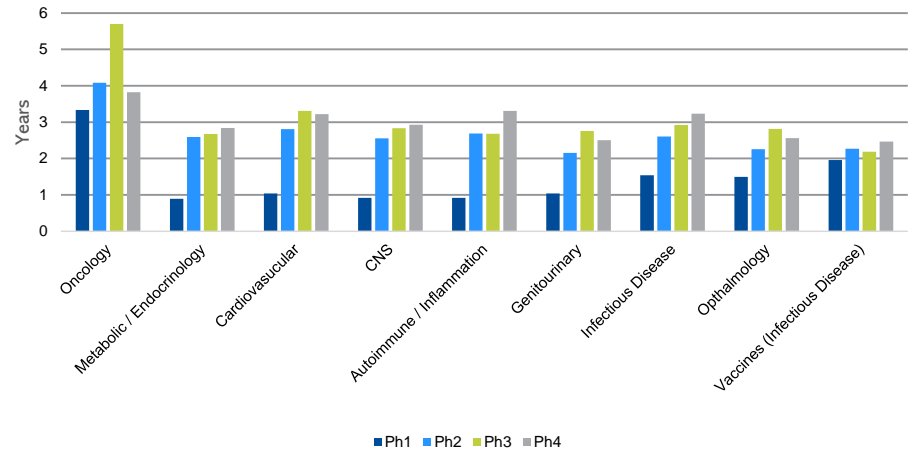
Phase 1: 1.61 years,

Phase 2: 2.94 years, and

Phase 3: 3.84 years.

The median duration across therapeutic groups to complete clinical activities (commence Phase 1 to Phase 3 completion – excluding preparation time) is wide and ranges between 5.94 years to 7.15 years, excluding oncology which is a significant outlier at 13.11 years.

**Figure 9: Median duration of trials by indication (2000-2015)**



Source: Wong, Siah, Loh 2019

### Completion rates

Another interesting factor in clinical progression risks is around completion rates, with some trials failing to run through to completion. The reasons for this varies, from poor recruitment rates, to funding, to selection bias.

Interesting to note again are the significantly lower completion rates (CR) in oncology assets (73.9%) versus other indications ranging from 84.4% to 93.1%.

Another point of interest is the broadly higher completion rates between Phase 3 (84.9%) and Phase 2 assets (81.1%). Given the wide gap between costs to run these trials across the two phases, it is thought the higher completion rates in Ph3 trials are due to asset owners having had the benefit of Ph2 efficacy results, with selection bias favouring assets with better efficacy prospects and closer to marketing approval likely to be given sufficient resources to complete the trials.

**Figure 10: Completion rates for industry-sponsored trials (2000-2015)**

	Phase 1			Phase 2			Phase 3			Phase 4		
	Completed	Failed	CR <sub>1</sub>	Completed	Failed	CR <sub>2</sub>	Completed	Failed	CR <sub>3</sub>	Completed	Failed	CR <sub>4</sub>
Oncology	3910	885	81.5%	6278	2501	71.5%	1439	706	67.1%	403	149	73.0%
Metabolic/ Endocrinology	2602	145	94.7%	1939	292	86.9%	2267	370	86.0%	1564	227	87.3%
Cardiovascular	1884	110	94.5%	1349	249	84.4%	1679	290	85.3%	1373	199	87.3%
CNS	3233	185	94.6%	2862	432	86.9%	3091	453	87.2%	2100	245	89.6%
Autoimmune/ Inflammation	2449	132	94.9%	2986	432	87.4%	2681	343	88.7%	1984	234	89.4%
Genitourinary	507	16	96.9%	419	56	88.2%	450	53	89.5%	324	43	88.3%
Infectious Disease	2424	140	94.5%	1715	268	86.5%	1698	243	87.5%	1111	220	83.5%
Ophthalmology	161	18	89.9%	424	72	85.5%	307	51	85.8%	336	45	88.2%
Vaccines (Infectious Disease)	414	37	91.8%	752	69	91.6%	850	63	93.1%	337	34	90.8%
Total	17584	1668	91.3%	18724	4371	81.1%	14462	2572	84.9%	9532	1396	87.2%

Source: Wong, Siah, Loh 2019

## Partnership deal trends – Biobucks and upfronts

We have extracted all global biotechnology licensing transactions since 2012, seeking to find any emerging trends.

What we found interesting is while the volume of deals remains fairly constant (in the 250-300 pa range), there appears to be a recent trend toward back-end loaded transactions with larger total packages and smaller up-front cash components (Figure 11). This trend makes greater sense if we look deeper into the maturity of the assets being licensed, with partnerships favouring earlier stage assets in recent years (pre-clinical to Ph2) over later stage assets (Ph3 to Marketed) (Figure 12). Outside of a risk-off mentality in recent years, this can occur for any number of reasons from plugging gaps in long-lead pipelines, increasing demand for control of clinical direction, and even down to the assets that are now moving through into the latter stages having already been raided - with less desirable assets and/or smaller market indications remaining.

