

# 4Dmedical

## The next dimension

4DX has announced the signing of the Philips (PHG.NYSE) reseller agreement, with 4DMedical and Imbio products now set for US distribution via the Philips' product catalogue. The deal represents the culmination of a (circa) year long process with Philips (MoU Nov-23, teaming agreement Jan-24) and underpins the next phase of 4DX's commercialisation. In this note we revisit the US opportunity, highlighting why we remain positive on 4DX's TAM, value proposition and unit economics. While we expect US volumes to build medium-term, this partnership also increases the likelihood of a more significant, VA-wide screening program (underpinned by a ~6m patient population, US\$280b of PACT Act funding). **Maintain Spec Buy.**

### 4DX-Philips formalise distribution agreement

Philips has signed a 5-year agreement with 4DX, giving it exclusive distribution rights to the product portfolio (i.e. XV LVAS, CT LVAS and Imbio – ex CT VQ) in the US for Government customers (inc VA and DoD) and non-exclusive rights with all other US customers. Philips will earn reseller margins of 20-35% on end-customer sales with minimum sales targets set to maintain exclusivity rights (not disclosed). With core CT LVAS scans carrying US\$650 CMS reimbursement, we estimate US\$350 net pricing to 4DX with providers capturing US\$150 and Philips US\$150.

### Deal augments 4DX's pathway to material revenue generation

We estimate ~80m respiratory diagnostics procedures pa in the US, with OMLe taking the ~12m thoracic CTs a proxy for 4DX's serviceable market (i.e. US\$7.8b). Assuming 2% penetration and overlaying 10% of the burn-pit population, we calculate an initial US revenue opportunity of ~US\$300m (>A\$400m vs OMLe FY26E US revenue of A\$35m).

### Valuation: TP (DCF) \$1.10 (was \$1.05), Maintain Spec Buy

Our TP lifts slightly on roll-forward and minor changes to outer-year OMLe.

### Key Financials

Year-end June (\$)	FY23A	FY24A	FY25E	FY26E	FY27E
Revenue (\$m)	0.7	3.8	18.2	53.3	93.9
EBITDA (\$m)	(28.9)	(30.5)	(23.5)	(1.4)	17.3
EBIT (\$m)	(31.4)	(34.6)	(28.6)	(7.6)	9.8
Reported NPAT (\$m)	(31.4)	(36.2)	(27.9)	(7.3)	7.5
Reported EPS (c)	(9.6)	(8.0)	(5.6)	(1.4)	1.5
Normalised NPAT (\$m)	(31.4)	(33.7)	(27.9)	(7.3)	7.5
Normalised EPS (c)	(9.6)	(7.5)	(5.6)	(1.4)	1.5
Dividend (c)	-	-	-	-	-
Net Yield (%)	-	-	-	-	-
Franking (%)	-	-	-	-	-
EV/EBITDA (X)	-	-	-	-	14.7
Normalised P/E (x)	-	-	-	-	42.3
Normalised ROE (%)	-	-	-	-	16.3

Source: OML, Iress, 4Dmedical

30 September 2024

Last Price

**A\$0.63**

Target Price

**A\$1.10 (Previously A\$1.05)**

Recommendation

**Speculative Buy**

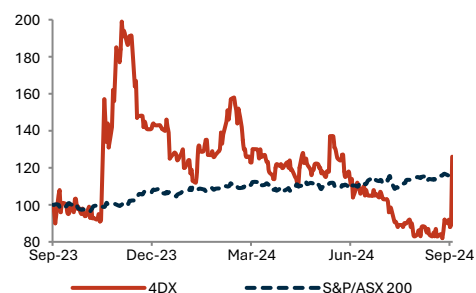
Risk

**Higher**

### Health Care Technology

ASX Code	4DX
52 Week Range (\$)	0.41 - 1.00
Market Cap (\$m)	260.9
Shares Outstanding (m)	414.1
Av Daily Turnover (\$m)	4.7
3 Month Total Return (%)	10.5
12 Month Total Return (%)	26.0
Benchmark 12 Month Return (%)	16.8
NTA FY25E (¢ per share)	-4.8
Net Cash FY25E (\$m)	12.7

### Price performance



Source: FactSet

### Consensus Earnings

	FY25E	FY26E
NPAT (C) (\$m)	(31.9)	(12.2)
NPAT (OM) (\$m)	(27.9)	(7.3)
EPS (C) (c)	(7.0)	(2.8)
EPS (OM) (c)	(5.6)	(1.4)

Source: OML, Iress, 4Dmedical

### Tom Godfrey, CFA

Senior Research Analyst

(07) 3214 5587

[tgodfrey@ords.com.au](mailto:tgodfrey@ords.com.au)

### Benjamin Yun, CFA

Research Associate

(02) 8216 6646

[byun@ords.com.au](mailto:byun@ords.com.au)

