

LBT Innovations (LBT)

Commercial sales underway

19 September 2018

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KEY POINTS

- Every day 12 million hand sized agar plates are analysed by highly trained staff, and more than 80% are negative.
- The gold standard for culling negatives automatically still requires human analysis intervention and costs US\$3.0m.
- LBT's solution is just US\$0.3m and is only USFDA approved Artificial Intelligent (AI) plate reader. It allows trained professionals to focus on 20% of positive plates.
- LBT sold its first unit last month, we estimate LBT will sell at least five units in FY'19F and 25 in FY'20F.
- LBT is operating cash positive in 18 months, and will use its strong balance sheet for additional applications.

Moving to control its destiny through AI

Emerging – targeting inefficiency with one tenth of cost

Every day 12 million agar plates are analysed globally, and more than 80% are negative. These negative results are great for patients, but take up valuable time from medical staff and clog up pathology labs. *The “gold standard” automation* for culling these negatives is one of two US\$3.0m table tennis table sized machines. These machines can provide automated streaking, and heat or cool samples. However, when it comes to first pass analysis, an image of the agar plate is taken and sent to a remote location for medical staff analysis. No AI is used! *LBT's APAS® Independence instrument* costs just US\$0.3m and is the size of a photocopier. Yes, APAS® is limited to culling negatives at this stage. But this is what 13,000 large pathology labs need right now to cope with expected 5-10% volume growth each year and restraints on staff and space.

Approved by FDA/TGA. LBT's APAS® received FDA regulatory approval and patents in Oct'16. Its first evaluation trial at Melbourne's St Vincent Hospital was successfully completed in Nov'17 and first sale was completed in Aug'18. An Australian pathology chain and the leading EU pathology laboratory (*Wisplinghoff*) are doing evaluation trials now. Both should result in sales over the next six months.

Capital – \$7.9m of equity was raised during FY'18 and a further \$2m shares issued for sale of non-core assets. This provides funding until positive cash flow and development support for new pathology applications of APAS®

INVESTMENT VIEW – Buy and 12 Month Price target \$0.25/share. Long term DCF valuation of \$0.44/share

LBT Innovations ticks PAC Partners' boxes of: **Advantage to gold standard** with high barriers to entry; **Believable managers** – Two years under new MD, Brent Barnes, with resolute “Cochlear” focus making dependable instruments; and, **Cash flow starts** in FY'19F with strong dist'n partners.

RECOMMENDATION

Buy

Previous Recommendation	Initiating Coverage
Risk Rating	Very High
Current Share Price	\$0.105
12 Month Price Target	\$0.25
Price Target Methodology	FY'21F EV/EBITDA 17x
Total Return (Capital + Yield)	138%
DCF Valuation	\$0.44
Market capitalisation	\$25m
Liquidity – Daily Value	\$100k

Financial Forecasts & Valuation Metrics

Jun Yr (\$m)	FY'18A	FY'19F	FY'20F	FY'21F
Revenue	0.0	0.7	3.4	10.5
EBITDA	(5.6)	(8.3)	(1.9)	3.1
NPAT	(4.7)	(6.2)	(1.8)	1.6
EPS (cps)	(2.8)	(3.1)	(0.9)	(0.8)
DPS (c)	0.0	0.0	0.0	0.0
EV / EBITDA (x)	(2.3)x	(2.7)x	(12.7)x	7.5x
PER (x)	(3.8)x	(3.3)x	(11.6)x	12.7x
Dividend Yield	0.0%	0.0%	0.0%	0.0%
Gearing	(26)%	6.1%	21%	11%
Interest Cover (x)	64x	33x	13x	(59)x

Source: PAC Partners estimates

LBT Milestones & Risks

2HCY'18 – Evaluation trials in Australia pathology laboratory chain and German Labor Dictor Wisplinghoff pathology lab

2HCY'18 – Two APAS® sales into Australia

1HCY'19 – Appointment of distributors in EU and US regions, and at least two APAS® into sales to EU

CY'19 – US approval of supplementary 510(k) and extend APAS® for different specimens and uses

RISKS:

- Slow APAS® sales due to evaluation and approval
- Regulatory delays, and any issues with early users

Source: PAC Partners estimates

DISCLOSURE: PAC Partners was Joint Lead Manager for \$7m Placement in February 2018, and is mandated for research. PAC received fees on commercial terms for its services.

The information contained in this report is provided by PAC Partners to Wholesale Investors Only.

The information contained in this report is to be read in conjunction with other important disclosures at the end of this document.