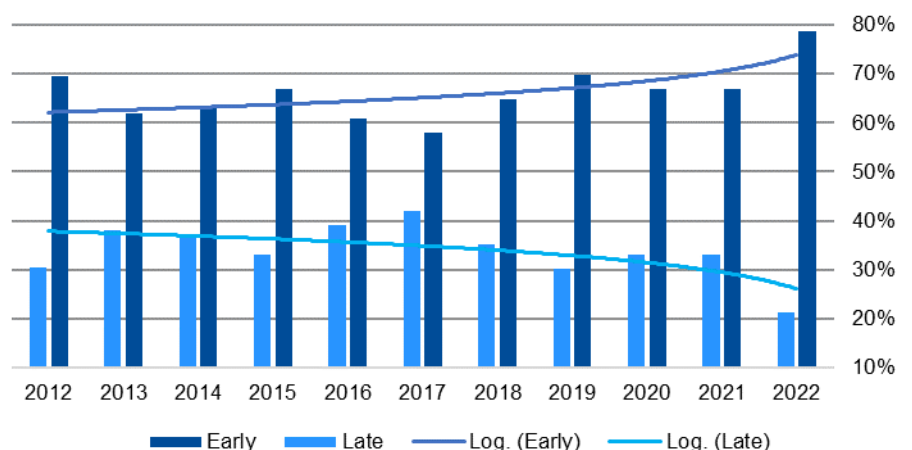
Figure 11: Count, partnership deal sizes, upfront component (last 10 years)

Year	# deals	Avg deal size (\$m)	Avg upfront (\$m)	Upfront (%)
2022	250	748	55	7%
2021	337	626	95	15%
2020	298	608	114	19%
2019	224	609	180	30%
2018	302	459	64	14%
2017	243	406	87	21%
2016	254	381	61	16%
2015	284	430	66	15%
2014	205	469	233	50%
2013	157	283	70	25%
2012	124	174	35	20%
<b>Average</b>	<b>268</b>	<b>487</b>	<b>98</b>	<b>20%</b>

*2022 year extrapolated out to full year*

Source: Bloomberg, Morgans estimates

Figure 12: Count, partnership deal sizes, upfront component (last 10 years)



Source: Bloomberg, Morgans estimates

## Biobucks create headlines - but don't bank on it

Milestone packages ("biobucks") and the mechanisms that trigger certain payment events aren't often disclosed other than top-line total values and any up-front components given the commercial-in-confidence nature of these deals. However, typical deals are made up of several clinical progression events



(sometimes referred to as R&D reimbursement triggers and often not “profitable” considering the cost of running the trial), and often highly geared toward large incentives that are based on high sales targets post approval and commercialisation.

However, on average only a small proportion of the total package ever materialises (SRS Acquiom, 2019) given clinical progression risks and often large skews to high post-approval sales targets. A study by SRS Acquiom which followed 100 deals found only around 33% of total milestone packages had been paid, 17% remained pending (at risk), and 50% of value unlikely to ever be paid out due to failure to reach certain clinical/commercial milestones.

Of the 33% in value paid, we assume a significant portion of those splits would be the upfront component (~15% of total deal value), leaving <20% of total deal value paid through genuine progression or achievement of clinical/commercial milestones.

Our analysis through all biotech partnership deals with milestone components since 2012 (>2,500 deals) broadly mirror these findings based on a deal value-weighted vs clinical phase LOA. With a much heavier skew toward pre-clinical (~50% of total deal value) and Phase 1 assets (11% of deal value) versus all other phases (combined 39% of deal value) and average approval rates through to successful commercialisation, we believe the average risked rate of achieving milestone-based payment triggers sits around the 22% level. This figure assumes all sales-based milestones are also triggered (which is very unlikely).

Given the weighting of high-hurdle triggers in several transactions we have seen in the last few years, we view a more realistic range likely sits somewhere within the 10% mark and up to the 22% mark, plus any upfront component.

**So what’s the takeaway from this? While it’s nice to see big numbers in a headline when partnership deals are struck, always keep in mind that companies will typically only receive a fraction of this. Where we see the most value is in more tangible items such as up-front cash consideration and a strong royalty rate, while considering the clinical risk and timeframes prior to an asset becoming a commercial prospect, and the present value of those potential future cashflows.**



## Catalyst tables

Figure 13: Bone

			Minor				Mid		Significant					
Ticker	Company Name	Mkt Cap (A\$m)	Share price movement (%)				Estimated timing on catalysts							
			1M	3M	6M	12M	2H22	1H2023	2H2023					
OCC	Orthocell Ltd	77	-	2.5	-	1.3	-	7.1	-	26.4	Striate - global product launch	Remplir - Aus reimbursement		OrthoATI vs Surgery 12m follow-up
OSX	Osteopore Ltd.	30	-	8.9		41.7		27.5	-	10.5	EU approval for custom made device	China: initiate market entry		

Source: Morgans estimates, company data, FACTSET, Prices as at 17 Oct 2022

Figure 14: Cardiovascular

			Minor				Mid		Significant						
Ticker	Company Name	Mkt Cap (A\$m)	Share price movement (%)				Estimated timing on catalysts								
			1M	3M	6M	12M	2H22	1H2023	2H2023						
AVR	Anteris Technologies Ltd.	314	-	11.5	-	14.0		25.9		152.3			Commence next in-human trials	Follow up FIH patient data	
EBR	EBR Systems	175		13.3		3.7	-	2.6					Top line results - SOLVE trial	Submit PMA application for US approval	FDA regulatory approval

Source: Morgans estimates, company data, FACTSET, Prices as at 17 Oct 2022

Figure 15: Central Nervous System (CNS)