## Philips Reseller a done deal – key takeaways

### Reseller agreement in detail

- In Jan-24, 4DX announced it had signed a Teaming Agreement with Philips to establish a strategic collaboration to advance solutions to evaluate Veterans with deployment-related respiratory disease (DRRD) and other respiratory conditions as part of a broader lung screening initiative. Since then, 4DX and Philips teams have been collaborating to develop solutions for toxic exposure and lung screening using 4DMedical software and Philips fluoroscopy and CT systems;
- In parallel, the parties have been working towards this reseller agreement under which the 4DMedical and Imbio portfolios have been added to Philips’ product catalogue and will be offered as a third-party solution to its U.S. customer base;
- **The 5-year agreement will give Philips exclusive distribution rights to the 4DMedical suite of products with its U.S. government customers (including the VA and DoD) and nonexclusive rights with all other U.S. commercial customers;**
- Initial transfer pricing for all products has been established, **whereby Philips will earn margins between 20% and 35% (varying by product) on end-customer sales** of XV LVAS, CT LVAS and Imbio products; and,
- For Philips to maintain exclusive rights to U.S. government customers, the agreement stipulates minimum thresholds for annual sales targets, across the 5-year term.

### Figure 1: CT LVAS scan net pricing – worked example

CT LVAS scan	US\$	OML comment
Scan reimbursement	\$650	CMS rate
Provider margin	\$150	
Scan price	\$500	
Philips margin	\$150	30% reseller margin
<b>Net 4DX price</b>	<b>\$350</b>	

Source: Company data, OMLe

### Partnership delivers potential for a commercialisation step-change

- The partnership will allow 4DX to leverage Philips’ long-established and significant existing commercial partnerships in the US. These existing relationships are particularly strong within the VA and DoD, where Philips has been providing solutions for over 45 years (with 50% of VA clinics currently use Philips imaging solutions);
- 4DX sees the opportunities within the VA as twofold:
  1. 4DX and Philips will work together to support the need for scalable, non-invasive lung screening in support of the PACT Act. The PACT Act represents a US\$280b commitment over 10 years, covering numerous respiratory illnesses as presumptive conditions, providing healthcare eligibility to 6m Veterans exposed to airborne hazards while on deployment. XV LVAS and LDAf are currently two leading non-invasive technologies capable of assessing DRRD;
  2. 4DX’s comprehensive portfolio of products is well placed to provide actionable insights to frontline VA physicians treating patients with chronic lung disease, whilst also serving all physicians triaging respiratory conditions across the entire Veteran population. **This is particularly relevant when considering that Veterans have three times the rates of chronic lung diseases such as COPD**

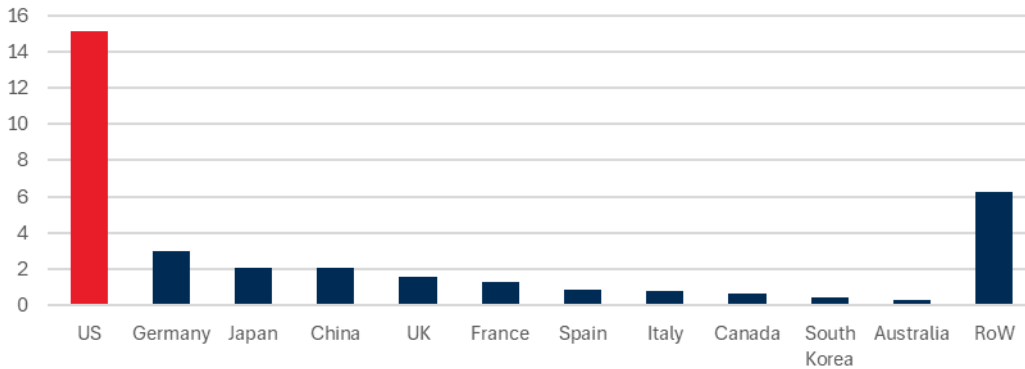
**compared to the general population.** It is also worth noting that the VA annual healthcare budget is more than US\$330 billion per annum.

## Breaking down the US opportunity

### The US represents the largest respiratory diagnostics TAM in the world

The US is the largest respiratory diagnostics market in the world, with ~80 million procedures pa generating ~US\$15b of expenditure (roughly 43% of global spend).

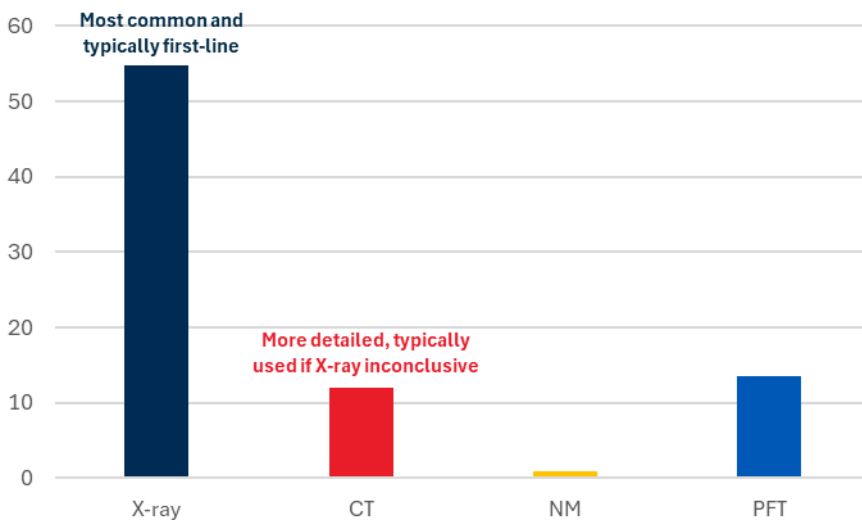
**Figure 2: We estimate the global respiratory diagnostics TAM is ~\$35b**



