

Paradigm Biopharmaceuticals

Cautious view remains

REDUCE

Current price:	A\$4.17
Target price:	A\$2.16
Previous target:	A\$1.71
Up/downside:	-48.2%
Reuters:	PAR.AX
Bloomberg:	PAR AU
Market cap:	US\$553.9m A\$824.9m
Average daily turnover:	US\$2.81m A\$4.12m
Current shares o/s	192.2m
Free float:	72.2%

- PAR reported its 1H20 result with expenses largely in line with expectations. No further detail or commentary was provided in the report.
- We maintain our cautious view on the stock with current valuation pricing in significantly higher expectations of potential licensing deal value and market share assumptions than we see as reasonable.
- We have rolled forward our model and made minor changes to our assumptions. Our price target increases to A\$2.16 (from A\$1.71) although we retain a Reduce recommendation. We note an investment in PAR is appropriate for investors with a higher risk profile.

1H20 results

PAR posted a 1H20 net loss of A\$5.1m for the period (~14% increase in the pcp). Expense items grew in line with expectations with a 35% increase in R&D and employee expenses, and a 25% increase in general and administration costs. Cash balance remains strong with A\$70.1m in cash after the A\$77.9m capital raise in late FY19 and a further A\$1.4m via the exercising of options in the 1H20 period.

Better risk-adjusted plays in the space

We remain wary after PAR's change in strategy mid last year and what we view as interesting but inconclusive results on its Ph2b osteoarthritis (OA) trial, while follow-up studies similarly unconvincing and lack substantive clinical evidence. We view the OA data as an interesting trend but will likely require a more stringent trial design and analysis to flush out critical design parameters for a Ph3 trial and draw out a realistic commercial opportunity. Even taking into consideration our question marks over the trial quality, we still think there is value in the asset, just not at current valuations. The data shown to date, while interesting and showing positive initial trends of efficacy is by no means conclusive and given the significant risks ahead trials / approvals / costs / marketing / time-value, we continue to view PAR as a funding source for better risk-adjusted plays in the space.

Changes to forecasts

We have rolled forward our model and made minor changes including re-weighting partnership and milestone assumptions based on updated biotechnology deal metrics which continue to shift toward higher back-end loaded milestone payments over the last 12 months.

Investment view – retain Reduce recommendation

As a result of the changes to forecasts and rolling forward of our model, our DCF valuation and price target increases to A\$2.16 (from A\$1.71) although we maintain our Reduce recommendation with recent share price rally running well ahead of fundamental value and pricing in significantly higher deal values than what we are seeing across the market, in our view. We continue to advocate investors take profits but maintain a core holding if risk-profile allows. We note this investment is appropriate for investors with higher risk-profiles.



Price performance	1M	3M	12M
Absolute (%)	23	39.9	268.
Relative (%)	20.6	34	250.

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

– N/A

Financial Summary	Jun-18A	Jun-19A	Jun-20F	Jun-21F	Jun-22F
Revenue (A\$m)	2.74	2.98	2.25	4.28	70.20
Operating EBITDA (A\$m)	-6.19	-15.89	-17.10	-50.40	15.17
Net Profit (A\$m)	-6.15	-15.63	-15.50	-49.21	10.82
Normalised EPS (A\$)	-0.04	-0.09	-0.08	-0.25	0.05
Normalised EPS Growth	22681%	115%	(15%)	213%	
FD Normalised P/E (x)	NA	NA	NA	NA	76.26
DPS (A\$)	-	-	-	-	-
Dividend Yield	0%	0%	0%	0%	0%
EV/EBITDA (x)	NA	NA	NA	NA	53.44
P/FCFE (x)	NA	NA	NA	NA	44,514
Net Gearing	(18.0%)	(87.4%)	(88.8%)	(78.0%)	(48.9%)
P/BV (x)	43.52	9.68	12.26	45.59	28.53
ROE	(46%)	(32%)	(21%)	(115%)	46%
% Change In Normalised EPS Estimates					
Normalised EPS/consensus EPS (x)			1.85	1.78	-0.38