Ticker	Company Name	Mkt Cap (A\$m)	Share price movement (%)				Estimated timing on catalysts							
			1M	3M	6M	12M	2H22			1H2023		2H2023		
							Minor	Mid	Significant					
ACW	Actinogen Medical Limited	207	40.2	105.4	29.2	9.5	CTAD conference presentation of positive XanaMIA cognition results			Commence Ph2a Depression & Ph2b Early Alzheimers Disease trials				
AGN	Argenica Therapeutics	42	- 22.7	10.8	- 24.0	19.5	Initiate Phase 1 healthy volunteer study			Preliminary Ph1 Results	Final Phase 1 Report and ethics submission for Ph2			
BNO	Bionomics Ltd	87	23.1	9.4	- 8.6	- 55.9	Ph2 top-line results - Acute Social Anxiety Disorder			Ph2b top-line results - PTSD				
IXC	Invex Therapeutics Ltd.	44	- 8.5	13.5	- 21.3	- 16.9	First site activation (AUS/UK)	EU/NZ approvals	Ph3 first patient dose					
LCT	Living Cell Technologies Ltd.	14	- 15.4	37.5	37.5	4.7	NTCELL 3rd trial - GMP manufacturing commencement					NTCELL third trial - regulatory approval		
NEU	Neuren Pharmaceuticals Limited	903	- 2.5	79.0	76.8	259.0				FDA approval of NDA for Rett	Earn US\$40m milestone payment	Results of 3 x Ph2 trials (NZ-2591)	Earn US\$10m milestone payment	Results of Prader-Willi Ph2 trial
NSB	Neuroscientific Biopharmaceuticals Ltd.	14	- 5.5	- 58.0	- 66.3	- 75.5	HREC / recruitment / commence Ph1 ocular study							
NTI	Neurotech International Ltd.	75	10.5	43.8	90.9	118.8	20 week Ph1/2 data	Commence Ph2/3 ASD trial	Ph1/2 initiation (paediatric disorder)	Commence Phase I/II recruitment Cerebral Palsy		Ph2/3 study complete	US FDA IND submission	

Source: Morgans estimates, company data, FACTSET, Prices as at 17 Oct 2022

Figure 16: Devices

Ticker	Company Name	Mkt Cap (A\$m)	Share price movement (%)				Estimated timing on catalysts			
			1M	3M	6M	12M	Minor		Mid	Significant
							2H22		1H2023	2H2023
AUA	Audeara	10	- 3.3	- 30.4	- 20.9	- 37.9	First large EU clinic sale / partner	Non-clinical p'ship / sales expansion	Sales progression	Sales progression
CDX	CardieX Limited	34	- 15.6	- 28.9	- 31.6	- 60.3	FDA approval: Pulse device			FDA approval: CONNEQT Band
CMP	Compumedics Limited	40	- 11.8	15.4	- 18.2	- 40.8	Sales progression		Sales progression	Sales progression
CYC	Cyclopharm Limited	137	0.7	- 6.6	- 1.7	- 17.6			FDA review of CRL	
EMV	EMvision Medical Devices Ltd.	104	- 9.8	- 25.6	- 36.2	- 55.3	Clinical trial enrolment opens	Industry / Commercial collaboration	Clinical trial progress / insights	
EYE	Nova Eye Medical Ltd	35	- 4.0	26.3	- 5.9	- 42.2	Sales progression		Sales progression	Sales progression
HMD	HeraMed	33	- 17.6	16.7	- 12.5	- 26.3	Update/outcome of Spanish government tender			
LBT	LBT Innovations Limited	25	- 7.1	- 6.0	- 6.0	- 32.2	Partnership with global Pharma company to develop APAS-Pharma	Non-dilutive funding to support new product pipeline	EU Distribution agreement and territory expansion with Top Tier channel partner	Instrument sales step-up increase compared to CY2022

Source: Morgans estimates, company data, FACTSET, Prices as at 17 Oct 2022

Figure 17: Devices (cont'd)

Ticker	Company Name	Mkt Cap (A\$m)	Share price movement (%)				Minor	Mid	Significant				
			1M	3M	6M	12M	Estimated timing on catalysts						
							2H22	1H2023	2H2023				
MX1	Micro-X Ltd.	68	3.7	6.7	40.4	54.8	Aust Dept Defence Land 154 tender – 64 x Argus IED units	Global launch of Argus IED X-ray camera	Prototype (miniature baggage scanner) accepted by DHS	Tech transfer Vares / final licence p'ment			
OIL	Optiscan Imaging Limited	71	9.5	16.2	30.3	50.0		FDA clearance for oral cancer	US distributor (oral). US/EU distributor (life sciences)	Complete analysis - breast cancer study	FDA clearance for oral cancer	Commence breast cancer clinical trial	
PGC	Paragon Care Limited	218	16.9	16.7	13.6	5.6	Sales progression	Sales progression	Sales progression				
RNO	Rhinomed Limited	39	15.6	15.6	41.3	56.9		Sure Screen- First orders of nasal swab (10m units over 24m)	BTNX- First orders nasal swab (22.5m units over 24m)	Mute device - expansion into Amazon UK	Securing further supply deals for Rhinoswab in the US market	Expansion of Mute antisnoring products into further US retail outlets	Expansion of Mute antisnoring products into Amazon Germany
RSH	Respiri	27	12.8	32.0	46.0	50.7		CPT reimbursement expected for remote patient monitoring					
SOM	Somnomed Limited	137	26.0	39.8	15.8	24.7	Launch of technology enabled sleep device	Sales progression			Sales progression		
UCM	Uscom Limited	12	23.1	7.7	42.9	55.1	Sales progression	Sales progression			Sales progression		
VTI	Visioneering Technologies Inc	5	32.8	28.9	62.3	77.7					PROTECT Clinical Study (interim) release - one year data		