Source: Company data, Frost & Sullivan, OMLe

We estimate ~80m respiratory diagnostics procedures pa in the US, with OMLe taking the ~12m thoracic CTs a proxy for 4DX’s serviceable market (i.e. US\$7.8b value at the US\$650 CMS reimbursement rate).

**Figure 3: US respiratory testing volumes (m)**



Source: Company data, Frost & Sullivan, OMLe

While 4DX’s TAM is clearly significant, below we drill-down to a more realistic medium-term revenue opportunity assuming:

- 2% penetration of the broader US market (thoracic CT vols an approximation of more complex patient episodes); and,
- 10% of the DRRD/ burn-pit population ~6m (initial screenings and follow-up tests). We would expect VA testing volumes to exceed this if a system-wide screening program is established.

On this basis, we calculate an initial US revenue opportunity of ~US\$300m (>A\$400m vs OMLe FY26E US revenue of A\$35m).

**Figure 4: Our assessment of 4DX’s medium-term US revenue opportunity**

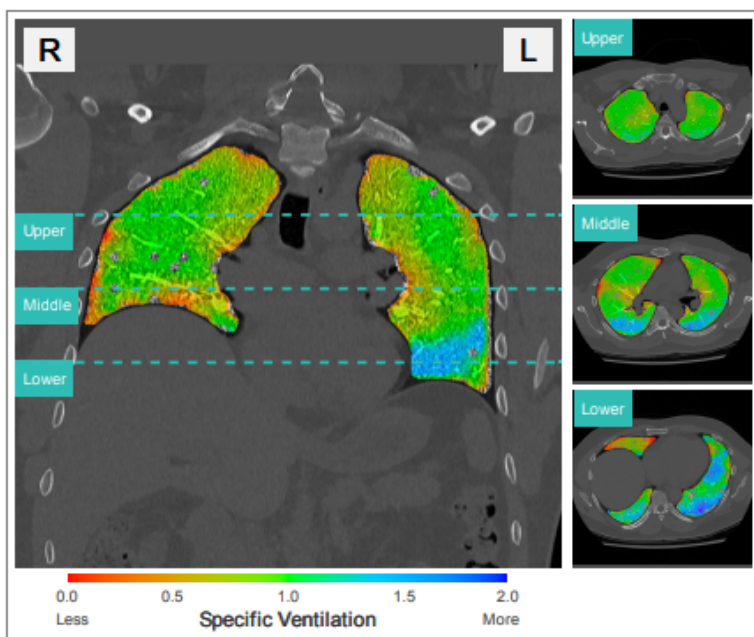
4DX revenue opportunity	Units	
Thoracic CTs	m	12.0
Penetration	%	2%
Volume opportunity	m	0.2
DRRD population	m	6.0
Penetration	%	10%
Volume opportunity	m	0.6
Total scans	m	0.8
Net pricing	US\$	350
<b>Revenue opportunity</b>	<b>US\$m</b>	<b>294</b>
Revenue opportunity	A\$m	420

Source: OMLe

**Why XV Technology – understanding the value proposition...**

At the core of 4DX’s product suite is its flagship imaging platform - XV Technology (X-ray Velocimetry). The suite includes software products CT LVAS and XV LVAS (Lung Ventilation Analysis Software) that enable breakthrough levels of non-invasive, quantitative lung function analysis. The underlying technology leverages patented mathematical models and algorithms to convert diagnostic images (e.g. CTs, X-rays) into quantitative data, delivering a four-dimensional (4D) lung imaging solution. XV Technology operates through a cloud-based SaaS platform that integrates directly with existing imaging hardware (alleviating upfront capex for hospitals/clinics).

**Figure 5: CT LVAS Ventilation Report**



Source: 4DX

XV Technology lets physicians understand regional airflow, allowing them to diagnose respiratory disorders earlier and with greater sensitivity. Diagnosis and treatment of respiratory diseases typically involves examination by a doctor using traditional imaging modalities (i.e. X-

ray, CT or nuclear medicine) or a pulmonary function test (PFT). The majority of respiratory tests globally are chest X-rays (~67%), followed by PFTs, chest CTs and nuclear medicine scans.

Compared to traditional/incumbent modalities, XV Technology offers the following advantages:

- New medical insights through spirometry at a regional level;
- Improved safety with a similar radiation dose vs X-ray;
- Superior imaging results with high-detail 4D resolution;
- Improved clinical outcomes and experience for patients;
- Faster and more efficient testing; and,
- Lower cost vs majority of incumbent modalities.