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SUMMARY SWOT

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • 11 years of focused development on breaking down pathology bottlenecks with MicroStreak and now APAS® • Proven APAS® performance at commercial scale with St Vincents' Hospital (Melbourne) buying a unit • People & Partners: Executive team and Board come from strong ASX listed biotech companies. MD is ex Cochlear (COH.AX) and Clever Culture Systems has deep relationships to bring APAS® to global market. 	<ul style="list-style-type: none"> • Quality assurance and Occupational Health & Safety will be tested during this high growth phase, especially with three different countries trialling and buying • Small scale at start and earnings may be volatile. Earnings in short term are driving by fewer than 30 sales • Inventory and financial management is challenging at start-up phase and some risk falls on LBT despite partnership and impending distribution arrangements
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • 13,000 global pathology laboratories need improved automation for the 400+ agar plates processed each day , and top 1,000 laboratories process 1,000+ plates per day • Multiple uses of existing APAS® with additional modular units for respiratory and blood diagnosis. (Urine & Surface are the base modules) • Artificial intelligence technology product pipeline is being extended into dairy and water applications 	<ul style="list-style-type: none"> • CE Mark regulatory approval APAS® is just a documented process but not guaranteed. USFDA and TGA approval are good indicators • Lethargy and bureaucracy in many pathology labs and hospitals can slow down trial and ordering process • Partners - LBT is reliant on new distribution partners to fast track sales, but has good control in Australia and Europe with existing JV partners

Executive Summary

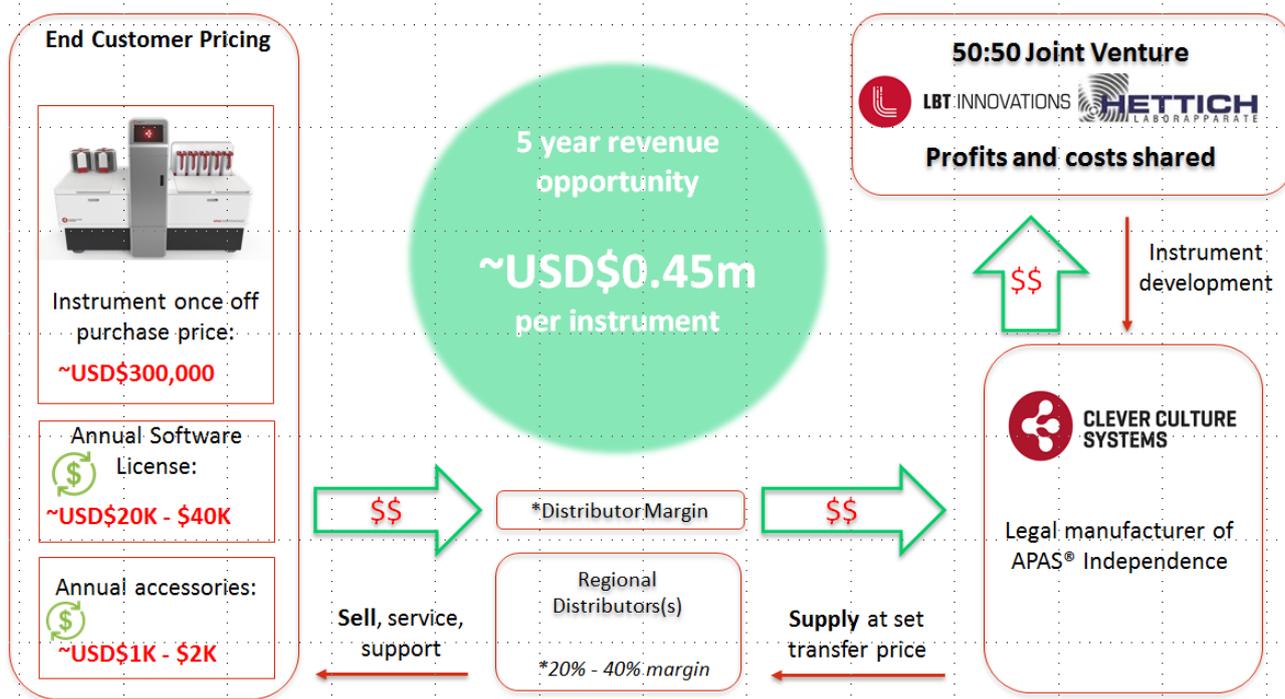
TEN YEARS OF BUILDING PLATFORM WITH PARTNERS

Over the last 11 years LBT Innovations (LBT) has built up a strong Artificial Intelligence platform aimed at simplifying the any repetitious pathology or medical procedure, with agar plate streaking and reading the early focus. LBT use a partnership approach for hardware development. A 50/50 JV was created with Hettich Laborapparate, a significant supplier of pathology equipment to Europe.