Source: Morgans estimates, company data, FACTSET, Prices as at 17 Oct 2022

Figure 18: Diagnostics

				Minor			Mid			Significant					
Ticker	Company Name	Mkt Cap (A\$m)	Share price movement (%)				Estimated timing on catalysts								
			1M	3M	6M	12M	2H22			1H2023		2H2023			
4DX	4D Medical	171	-	7.2	19.6	-	20.0	-	57.0	Progression of i-Med rollout	AU reg clearance for CT variant	US regulatory clearance for CT product variant		Regulatory approval for XVD Lung Scanner	
ADO	AnteoTech Ltd	99	-	9.1	-	31.5	-	56.5	-	77.8	Complete clinical trials	Sales progress			
AT1	Atomo Diagnostics Ltd.	34		1.7	-	6.3	-	47.8	-	82.9	Sales progression			Sales progression	
GSS	Genetic Signatures Ltd.	115	-	9.6	-	18.4	-	40.3	-	47.0	Enteric kit FDA 510(k) submission			Enteric kit FDA clearance	
LDX	Lumos Diagnostics	11	-	1.9	-	11.9	-	85.3	-	94.0	FebriDX FDA appeal outcome				
PIQ	Proteomics International Laboratories Ltd.	110	-	5.0		11.0	-	13.6		2.7	US license agreement with Sonic Healthcare USA finalised for ProMarkerFD		US reimbursement code approved for DKD	Endo & Esoph cancer DX tests finalised	
RHY	Rhythm Biosciences Ltd.	247	-	8.8	-	23.0	-	22.7	-	4.6	TGA approval	Commence distribution			
SHG	Singular Health	10	-	24.6		5.4	-	52.2	-	44.0	Completion of IMCRC Project (CSIRO & Customa)	Comparative Study on AI-Designed Cranial Implants	Integration of 3rd Party AI Models	Application for FDA510(k) clearance for 3Dicom Surgical	
TRU	TruScreen	16	-	6.5	-	12.2	-	35.8	-	31.7	TruScreen - primary screening method in Zimbabwe	Publication of research paper on TruScreen results in China			

Source: Morgans estimates, company data, FACTSET, Prices as at 17 Oct 2022

Figure 19: Eye

			Minor				Mid		Significant	
Ticker	Company Name	Mkt Cap (A\$m)	Share price movement (%)				Estimated timing on catalysts			
			1M	3M	6M	12M	2H22	1H2023	2H2023	
OPT	Opthea Limited	474	- 11.7	- 10.1	-	- 19.7			Ph3 ShORe & COAST wet AMD complete recruitment	
PYC	PYC Therapeutics Limited	207	- 12.2	- 5.8	- 35.0	- 58.1	RP11 - IND submission	RP11 - Combo Ph1/2 commences	RP11 - Part 1 completion (SAD) combo Ph1/2	ADOA program lead selection

Source: Morgans estimates, company data, FACTSET, Prices as at 17 Oct 2022

Figure 20: Fibrosis

							Minor	Mid			Significant				
Ticker	Company Name	Mkt Cap (A\$m)	Share price movement (%)				Estimated timing on catalysts								
			1M	3M	6M	12M	2H22		1H2023		2H2023				
1AD	AdAlta Ltd.	15	-	3.9	8.9	-	31.9	-	43.1	Collaboration exploring CXCR4 inhibitors in cancer	Pre-clinical development of inhaled AD-214	Prioritisation of AD-214 indications for Phase II			
DXB	Dimerix Limited	48		11.1	-	3.2	-	6.2	-	46.4			FSGS Ph3 study Part 1 data (triggers options expiry to fund Part 2)	Ph2 DKD trial start	Ph1 COPD trial start
PXS	Pharmaxis Ltd	43	-	7.1	13.0	-	22.0	-	32.2	Ph1-2 Hepatocellular study commencement	Ph2a interim results - MF	Ph2 top line results PXS-5505 in Myelofibrosis	Ph1c top line results - established scars		

Source: Morgans estimates, company data, FACTSET, Prices as at 17 Oct 2022



Figure 21: Gut health

							Minor	Mid		Significant					
Ticker	Company Name	Mkt Cap (A\$m)	Share price movement (%)				Estimated timing on catalysts								
			1M	3M	6M	12M	2H22		1H2023	2H2023					
ANR	Anatara Lifesciences Ltd	4	-	5.7	-	18.0	-	45.7	-	64.3		GaRP; Phase I/II; interim results		GaRP; Phase I/II final results / commercial partnerships	
IMC	Immuron	20		4.8	-	4.4	-	17.1	-	33.1	IMM-124E IND submission	Submit Complete Response Letter (CRL) for FDA clinical hold			IMM-124E ETEC: Topline results
MAP	Microba	38	-	30.0	-	36.4	-	65.9			New distribution partnerships signed for Services		Ethics approval for Ph1 IBD (MAP-315)	Immunology lead pre-clinical results	IBD (MAP-315) Ph1 commencement