The higher levels of detail and accuracy offered by XV Technology means doctors are better placed to manage patients with complex conditions (usually presenting with unexplained dyspnea – i.e. shortness of breath). The need to diagnose, triage and treat patients quickly and effectively is significant given the global burden of respiratory disease.

### Spotlight on VA and Burn Pits

The PACT Act was signed on 10-Aug-22 and provides US\$280b in additional healthcare benefits over ten years for veterans exposed to burn pits and other harmful toxins. It requires the Veterans Health Administration (VHA) to provide toxic exposure screening to each of the >9m veterans enrolled in the VHA program.

The US Military built burn pits close to bases across the Middle East to dispose of waste (both hazardous and non-hazardous). A range of materials (including munitions, chemicals, plastics and medical waste) were burned in pits using jet fuel as the accelerant. 4DX estimates that ~6m veterans have been exposed to airborne hazards while on deployment. After exposure to burn pit environments, many previously combat-ready troops returned from deployment with disabling respiratory symptoms (i.e. shortness of breath, coughing), that prevented them from performing basic physical activities. A significant portion of these troops developed constrictive bronchiolitis (CB - a narrowing of the smallest and deepest airways of the lungs). Diagnosing these veterans has been difficult. Historically, a highly invasive surgical lung biopsy has been the only way to detect CB, with conventional lung imaging and PFTs returning normal results in this population.

**The Vanderbilt clinical trial enrolled: 1) group of veterans who had undergone surgical lung biopsy; and, 2) a control group. The data from the trial showed that XV Technology confirmed the diagnosis of CB with <0.001% uncertainty, setting it well apart from conventional diagnostic methods and as a dramatically safer and less expensive alternative to surgical biopsy.**

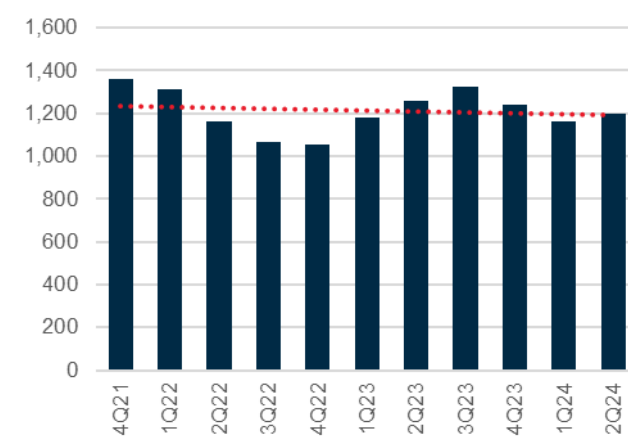
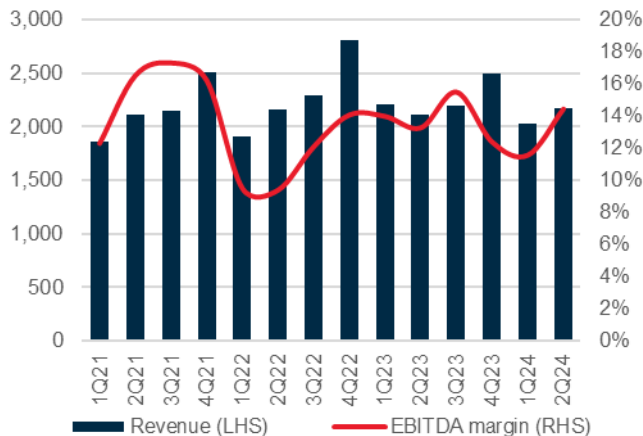
### Why Philips?

Philips has long-run and significant partnerships with both the VA and the Department of Defense going back >45 years, deploying ~35% of the critical care information systems across the VA, and having Philips imaging solutions in ~50% of VA hospitals.

Philips is a global leader in health care with >€18b in sales (LTM) and ~70k staff globally. The company offers a wide range of products and services, including advanced imaging systems, patient monitoring solutions and healthcare informatics (with its largest market being North America at ~42% of sales). Through a combined offering with 4DX, Philips is targeting market share growth across capital equipment sales and service offerings (plus attachment through its PACS portfolio), as the company looks to more comprehensively serve the VA. We note that on an LTM basis, Philips' Diagnosis & Treatment Division generated €8.9b in sales and €1.2b in

EBITDA (noting moving annual EBITDA has been on a downward trajectory). This highlights both the scale of this business and the impetus for Philips to seek additional competitive edges to drive higher growth and returns.