SOURCE: MORGANS, COMPANY REPORTS

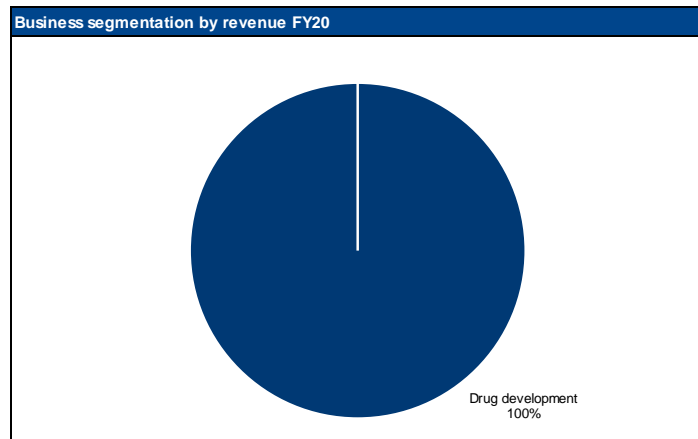
Paradigm Biopharmaceuticals

as at February 17, 2020

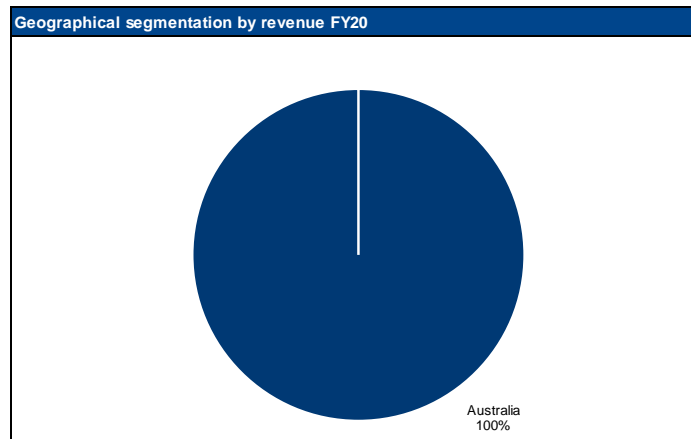
Market cap (A\$m):	824.9	Rating:	REDUCE
Shares outstanding (m):	192.2	Price (A\$):	4.17
Free float (%):	72.2	Target price (A\$):	2.16
Website:	https://paradigmbiopharma.com/	Upside/downside to target price (%):	-48.2

Company description

Paradigm Biopharmaceuticals Limited (PAR) is an Australian biopharmaceutical company focused on repurposing the drug 'pentosan polysulphate sodium' (PPS) for the treatment of bone marrow edema. Paradigm is targeting addressable markets with the aim to use the shortened development pathway utilising repurposed drugs.



SOURCE: MORGANS



SOURCE: MORGANS

PAR corporate milestones

Milestones for CY2020	
Initiate Compassionate Use program with NFL 'Pro Players Elite Network'	
Peer review publication of Phase 2a Viral Arthritis clinical trial.	
Phase 3 OA/BMEL Clinical Trial:	<ul style="list-style-type: none"> Commence Phase 3 Clinical Trial in USA
Phase 2/3 MPS Clinical Trial:	<ul style="list-style-type: none"> Commence Phase 2/3 Clinical Trial in USA and EU
Peer reviewed publication of Phase 2b OA/BMEL Results	
Progress MPS Indication	
TGA Provisional Approval for iPPS to treat OA in Australia	
Ongoing assessment of respiratory indication	

SOURCE: PARADIGM BIOPHARMACEUTICALS

Catalyst table

Upcoming catalysts:
Peer-reviewed publication of OA/BMEL results
TGA provisional approval results
Release of Ph3 trial protocol (FDA IND)
Ex-NFL player EAP
Partnership transaction discussions
Ph3 commencement

SOURCE: MORGANS

Market assumptions

MARKET DATA	#
Population of target market	325.70
Prevalence of disease	12.1%
Post-traumatic portion	12.0%
Number of Cases Forecast for Year 1	4.7
Annual Population Growth	0.70%
Peak Market Penetration	10.0%
Revenue Per Unit (\$US)	\$ 1,750
Market Ramp Time to Peak Penetration (Years)	5
Hold peak	5
Life cycle of drug	20

SOURCE: MORGANS

Key drivers / risks

Key Drivers
Licensing deal value for late stage assets
Potential for early commercialisation
Key risks:
Timing / execution risks
Trial risks
Value of intellectual property
API supply
Alternative therapies
Quality of trial data to date