Source: Morgans estimates, company data, FACTSET, Prices as at 17 Oct 2022

Figure 22: Inflammation

Ticker	Company Name	Mkt Cap (A\$m)	Share price movement (%)				Estimated timing on catalysts										
			1M	3M	6M	12M	2H22										
			1M	3M	6M	12M	1H2023		2H2023								
ANP	Antisense Therapeutics Limited	58	-	5.5	7.5	-	28.3	-	70.3	Animal model - Chronic dosing phase data	DMD combination study results	Ph2b DMD trial initiation		Ph2b DMD - complete enrolment			
CYP	Cynata Therapeutics Limited	47	-	-	14.3	-	18.5	-	46.3	Commence Ph2 GvHD trial		Data readout for diabetic foot ulcer (DFU) trial		Complete recruitment (n=440) Ph3 OA trial			
RGS	Regeneus Ltd.	12	-	16.7	-	27.3	-	32.2	-	47.4	Progenza (KOA) – the PMDA IND approval for a pivotal Ph2 trial in Japan		Sygenus – Ph1 pain trial commencement	Progenza (KOA) – JPN: establishment of manufacturing process milestone payment (US\$3m)	Progenza (KOA): Ph2 US IND application	US\$1.5m milestone payment (50% recruitment) / KOA: US\$1.5m milestone payment (100% recruitment)	Progenza (KOA): Ph2 US IND Approval

Source: Morgans estimates, company data, FACTSET, Prices as at 17 Oct 2022

Figure 23: Medicinal cannabis

							Minor	Mid	Significant	
Ticker	Company Name	Mkt Cap (A\$m)	Share price movement (%)				Estimated timing on catalysts			
			1M	3M	6M	12M	2H22	1H2023	2H2023	
BOD	Bod Australia	13	1.2	- 6.3	- 51.6	- 69.4	Licensing agreement S3 CBD product	Commence Aqua Phase PK	Commence FDA discussions for CBD product	FDA NDA submission
CAN	Cann Group Ltd.	93	- 1.9	- 13.1	- 35.4	- 8.6			S3 CBD capsule trial results Haleon (GSK) S3 distribution deal	TGA GMP for imports (culls competition importing non GMP product)
EOF	Cann Group Ltd.	74	- 2.2	- 6.4	- 51.1	- 73.3	Ph3 sleep trial / TGA product submission	Results from Endometriosis / GYN cancer study	Turf yarn production expansion / Fibre seed export	S3 registration decision by TGA
ZLD	Zelira	12	- 14.5	- 62.3	- 60.6	- 81.8	Results from Zelira diabetic nerve pain drug study (n=20)			

Source: Morgans estimates, company data, FACTSET, Prices as at 17 Oct 2022

Figure 24: Multi-indication

				Minor				Mid			Significant			
Ticker	Company Name	Mkt Cap (A\$m)	Share price movement (%)				Estimated timing on catalysts							
			1M	3M	6M	12M	2H22	1H2023		2H2023				
PAA	Pharmaust Limited	24	-	6.2	-	8.5	-	17.6	-	24.2	Ph2 canine trial results (B cell lymphoma)	P1/2 human MND trial results	Commence human cancer Ph2 trial	Commence COVID Ph2 trial
NYR	Nyrada	20	-	7.1	-	21.2	-	35.0	-	44.7		Brain Injury Program: Ph1 study commencement	Ph1 Cholesterol-Lowering Program start	

Source: Morgans estimates, company data, FACTSET, Prices as at 17 Oct 2022

Figure 25: Oncology

						Minor	Mid	Significant										
Ticker	Company Name	Mkt Cap (A\$m)	Share price movement (%)				Estimated timing on catalysts											
			1M	3M	6M	12M	2H22	1H2023	2H2023									
ATX	Amplia Therapeutics Ltd.	19	-	5.7	-	1.0	-	31.7	-	48.7	Ph2 pancreatic cancer top-line readout							
CU6	Clarity Pharmaceuticals Ltd.	153	-	6.3	-	3.3	3.1	-	46.4	Top-line results: Phase 1 PROPELLER diagnostic trial of SAR-bisPSMA	Recruitment complete in Phase 1/2a COBRA diagnostic trial of SAR-	IND application outcome for theranostic trial of 64Cu/67Cu SAR-Bombesin	Full results: Ph1 PROPELLER diagnostic trial of SAR-bisPSMA	Advance to cohort 4 Phase 1/2a CL04 theranostic trial of SARTATE in neuroblast	Commercial scale Cu-67 production online in the US	Top-line data: Phase 1/2a COBRA diagnostic trial of SAR-bisPSMA	Commence recruitment in theranostic SAR-Bombesin trial in PSMA-	Advance to cohort 3 of Phase 1/2 SECURE SAR-bisPSMA theranostic trial in
IBX	Imagion Biosystems Ltd.	36	-	8.6	-	23.8	-	41.8	-	54.9	Ph1 HER2 study completion							
IMM	Immutep Ltd	268	8.9	-	6.2	-	11.6	-	45.0	New data from Phase II TACTI-002 in 1L NSCLC	Update from Phase IIb TACTI-003 in 1L HNSCC	Initial results from INSIGHT-003 (triple-combo data) - Nov 11	Expansion of efit clinical program: including regulatory updates from FDA and/or EMA regarding proposed late-stage programs.		Update for Immutep's preclinical autoimmune disease candidate	Primary readout of ORR from Phase IIb TACTI-003 in 1L HNSCC		
IMU	Imugene Limited	1,067	-	22.7	-	35.8	-	20.9	-	59.0	Ph1b: trial start - PD1-Vaxx combo with Atezo			Ph1: CHECKvacc optimal dose data	Ph1/2 FPI: onCARlytics trial commences			
IVX	Invion Ltd.	74	-	11.5	15.0	-	23.3	-	17.9	Early Stage findings from atherosclerosis & infectious diseases (AID)								

Source: Morgans estimates, company data, FACTSET, Prices as at 17 Oct 2022

Figure 26: Oncology (cont'd)