**Figure 6: PHG Diagnosis & Treatment division (€m) Figure 7: PHG D&T division MAT EBITDA (€m)**



Source: Company data, OML

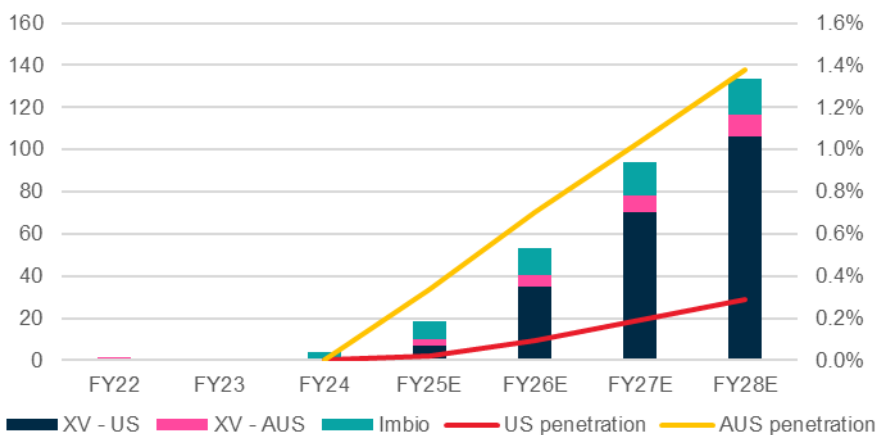
Source: Company data, OML

## Valuation and forecast changes

We value 4DX at \$1.10ps (was \$1.05ps) using a DCF methodology (WACC 11.2%, TGR 3%) and maintain a Speculative Buy rating. Our forecasts remain broadly unchanged (minor outer-year tweaks) with Philips deal completion already assumed in 1Q25. We assign a Spec Buy recommendation as we expect the stock’s total return to >20% over 12 months. The investment may have a strong capital appreciation but also has high degree of risk and there is a significant risk of capital loss (per Ords recommendation definitions). Our DCF is driven by:

- FY25E revenue of A\$18m, increasing to A\$53m in FY26E with a 47% 3yr revenue CAGR thereafter. Longer-term we model 10% revenue growth noting our TAM penetration rates remain modest even in outer-years (i.e. US penetration of 0.6% in FY30E);
- Long-term GMs of 90% and EBITDA margins of 39-40%. Minimal levels of working capital and capex (3% of sales) long-term per 4DX’s capital light business model; and,
- Our WACC of 11.2% in underpinned by: 1) cost of equity 12.8%; 2) risk free rate of 4%; and, 3) target gearing of 20%. Our terminal growth rate for 4DX is 3.0%.

**Figure 8: Revenue forecasts (A\$m) – Medium-term OML unchanged**



Source: OML

### 4Dmedical

PROFIT & LOSS (A\$m)	2023A	2024A	2025E	2026E	2027E
Revenue	0.7	3.8	18.2	53.3	93.9
Other income	-	-	-	-	-
Operating costs	(29.6)	(34.3)	(41.8)	(54.7)	(76.6)
<b>Operating EBITDA</b>	<b>(28.9)</b>	<b>(30.5)</b>	<b>(23.5)</b>	<b>(1.4)</b>	<b>17.3</b>
D&A	(2.6)	(4.1)	(5.1)	(6.2)	(7.5)
Non-operating items	-	-	-	-	-
<b>EBIT</b>	<b>(31.4)</b>	<b>(34.6)</b>	<b>(28.6)</b>	<b>(7.6)</b>	<b>9.8</b>
Net interest	0.3	1.0	0.7	0.3	0.3
<b>Pre-tax profit</b>	<b>(31.1)</b>	<b>(33.6)</b>	<b>(27.9)</b>	<b>(7.3)</b>	<b>10.1</b>
Net tax (expense) / benefit	(0.3)	(0.0)	-	-	(2.5)
Significant items/Adj.	-	(2.5)	-	-	-
Associate NPAT	-	-	-	-	-
<b>Normalised NPAT</b>	<b>(31.4)</b>	<b>(33.7)</b>	<b>(27.9)</b>	<b>(7.3)</b>	<b>7.5</b>
<b>Reported NPAT</b>	<b>(31.4)</b>	<b>(36.2)</b>	<b>(27.9)</b>	<b>(7.3)</b>	<b>7.5</b>
Normalised dil. EPS (cps)	(9.6)	(7.5)	(5.6)	(1.4)	1.5
Reported EPS (cps)	(9.6)	(8.0)	(5.6)	(1.4)	1.5
Effective tax rate (%)	(1.0)	(0.1)	-	-	25.0
DPS (cps)	-	-	-	-	-
DPS (cps)	-	-	-	-	-
Dividend yield (%)	-	-	-	-	-
Payout ratio (%)	-	-	-	-	-
Franking (%)	-	-	-	-	-
Diluted # of shares (m)	326.8	450.7	494.4	505.7	505.7