Brent Barnes (MD) is the driving force

Brent Barnes joined LBT two years ago from Cochlear (COH.AX) and has brought resolute focus to make dependable instruments with commercial expertise and contractor Planet Innovations.

APAS® - commercial business approach



Source: Company reports and PAC Partners estimates

COMMERCIAL SALES RAMP UP...FY'19F \$0.70M, FY'20F \$3.4M

Five commercial sales in FY'19F...

FY'19F is a year of transition for LBT with first commercial sale of APAS® in Australia last month to St Vincent Hospital, Europe and USA (after CE Mark and FDA supplementary 510(k) approval).

...and \$10m EBITDA shortly after FY'21F

We estimate FY'20F would deliver positive cash flow if LBT slowed down its new application development. At this stage LBT is receiving strong support and likely funding from prospective customers and partners to press ahead. The prize of \$10m+ EBITDA post FY'21F is attractive.

LBT – Financial Forecasts

LBT is spending \$6m/annum rolling out APAS® units...

...and building new applications outside of our APAS® estimates with base urine and surface tests

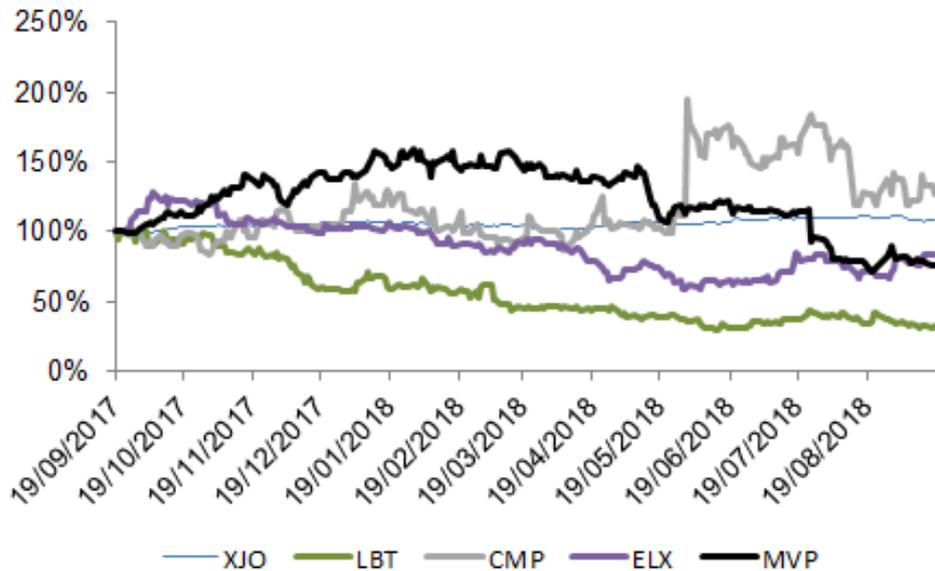
	FY17A	FY18A	FY19F	FY20F	FY21F	FY22F
APAS Unit sales (number)	0	0	5	25	75	100
Sales (\$m)	0	0.0	0.7	3.4	10.5	17.2
EBITDA	(2.9)	(5.6)	(8.3)	(1.9)	3.1	7.0

Source: PAC Partners estimates. Pay-aways to JV partner and distributors excluded from Sales and EBITDA

PEER COMPANY PERFORMANCE

Australian simple cash generating biotech LBT, MVP, CMP, ELX vs ASX200 over last year

Underlying demand for simple medtech solutions strong...
 ... with transition to commercial sales of new applications tough
 Medical Developments (MVP) made transition with a “back the future” pain treatment...but fell back on slower growth and USFDA
 CMP bounced with new Chinese partner, but then needed a new contract
 LBT and ELX are all attempting similar breakout growth



Source: Iress

INVESTMENT VIEW – TARGET PRICE \$0.25/SHARE (168% UPSIDE TO SHAREPRICE)

DCF relies on unit sales and prices being achieved...
 ...with distributors
 Validation lowers risk and raises DCF

Our longer term cash flow valuation is \$0.44/share, and relies on LBT delivering:

- APAS® unit sales of 5, 25, 75 over the next three years. LBT successful transitioned a successful Nov’17 St Vincent’s Hospital trial to a Aug’18 sale, and has many other evaluation trials in Australia, EU and US over the next 12 months. US\$3.0m capital cost and US\$0.03m service fee.
- Global distribution partners are on the ground by 1HCY19F.