Ticker	Company Name	Mkt Cap (A\$m)	Share price movement (%)				Estimated timing on catalysts					
			1M	3M	6M	12M	2H22		1H2023		2H2023	
KZA	Kazia Therapeutics Ltd	26	- 18.6	- 67.6	- 84.4	- 88.3	Paxalisib: peer-review childhood brain cancer publication		Paxalisib Ph2: Interim data readout PCNSL study	EVT801 Ph1: interim data readout	Paxalisib: GBM Agile - final data readout	
MDC	Medlab Clinical Ltd	25	- 8.3	- 11.9	- 22.1	- 53.8	NASDAQ listing	NanoCelle RNA PoC	NanaBis Ph3 initiation			
NOX	Noxopharm Ltd.	56	- 22.4	- 11.6	- 40.6	- 66.4			IONIC study: Interim readout readout - NOX66 / nivolumab combo for patients with solid tumours	CEP-2: Part 1 safety results / DARRT-2: Phase 1b/2a. Part 1 safety results	Chroma technology platform: Preclin results from pancreatic cancer study	
OSL	Oncosil	53	- 4.0	- 17.2	- 17.6	10.4	Approval in targeted commercial centres	FDA feedback on pivotal study design on LAPC				
PAB	Patrys	41	- 13.0	- 13.0	- 16.7	- 52.2			Completion of PAT-DX1 GLP toxicology studies	Completion of PAT-DX3 Engineering run	Completion of PAT-DX3 GLP toxicology studies	Initiation of PAT-DX1 phase 1 clinical studies

Source: Morgans estimates, company data, FACTSET, Prices as at 17 Oct 2022

Figure 27: Oncology (cont'd)

Ticker	Company Name	Mkt Cap (A\$m)	Share price movement (%)				Estimated timing on catalysts				
			1M	3M	6M	12M	2H22	1H2023	2H2023		
							Minor	Mid	Significant		
PTX	Prescient Therapeutics	119	- 5.7	- 2.9	17.9	- 28.3	PTX-100 full recruitment				
RAC	Race Oncology Ltd.	410	30.3	21.1	2.8	- 18.4	Initiation of Phase 2 Cardiprotection Trial	Initiation of Phase 1/2 Solid Tumour Trial	Various Preclinical results	Interim Update of Phase 2 AML Trial	
RAD	Radiopharm	42	- 8.3	- 31.2	- 28.3		Ph2 readout - Pivalate Imaging Trial	Ph1 start: Therapeutic Trial Nanobody-HER2	Ph1 start: Imaging Trial Integrin	Ph1 start: Therapeutic Trial Nanobody-PDL1	Ph1 commencement: PSA-mAb
TLX	Telix Pharmaceuticals Ltd.	1,750	- 4.1	- 4.9	19.7	- 5.9	ZIRCON study readout	Health Canada regulatory decision (Illuccix)	CUPID alpha therapy interim update	ProstACT SELECT interim update	Brazil regulatory decision (Illuccix)

Source: Morgans estimates, company data, FACTSET, Prices as at 17 Oct 2022



Figure 28: SaaS

						Minor	Mid	Significant		
Ticker	Company Name	Mkt Cap (A\$m)	Share price movement (%)				Estimated timing on catalysts			
			1M	3M	6M	12M	2H22	1H2023	2H2023	
ALC	Alcidion Group Limited	171	-	3.6	- 3.6	- 32.5	- 61.8	Contract win announcements	Contract win announcements	Contract win announcements
GLH	Global Health	15	-	15.6	- 14.3	- 6.9	- 21.7		In-patient EMR (A digital medical records solution for private/independent hospitals)	
IPD	Impedimed Limited	127	-	1.4	29.1	- 43.2	- 52.7	Potential inclusion in NCCN guidelines	First Reimbursement Policy Determinations	
IME	ImExHS Limited	20	-	1.0	- 28.7	- 45.1	- 63.5	Breakthrough cashflow/EBITDA +ve on a monthly run-rate basis	New larger contract wins	New contract wins
M7T	Mach7 Technologies Ltd.	127	-	19.1	- 20.9	- 25.4	- 46.7	New contract wins	New contract wins	New contract wins
VHT	Volpara Health Technologies Ltd.	146		5.5	5.5	- 34.1	- 53.2	Expansion of key partnerships / "Elephant hunting"	Expansion of key partnerships / "Elephant hunting"	Expansion of key partnerships / "Elephant hunting"

Source: Morgans estimates, company data, FACTSET, Prices as at 17 Oct 2022

Figure 29: Services

			Minor				Mid			Significant			
Ticker	Company Name	Mkt Cap (A\$m)	Share price movement (%)				Estimated timing on catalysts						
			1M	3M	6M	12M	2H22		1H2023		2H2023		
MEM	Memphasys Ltd	17	- 18.2	- 49.0	- 68.6	- 69.1	Monash study complete	Clinical sales progress		Clinical sales progress		Clinical sales progress	
OPL	Opyl Ltd.	3	- 12.3	- 2.0	- 31.5	- 68.8	Opin 2.0: Partner with Asian CRO		Partner with US CRO	Data trial #4: TrialKey	First customer TrialKey		

Source: Morgans estimates, company data, FACTSET, Prices as at 17 Oct 2022

Figure 30: Skin

			Minor				Mid			Significant		
Ticker	Company Name	Mkt Cap (A\$m)	Share price movement (%)				Estimated timing on catalysts					
			1M	3M	6M	12M	2H22		1H2023		2H2023	
BOT	Botanix Pharmaceuticals Limited	73	-	- 6.9	- 19.3	-	Sofpironium Bromide day 74 letter		Sof Bro mid cycle review guidance		Sof Bro approval	