CASH FLOW (A\$m)	2023A	2024A	2025E	2026E	2027E
EBITDA incl. adjustments	(66.0)	(74.6)	(46.1)	(1.8)	35.6
Change in working capital	27.9	31.3	22.7	1.3	(26.3)
Net Interest (paid)/received	15.4	12.4	0.7	0.3	0.3
Income tax paid	-	-	-	-	(2.5)
Other operating items	-	-	-	-	-
<b>Operating Cash Flow</b>	<b>(22.7)</b>	<b>(30.9)</b>	<b>(22.6)</b>	<b>(0.2)</b>	<b>7.1</b>
Capex	(0.7)	(1.2)	(0.9)	(1.6)	(2.8)
Acquisitions	-	(38.9)	-	-	-
Other investing items	(0.9)	-	-	-	-
<b>Investing Cash Flow</b>	<b>(1.6)</b>	<b>(40.0)</b>	<b>(0.9)</b>	<b>(1.6)</b>	<b>(2.8)</b>
Inc/(Dec) in equity	45.0	35.0	6.8	-	-
Inc/(Dec) in borrowings	-	-	0.1	-	-
Dividends paid	-	-	-	-	-
Other financing items	(2.2)	(3.1)	(1.0)	(1.0)	(1.0)
<b>Financing Cash Flow</b>	<b>42.7</b>	<b>31.9</b>	<b>5.8</b>	<b>(1.0)</b>	<b>(1.0)</b>
FX adjustment	-	-	-	-	-
Net Inc/(Dec) in Cash	18.5	(39.0)	(17.7)	(2.8)	3.2

BALANCE SHEET (A\$m)	2023A	2024A	2025E	2026E	2027E
Cash	69.6	30.6	12.9	10.1	13.3
Receivables	0.8	1.3	5.8	13.9	22.5
Inventory	0.7	1.0	1.0	1.1	1.5
Other current assets	7.5	6.2	6.2	6.2	6.2
PP & E	5.5	4.9	3.5	2.1	1.4
Investments	-	-	-	-	-
Financial Assets	-	-	-	-	-
Intangibles	5.1	72.2	69.5	66.2	62.3
Other non-current assets	3.8	3.9	3.9	3.9	3.9
<b>Total Assets</b>	<b>92.9</b>	<b>120.0</b>	<b>102.7</b>	<b>103.5</b>	<b>111.1</b>
Short term debt	0.9	-	-	-	-
Payables	12.8	5.1	8.8	17.0	17.0
Other current liabilities	3.3	16.8	16.8	16.8	16.8
Long term debt	4.2	0.1	0.2	0.2	0.2
Other non-current liabilities	0.2	27.1	27.1	27.1	27.1
<b>Total Liabilities</b>	<b>21.5</b>	<b>49.1</b>	<b>52.9</b>	<b>61.1</b>	<b>61.1</b>
<b>Total Equity</b>	<b>71.5</b>	<b>70.9</b>	<b>49.8</b>	<b>42.5</b>	<b>50.0</b>
Net debt (cash)	(64.4)	(30.5)	(12.7)	(9.9)	(13.1)

### Speculative Buy

DIVISIONS	2023A	2024A	2025E	2026E	2027E
<b>Revenue (A\$m)</b>					
LVAS revenue	0.7	1.1	9.7	40.3	78.3
Imbio revenue	-	2.7	8.6	13.1	15.6
Other income	13.2	11.0	8.0	6.0	6.0
<b>Total Revenue</b>	<b>13.9</b>	<b>14.7</b>	<b>26.2</b>	<b>59.3</b>	<b>99.9</b>

KEY METRICS (%)	2023A	2024A	2025E	2026E	2027E
Revenue growth	(31.8)	421.6	385.9	192.6	76.2
EBITDA margin	-	-	-	-	18.4
OCF / EBITDA	131.9	141.7	99.1	32.9	53.8
EBIT margin	-	-	-	-	10.4
Return on assets	-	-	-	-	6.8
Return on equity	-	-	-	-	16.3

VALUATION RATIOS (x)	2023A	2024A	2025E	2026E	2027E
Reported P/E	-	-	-	-	42.3
Normalised P/E	-	-	-	-	42.3
Price To Free Cash Flow	-	-	-	-	98.8
Price To NTA	2.8	-	-	-	-
EV / EBITDA	-	-	-	-	14.7
EV / EBIT	-	-	-	-	26.0

LEVERAGE	2023A	2024A	2025E	2026E	2027E
ND / (ND + Equity) (%)	(917.6)	(75.5)	(34.2)	(30.4)	(35.6)
Net Debt / EBITDA (%)	223.3	99.9	53.9	704.9	(75.9)
EBIT Interest Cover (x)	100.2	35.6	41.7	26.4	-
EBITDA Interest Cover (x)	92.0	31.4	34.3	4.9	-

SUBSTANTIAL HOLDERS	m	%
Velocimetry Consulting Pty Ltd	65.7	15.9%
Norges Bank	8.7	2.1%
Ryder Inn Fund LP	6.3	1.5%

VALUATION	
Cost of Equity (%)	12.8
Cost of debt (after tax) (%)	6.5
<b>WACC (%)</b>	<b>11.2</b>

Target Price Method	DCF
Target Price (\$)	1.10
Valuation disc. / (prem.) to share price (%)	74.6