We estimate our 12 Month Price Target with a FY’21F EV/EBITDA of 17x

Each commercial sale and new application are validation steps. They lower the risk rating, discount rate and potentially increase FY’21F EBITDA. For example if distribution partnerships are formalised with LBT then discount rate can be lowered.

Company Overview

ELEVEN YEARS OF BUILDING PLATFORM WITH PARTNERS

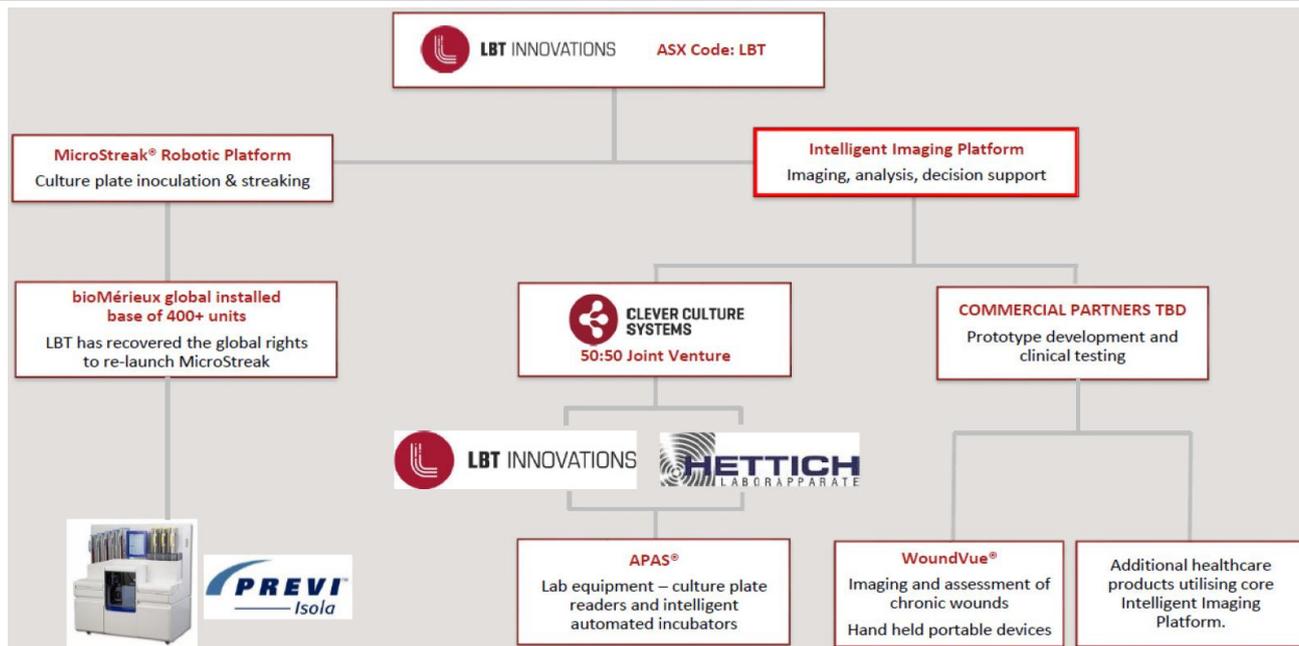
A strong Artificial Intelligence platform has been created

Over the last 11 years LBT Innovations has built up a strong Artificial Intelligence platform aimed at simplifying the any repetitious pathology or medical procedure, with agar plate streaking and reading the early focus.

Brent Barnes (MD) is now the driving force

Brent Barnes joined LBT two years ago from Cochlear (COH.AX) and has brought resolute focus to make dependable instruments with commercial expertise and contractor Planet Innovations.

ANR in a chart



Source: Company Reports & PAC Partners

Check share #'s

LBT Board of Directors



Kate Costello – Chair. 3.35m Shares, 0.16m Options, Commenced Chair role on 1 August 2017, joined board 12 August 2005

Kate Costello was in management with a commercial law firm before establishing a management consultancy specialising in corporate governance practices and board performance. Kate has over 25 years' experience in corporate governance and strategy through her consulting work with the boards of client organisations,



Brenton Barnes – MD. 0.71m Shares, 1.66m Options, Commenced Aug'17

After beginning his career with global defence contractor Thales, Brent spent 11 years gaining broad Senior Executive experience in a variety of roles with Australian medical device manufacturer Cochlear Limited. Brenton final role at Cochlear was General Manager, Asia Growth Markets and Operations Director (Asia Pacific), based out of the Singapore office. Brent is also a non-executive Director of Connek Pty Ltd, a Telecommunications & IT professional services company that subcontracts to major blue chip companies within the IT/T space.