Source: Morgans estimates, company data, FACTSET, Prices as at 17 Oct 2022

Figure 31: Veterinary

						Minor	Mid	Significant			
Ticker	Company Name	Mkt Cap (A\$m)	Share price movement (%)				Estimated timing on catalysts				
			1M	3M	6M	12M	2H22	1H2023	2H2023		
AHX	Apiam Animal Health Ltd.	127	- 2.7	2.8	- 9.6	- 22.3	Strategic acquisitions (ongoing)	Strategic acquisitions (ongoing)	Realisation of cost base leverage / margin expansion	Strategic acquisitions (ongoing)	Realisation of cost base leverage / margin expansion
BGT	Bio-Gene	19	- 2.3	- 19.2	- 61.1	- 22.2	Developments relating to manufacturing process developments for Flavocide	Purdue mosquito control testing results			

Source: Morgans estimates, company data, FACTSET, Prices as at 17 Oct 2022

Figure 32: Viral

						Minor	Mid	Significant		
Ticker	Company Name	Mkt Cap (A\$m)	Share price movement (%)				Estimated timing on catalysts			
			1M	3M	6M	12M	2H22	1H2023	2H2023	
BIT	Biotron Limited	34	- 14.3	- 20.0	- 40.0	- 9.4		Topline Ph2 results - HIV		
RCE	Recce Pharmaceuticals Ltd.	118	- 5.0	- 17.5	- 28.6	- 28.6	Licencing and partnering developments	R327 Ph2 DFU trial start	R327 Ph2 UTI trial commencement	Sepsis: Phase Ib/IIa study completion

Source: Morgans estimates, company data, FACTSET, Prices as at 17 Oct 2022

Figure 33: Wound

			Minor				Mid		Significant					
Ticker	Company Name	Mkt Cap (A\$m)	Share price movement (%)				Estimated timing on catalysts							
			1M	3M	6M	12M	2H22	1H2023		2H2023				
ARX	Aroa Biosurgery	271	-	2.5	10.5	3.3	-	31.9	Sales progress		Sales progress			
AVH	AVITA Medical Inc	181	-	23.0	-	9.6	-	32.9	-	69.0	Vitiligo + soft tissue repair: FDA submission for approval	Vitiligo + soft tissue repair: FDA PMA approval	Automated Vitiligo device: FDA submission	
NXS	Next Science Ltd	163	-	6.2	-	2.6	-	6.2	-	41.8	XPERIENCE - Compound Fracture infection pilot study results	Animal Study on effectiveness	DAIR Study on acutely infected joints	BioBurden In vivo Study results
TRP	Tissue Repair Ltd		-	8.8	-	3.1	-	10.1			Real-world data readout TR-Pro+	Commercial launch TR-Pro+	End of Ph2 meeting with FDA	Commence Ph3 trial - Chronic Wounds

Source: Morgans estimates, company data, FACTSET, Prices as at 17 Oct 2022

## Queensland

Brisbane	+61 7 3334 4888
Stockbroking, Corporate Advice, Wealth Management	
Brisbane: Edward St	+61 7 3121 5677
Brisbane: Tynan Partners	+61 7 3152 0600
Brisbane: North Quay	+61 7 3245 5466
Bundaberg	+61 7 4153 1050
Cairns	+61 7 4222 0555
Gladstone	+61 7 4972 8000
Gold Coast	+61 7 5581 5777
Holland Park	+61 7 3151 8300
Kedron	+61 7 3350 9000
Mackay	+61 7 4957 3033
Milton	+61 7 3114 8600
Newstead	+61 7 3151 4151
Noosa	+61 7 5449 9511
Redcliffe	+61 7 3897 3999
Rockhampton	+61 7 4922 5855
Springfield-Ipswich	+61 7 3202 3995
Spring Hill	+61 7 3833 9333
Sunshine Coast	+61 7 5479 2757
Toowoomba Chalk Capital	+61 7 4639 1277
Townsville	+61 7 4725 5787

## Northern Territory

Darwin	+61 8 9881 9555
--------	-----------------

## New South Wales

Sydney	+61 2 9043 7900
Stockbroking, Corporate Advice, Wealth Management	
Sydney: Grosvenor Place	+61 2 8215 5000
Sydney: Reynolds Securities	+61 2 9373 4452
Sydney: Currency House	+61 2 8216 5111
Armidale	+61 2 6770 3300
Ballina	+61 2 6686 4144
Balmain	+61 2 8755 3333
Bowral	+61 2 4851 5555
Chatswood	+61 2 8116 1700
Coffs Harbour	+61 2 6651 5700
Gosford	+61 2 4325 0884
Hurstville	+61 2 8215 5079
Merimbula	+61 2 6495 2869
Mona Vale	+61 2 9998 4200
Neutral Bay	+61 2 8969 7500
Newcastle	+61 2 4926 4044
Orange	+61 2 6361 9166
Port Macquarie	+61 2 6583 1735
Scone	+61 2 6544 3144
Wollongong	+61 2 4227 3022

## Australian Capital Territory

Canberra	+61 2 6232 4999
----------	-----------------

## Victoria

Melbourne	+61 3 9947 4111
Stockbroking, Corporate Advice, Wealth Management	
Brighton	+61 3 9519 3555
Domain	+61 3 9066 3200
Geelong	+61 3 5222 5128
Hawthorn	+61 3 9900 4350
South Yarra	+61 3 9006 9955
Southbank	+61 3 9037 9444
Traralgon	+61 3 5176 6055
Warmambool	+61 3 5559 1500