### Institutional Research

Alastair Hunter	Head of Institutional Research	+61 3 9608 4168	ahunter@ords.com.au
Malcolm Wood	Macro Strategy Analyst	+61 2 8216 6777	mwood@ords.com.au
Lindsay Bettiol	Senior Research Analyst	+61 3 9608 4179	lbettiol@ords.com.au
Nicolas Burgess	Senior Research Analyst	+61 3 9602 9379	nburgess@ords.com.au
James Casey	Senior Research Analyst	+61 3 9602 9265	jamescasey@ords.com.au
Phillip Chippindale	Senior Research Analyst	+61 2 8216 6346	pchippindale@ords.com.au
Tom Godfrey	Senior Research Analyst	+61 7 3214 5587	tgodfrey@ords.com.au
Matthew Hope	Senior Research Analyst	+61 2 8916 0151	mhope@ords.com.au
Paul Kaner	Senior Research Analyst	+61 7 3214 5514	pkaner@ords.com.au
John Lawlor	Senior Research Analyst	+61 7 3214 5506	jlawlor@ords.com.au
Ian Munro	Senior Research Analyst	+61 3 9608 4127	ian.munro@ords.com.au
John O'Shea	Senior Research Analyst	+61 3 9608 4146	joshea@ords.com.au
Leanne Truong	Senior Research Analyst	+61 2 8216 6367	ltruong@ords.com.au
Milo Ferris	Research Analyst	+61 2 8216 6691	mferris@ords.com.au
Rushil Paiva	Research Analyst	+61 3 9608 4155	rpaiva@ords.com.au
Oliver Burston	Research Associate	+61 2 8216 6641	oburston@ords.com.au
Patrick Cockerill	Research Associate	+61 3 9608 4186	pcockerill@ords.com.au
Tim Elder	Research Associate	+61 7 3214 5565	telder@ords.com.au
Rushil Vaghani	Research Associate	+61 3 9602 9209	rvaghani@ords.com.au
Patrick Wilson	Research Associate	+61 2 8216 6376	pwilson@ords.com.au
Benjamin Yun	Research Associate	+61 2 8216 6646	byun@ords.com.au

### Institutional Sales (Australia)

Angus Esslemont	Head of Institutional Equities	+61 2 8216 6363	aesslemont@ords.com.au
Jim Bromley	Institutional Equities Sales	+61 2 8216 6343	jbromley@ords.com.au
Stephen Jolly	Institutional Equities Sales	+61 2 8216 6424	sjolly@ords.com.au
Isaac Morris	Institutional Equities Sales	+61 2 8216 6370	imorris@ords.com.au
Scott Ramsay	Institutional Equities Sales	+61 3 9608 4100	sramsay@ords.com.au
Matt White	Institutional Equities Sales	+61 3 9608 4133	mwhite@ords.com.au
Zac Whitehead	Institutional Equities Sales	+61 2 8216 6350	zwhitehead@ords.com.au
Trent Stewart	Institutional Derivatives Sales	+61 2 8216 6622	trent.stewart@ords.com.au
Brendan Sweeney	Operator	+61 2 8216 6781	bsweeney@ords.com.au

### Institutional Sales (Hong Kong)

Chris Moore	Institutional Equities Sales	+61 2 8216 6362	cmoore@ords.com.hk
-------------	------------------------------	-----------------	--------------------

### Ord Minnett Offices

#### Adelaide

Level 5  
100 Pirie Street  
Adelaide SA 5000  
Tel: (08) 8203 2500

#### Canberra

101 Northbourne Avenue  
Canberra ACT 2600  
Tel: (02) 6206 1700

#### Hobart

Ground Floor  
85 Macquarie Street  
Hobart TAS 7000  
Tel: (03) 6161 9300

#### Melbourne

Level 22  
35 Collins Street  
Melbourne VIC 3000  
Tel: (03) 9608 4111

#### Head Office

**Sydney**  
Level 18, Grosvenor Place  
225 George Street  
Sydney NSW 2000  
Tel: (02) 8216 6300  
www.ords.com.au

#### Brisbane

Level 34  
71 Eagle Street  
Brisbane QLD 4000  
Tel: (07) 3214 5555

#### Geelong

Office 3, Suite 4  
200 Malop Street  
Geelong VIC 3220  
Tel: (03) 4210 0200

#### Mackay

45 Gordon Street  
Mackay QLD 4740  
Tel: (07) 4969 4888

#### Newcastle

426 King Street  
Newcastle NSW 2300  
Tel: (02) 4910 2400

#### International Hong Kong

1801 Ruttonjee House  
11 Duddell Street  
Central, Hong Kong  
Tel: +852 2912 8980

#### Buderim (Sunshine Coast)

1/99 Burnett Street  
Buderim QLD 4556  
Tel: (07) 5430 4444

#### Gold Coast

Level 7  
50 Appel Street  
Surfers Paradise QLD 4217  
Tel: (07) 5557 3333

#### Mildura

128 Lime Avenue  
Mildura VIC 3500  
Tel: (03) 9608 4111

#### Perth

Level 27  
108 St Georges Terrace  
Perth WA 6000  
Tel: (02) 4910 2400



## Guide to Ord Minnett Recommendations

**Our recommendations are based on the total return of a stock – nominal dividend yield plus capital appreciation – and have a 12-month time horizon.**