SOURCE: MORGANS

Figure 1: Financial summary

Paradigm	Year															
Income statement	2018A	2019A	2020F	2021F	2022F	Closing price (A\$)	4.17	Price target (A\$)	2.16							
Divisional sales	0.0	0.0	0.0	0.0	0.0	Valuation metrics										
Total revenue	0.0	0.0	0.0	0.0	0.0	Methodology -DCF-PER Comp Target Price \$2.16										
EBITDA	-6.2	-15.9	-17.1	-50.4	15.2	DCF valuation inputs										
Associate income	0.0	0.0	0.0	0.0	0.0	Rf	3.50%	10-year rate	5.25%							
Depreciation	0.0	0.0	0.0	0.0	0.0	Rm-Rf	5.50%	Margin	2.0%							
EBITA	-6.2	-15.9	-17.1	-50.4	15.2	Beta	1.70	Kd	5.00%							
Amortisation/impairment	0.0	0.0	0.0	0.0	0.0	CAPM (Rf+Beta(Rm-Rf))	12.9%	Ke	14.9%							
EBIT	-6.2	-15.9	-17.1	-50.4	15.2	E/EV*Ke+D/EV*Kd(1-t)	NPV cash flow (A\$m)		470.9							
EBIT(incl associate profit)	-6.2	-15.9	-17.1	-50.4	15.2	Equity (E/EV)	96.2%	Minority interest (A\$m)	0.0							
Net interest expense/FX	0.0	0.0	0.3	1.6	1.2	Debt (D/EV)	3.9%	Net debt (A\$m)	0.0							
Pre-tax profit	-6.3	-15.6	-15.5	-49.2	15.5	Interest rate	5.00%	Investments (A\$m)	0.0							
Income tax expense	0.0	0.0	0.0	0.0	4.6	Tax rate (t)	30.0%	Equity market value (A\$m)	470.9							
After-tax profit	-6.3	-15.6	-15.5	-49.2	10.8	WACC	12.9%	Diluted no. of shares (m)	197.8							
Minority interests	0.0	0.0	0.0	0.0	0.0	DCF valuation \$2.38										
NPAT	-6.3	-15.6	-15.5	-49.2	10.8											
Significant items	0.0	0.0	0.0	0.0	0.0	Multiples										
NPAT post abnormals	-6.3	-15.6	-15.5	-49.2	10.8	Enterprise value (A\$m)	822.4	2018A	752.5	2019A	765.1	2020F	810.8	2021F	810.7	2022F
						EV/Sales (x)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cash flow statement	2018A	2019A	2020F	2021F	2022F	EV/EBITDA (x)	-132.9	-47.4	-44.7	-16.1	53.4					
EBITDA	-6.2	-15.9	-17.1	-50.4	15.2	EV/EBIT (x)	-132.8	-47.4	-44.7	-16.1	53.4					
Other cash items	0.0	0.0	0.0	0.0	0.0	PE (pre-goodwill) (x)	-95.9	-51.3	-53.2	-16.8	76.3					
Net interest (pd)/rec	-0.1	-0.3	-1.6	-1.2	-0.3	PEG (pre-goodwill) (x)	-0.2	0.0	0.3	-21.1	-0.4					
Taxes paid	0.0	0.0	0.0	0.0	-4.6	At target price					2018A	2019A	2020F	2021F	2022F	
Change in working capital	0.1	9.8	3.0	3.5	-10.8	EV/EBITDA (x)	-132.8	-47.4	-44.7	-16.1	53.4					
Cash flow from ops (1)	-6.1	-6.4	-15.7	-48.1	-0.5	PE (pre-goodwill) (x)	-49.7	-26.6	-27.5	-8.7	39.5					
Capex (2)	0.0	0.0	0.0	0.0	0.0	Per share data					2018A	2019A	2020F	2021F	2022F	
Disposals/(acquisitions)	0.0	0.0	0.0	0.0	0.0	No. shares	141.5	192.2	197.8	197.8	197.8					
Other investing cash flow	0.0	-6.5	0.0	0.0	0.0	EPS (cps)	-4.3	-8.1	-7.8	-24.9	5.5					
Cash flow from invest (3)	0.0	-6.5	0.0	0.0	0.0	EPS (normalised) (c)	-4.3	-8.1	-7.8	-24.9	5.5					