## Western Australia

West Perth	+61 8 6160 8700
Stockbroking, Corporate Advice, Wealth Management	
Perth	+61 8 6462 1999

## South Australia

Adelaide	+61 8 8464 5000
Stockbroking, Corporate Advice, Wealth Management	
Exchange Place	+61 8 7325 9200
Norwood	+61 8 8461 2800
Unley	+61 8 8155 4300

## Tasmania

Hobart	+61 3 6236 9000
--------	-----------------

## Disclaimer

The information contained in this report is provided to you by Morgans Financial Limited as general advice only, and is made without consideration of an individual's relevant personal circumstances. Morgans Financial Limited ABN 49 010 669 726, its related bodies corporate, directors and officers, employees, authorised representatives and agents ("Morgans") do not accept any liability for any loss or damage arising from or in connection with any action taken or not taken on the basis of information contained in this report, or for any errors or omissions contained within. It is recommended that any persons who wish to act upon this report consult with their Morgans investment adviser before doing so. Those acting upon such information without advice do so entirely at their own risk.

This report was prepared as private communication to clients of Morgans and is not intended for public circulation, publication or for use by any third party. The contents of this report may not be reproduced in whole or in part without the prior written consent of Morgans. While this report is based on information from sources which Morgans believes are reliable, its accuracy and completeness cannot be guaranteed. Any opinions expressed reflect Morgans judgement at this date and are subject to change. Morgans is under no obligation to provide revised assessments in the event of changed circumstances. This report does not constitute an offer or invitation to purchase any securities and should not be relied upon in connection with any contract or commitment whatsoever.

## Sustainalytics disclaimer

Part of this publication may contain Sustainalytics proprietary information that may not be reproduced, used, disseminated, modified nor published in any manner without the express written consent of Sustainalytics. Nothing contained in this publication shall be construed as to make a representation or warranty, express or implied, regarding the advisability to invest in or include companies in investable universes and/or portfolios. The information is provided "as is" and, therefore Sustainalytics assumes no responsibility for errors or omissions. Sustainalytics cannot be held liable for damage arising from the use of this publication or information contained herein in any manner whatsoever.

## Disclosure of interest

Morgans may from time to time hold an interest in any security referred to in this report and may, as principal or agent, sell such interests. Morgans may previously have acted as manager or co-manager of a public offering of any such securities. Morgans affiliates may provide or have provided banking services or corporate finance to the companies referred to in the report. The knowledge of affiliates concerning such services may not be reflected in this report. Morgans advises that it may earn brokerage, commissions, fees or other benefits and advantages, direct or indirect, in connection with the making of a recommendation or a dealing by a client in these securities. Some or all of Morgans Authorised Representatives may be remunerated wholly or partly by way of commission.

## Regulatory disclosures

Analyst owns shares in the following mentioned company(ies): Antisense Therapeutics, Audeara, Clinuvel Pharmaceuticals, EBR Systems, ImexHS, ImpediMed, Mach7 Technologies, Neuren Pharmaceuticals, Opyl, Pharmaxis, Proteomics International Laboratories, Rhythm Biosciences, Telix Pharmaceuticals, Volpara  
Morgans Corporate Limited was Joint Lead Manager to the Placement and Share Purchase Plan of shares in Antisense Therapeutics Limited in October 2021 and received fees in this regard.; Morgans Corporate Limited was Joint Lead Manager and Underwriter to the Entitlement Offer of shares in Apiam Animal Health in May 2022 and received fees in this regard.; Morgans Corporate Limited was Lead Manager and Underwriter to the Placement and Entitlement Offer of shares in IMEXHS Limited in July 2022 and received fees in this regard.; An Authorised Representative of Morgans Financial Limited is a Non-Executive Chairman of Noxopharm Ltd and will earn fees in this regard. ; Morgans Corporate Limited was Lead Manager to the Placement and Share Purchase Plan of shares in Pharmaxis Ltd in November 2021 and received fees in this regard. ; Morgans Corporate Limited was Lead Manager to the Placement of shares in Proteomics International Laboratories Limited in August 2022 and received fees in this regard.

## Recommendation structure

For a full explanation of the recommendation structure, refer to our website at [morgans.com.au/research\\_disclaimer](https://morgans.com.au/research_disclaimer)

## Research team

For analyst qualifications and experience, refer to our website at [morgans.com.au/research-and-markets/our-research-team](https://morgans.com.au/research-and-markets/our-research-team)

---

**Research coverage policy**

For an overview on the stock selection process, refer to our website at [morgans.com.au/research-and-markets/company-analysis/Research-Coverage-Policy](https://morgans.com.au/research-and-markets/company-analysis/Research-Coverage-Policy)

**Research independence statement**

[morgans.com.au/Research-Independence-Statement](https://morgans.com.au/Research-Independence-Statement)

**Stocks under coverage**

For a full list of stocks under coverage, refer to our website at [morgans.com.au/research-and-markets/company-analysis/ASX100-Companies-under-coverage](https://morgans.com.au/research-and-markets/company-analysis/ASX100-Companies-under-coverage) and [morgans.com.au/research-and-markets/company-analysis/EX-100-Companies-under-coverage](https://morgans.com.au/research-and-markets/company-analysis/EX-100-Companies-under-coverage)

If you no longer wish to receive Morgans publications please contact your local Morgans branch or write to GPO Box 202 Brisbane QLD 4001 and include your account details.

**[morgans.com.au](https://morgans.com.au)**