SPECULATIVE BUY	We expect the stock's total return (nominal yield plus capital appreciation) to exceed 20% over 12 months. The investment may have a strong capital appreciation but also has high degree of risk and there is a significant risk of capital loss.
BUY	The stock's total return (nominal dividend yield plus capital appreciation) is expected to exceed 15% over the next 12 months.
ACCUMULATE	We expect a total return of between 5% and 15%. Investors should consider adding to holdings or taking a position in the stock on share price weakness.
HOLD	We expect the stock to return between 0% and 5%, and believe the stock is fairly priced.
LIGHTEN	We expect the stock's return to be between 0% and negative 15%. Investors should consider decreasing their holdings.
SELL	We expect the total return to lose 15% or more.
RISK ASSESSMENT	Classified as Lower, Medium or Higher, the risk assessment denotes the relative assessment of an individual stock's risk based on an appraisal of its disclosed financial information, historical volatility of its share price, nature of its operations and other relevant quantitative and qualitative criteria. Risk is assessed by comparison with other Australian stocks, not across other asset classes such as Cash or Fixed Interest.

**Disclosure:** Ord Minnett is the trading brand of Ord Minnett Limited ABN 86 002 733 048, holder of AFS Licence Number 237121 and is an ASX Group Participant, a Participant of Cboe Australia Pty Ltd and a wholly owned subsidiary of Ord Minnett Holdings Pty Limited ABN 32 062 323 728. Ord Minnett Limited and/or its associated entities, directors and/or its employees may have a material interest in, and may earn brokerage from, any securities referred to in this document. This document is not available for distribution outside Australia, New Zealand and Hong Kong and may not be passed on to any third party or person without the prior written consent of Ord Minnett Limited. Further, Ord Minnett and/or its affiliated companies may have acted as manager or co-manager of a public offering of any such securities in the past three years. Ord Minnett and/or its affiliated companies may provide or may have provided corporate finance to the companies referred to in the report.

The preparation of this report was funded by ASX in accordance with the ASX Equity Research Scheme. This report was prepared by Ord Minnett and not by ASX. ASX does not provide financial product advice. The views expressed in this report do not necessarily reflect the views of ASX. No responsibility or liability is accepted by ASX in relation to this report. Ord Minnett and associated persons (including persons from whom information in this report is sourced) may do business or seek to do business with companies covered in its research reports. As a result, investors should be aware that the firm or other such persons may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. This document is current as at the date of the issue but may be superseded by future publications. You can confirm the currency of this document by checking Ord Minnett's internet site.

**Disclaimer:** Ord Minnett Limited believes that the information contained in this document has been obtained from sources that are accurate, but has not checked or verified this information. Except to the extent that liability cannot be excluded, Ord Minnett Limited and its associated entities accept no liability for any loss or damage caused by any error in, or omission from, this document. This document is intended to provide general securities advice only, and has been prepared without taking account of your objectives, financial situation or needs, and therefore before acting on advice contained in this document, you should consider its appropriateness having regard to your objectives, financial situation and needs. If any advice in this document relates to the acquisition or possible acquisition of a particular financial product, you should obtain a copy of and consider the Product Disclosure Statement for that product before making any decision. Investments can go up and down. Past performance is not necessarily indicative of future performance.

**Analyst Certification:** The analyst certifies that: (1) all of the views expressed in this research accurately reflect their personal views about any and all of the subject securities or issuers; (2) no part of their compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed herein.

**Ord Minnett Hong Kong:** This document is issued in Hong Kong by Ord Minnett Hong Kong Limited, CR Number 1792608, which is licensed by the Securities and Futures Commission (CE number BAI183) for Dealing in Securities (Type 1 Regulated Activity) and Advising on Securities (Type 4 Regulated Activity) and Asset Management (Type 9 Regulated Activity) in Hong Kong. Ord Minnett Hong Kong Limited believes that the information contained in this document has been obtained from sources that are accurate, but has not checked or verified this information. Except to the extent that liability cannot be excluded, Ord Minnett Hong Kong Limited and its associated entities accept no liability for any loss or damage caused by any error in, or omission from, this document. This document is provided for information purposes only and does not constitute an offer to sell (or solicitation of an offer to purchase) the securities mentioned or to participate in any particular trading strategy. The investments described have not been, and will not be, authorized by the Hong Kong Securities and Futures Commission.

**Note:** Through various investment entities, Bruce Mathieson beneficially holds a major shareholding in the Ord Minnett group as well as substantial shareholdings in Endeavour Group and Star Entertainment.

For summary information about the qualifications and experience of the Ord Minnett Limited research service, please visit <http://www.ords.com.au/our-team-2/>

For information regarding Ord Minnett Research's coverage criteria, methodology and spread of ratings, please visit <http://www.ords.com.au/methodology/>

For information regarding any potential conflicts of interest and analyst holdings, please visit <http://www.ords.com.au/methodology/>

The analyst has certified that they were not in receipt of inside information when preparing this report, whether or not it contains company recommendations. Any reports in this publication have been authorised for distribution by Alastair Hunter, Head of Institutional Research at Ord Minnett.