Incr/(decr) in equity	5.9	82.8	0.0	0.0	0.0	Dividend per share (c)	0.0	0.0	0.0	0.0	0.0					
Incr/(decr) in debt	0.0	0.0	0.0	0.0	0.0	Dividend payout ratio (%)	0.0%	0.0%	0.0%	0.0%	0.0%					
Ordinary dividend paid	0.0	0.0	0.0	0.0	0.0	Dividend yield (%)	0.0%	0.0%	0.0%	0.0%	0.0%					
Preferred dividends (4)	0.0	0.0	0.0	0.0	0.0	Growth ratios					2018A	2019A	2020F	2021F	2022F	
Other financing cash flow	0.0	0.0	0.0	0.0	0.0	Sales growth	n.a.	n.a.	n.a.	n.a.	n.a.					
Cash flow from fin (5)	5.9	82.8	0.0	0.0	0.0	Operating cost growth	n.a.	156.7%	7.6%	194.7%	-130.1%					
Forex and disc ops (6)	0.0	0.0	0.0	0.0	0.0	EBITDA growth	n.a.	-156.6%	-7.6%	-194.7%	130.1%					
Incr/(decr) cash (1+3+5+6)	-0.3	69.9	-15.7	-48.1	-0.5	EBITA growth	n.a.	n.a.	n.a.	n.a.	n.a.					
Equity FCF (1+2+4)	-6.2	-6.4	-15.7	-48.1	-0.5	EBIT growth	n.a.	n.a.	n.a.	n.a.	n.a.					
Balance sheet						Operating performance					2018A	2019A	2020F	2021F	2022F	
Cash & deposits	2.4	72.3	59.8	14.1	14.1	Asset turnover (%)	0.0	0.0	0.0	0.0	0.0					
Trade debtors	2.7	3.5	0.4	0.7	11.5	EBITDA margin (%)	n.a.	n.a.	n.a.	n.a.	n.a.					
Inventory	0.0	0.0	0.0	0.0	0.0	EBIT margin (%)	n.a.	n.a.	n.a.	n.a.	n.a.					
Investments	0.0	0.0	0.0	0.0	0.0	Net profit margin (%)	n.a.	n.a.	n.a.	n.a.	n.a.					
Goodwill	0.0	0.0	0.0	0.0	0.0	Return on net assets (%)	-45.7	-19.2	-25.4	-278.6	52.5					
Other intangible assets	9.9	3.0	3.0	3.0	3.0	Net debt (A\$m)	-2.4	-72.3	-59.8	-14.1	-14.1					
Fixed assets	0.0	0.0	0.0	0.0	0.0	Net debt/equity (%)	-18.0	-87.4	-88.8	-78.0	-48.9					
Other assets	0.0	0.0	0.0	0.0	0.0	Net interest/EBIT cover (x)	n.a.	389.4	65.3	31.6	-12.7					
Total assets	15.2	85.5	69.8	24.5	35.3	Internal liquidity					2018A	2019A	2020F	2021F	2022F	
Short-term borrowings	0.0	0.0	0.0	0.0	0.0	Current ratio (x)	1.5	26.7	23.8	2.2	2.2					
Trade payables	1.1	2.3	2.1	6.0	6.0	Receivables turnover (x)	0.0	0.0	0.0	0.0	0.0					
Long-term borrowings	0.0	0.0	0.0	0.0	0.0	Payables turnover (x)	6.6	9.4	7.7	12.4	-2.5					
Provisions	0.3	0.4	0.4	0.4	0.4											
Other liabilities	0.3	0.0	0.0	0.0	0.0											
Total liabilities	1.6	2.7	2.5	6.4	6.4											
Share capital	26.6	109.5	109.5	109.5	109.5											
Other reserves	2.0	4.1	4.1	4.1	4.1											
Retained earnings	-15.1	-30.7	-46.2	-95.4	-84.6											
Other equity	0.0	0.0	0.0	0.0	0.0											
Total equity	13.6	82.8	67.3	18.1	28.9											
Minority interest	0.0	0.0	0.0	0.0	0.0											
Total shareholders' equity	13.6	82.8	67.3	18.1	28.9											
Total liabilities & SE	15.2	85.5	69.8	24.5	35.3											

SOURCE: MORGANS RESEARCH, COMPANY

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