Stephen Mathwin – NED of LBT 3.37m Shares, 0.07m Options, joined board 20 November 2006

Stephen has more than 30 years' experience as a legal practitioner including being a partner with the Adelaide law firm, Kelly & Co, from 1988 to 2001. During that time he headed the firm's Employment, Industrial Law and Superannuation Section. He was also responsible for managing much of Kelly & Co's internal risk management functions. Stephen remains a Consultant to its successor firm HWL Ebsworth.



Dr Caroline Popper – NED of LBT 0.3m Shares, joined board 15 March 2012

Caroline is a USA-based pathologist and business consultant, with more than 25 years' operational experience in the international diagnostics, medical devices and digital health fields... As well as extensive experience in life science business strategy, Caroline enjoys a unique clinical perspective gained in the busy wards and laboratories of Baltimore's Johns Hopkins Hospital.



Matthew Michalewicz NED of LBT 0.33m Shares, 0.5m Options, Commenced Sep'17

Matthew Michalewicz has more than 20 years' experience in starting and running high-growth tech companies, particularly in the areas of predictive analytics and optimisation software. He is currently the CEO of Complexica Pty Ltd, a provider of artificial intelligence software applications that help large organisations increase revenue, margin and customer engagement through automated analytics.



Glenn Haifer NED of LBT 1.67m Shares, 0.5m Options Commenced Sep'17

Glenn Haifer has over 30 years' experience in the healthcare sector. He has successfully established four different businesses operating in primary medical services, histopathology and cosmetic medical services, which he has exited through sales to private equity firms and to an ASX listed company. Glenn has current roles as Medical Consultant to Apotex Pharmaceuticals and is the Australasian Medical Consultant to P&O/Princess Cruises.

Market and Competitors

MARKET SIZE - 13,000 LABORATORIES NEED AUTOMATION

Of the 27,000 path laboratories, there ...

...are 13,000 which need agar plate efficiency

Pathology laboratories can be segmented into small, medium and large users of agar plates by number processed each day – see below.

LBT is targeting both large and medium labs with its low cost and simple plate reading solution, and this opens up 13,000 potential customers.

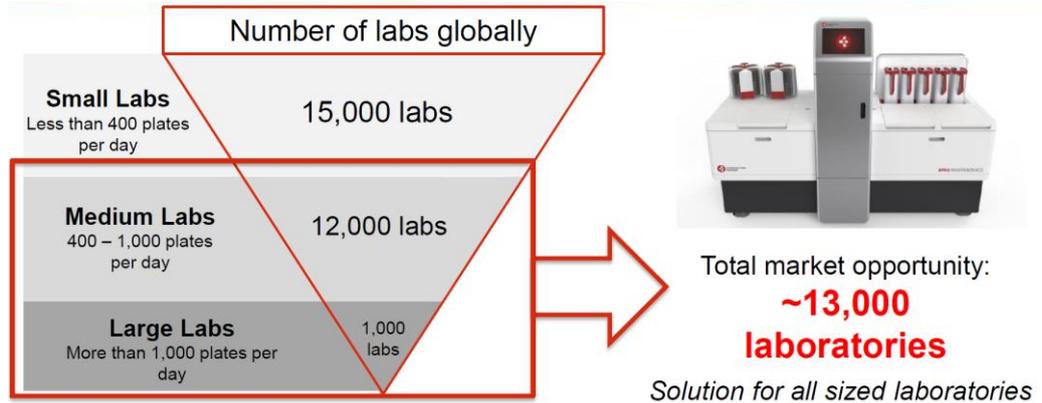
LBT has a low cost solution...

...applicable to mid and large agar plate users...

...and APAS® is a great way to get LBT's foot in the door...

...and then offer larger range of automation and artificial intelligence

Pathology market for agar plate readers



Source: LBT estimates

LBT has learned a lot about global distribution...

...with MicroStreak

FDA 10,000 patient trial and TGA approvals have allowed LBT ...

LBT understands its skills are late stage Artificial Intelligence R&D and has learnt a lot about global distribution and pathology laboratories and MicroStreak. MicroStreak is LBT's automated transfer or urine or other liquid sample onto an agar plate.

LBT first partner for MicroStreak, bioMerieux, sold 400 LBT MicroStreak units and then backed the Copan WASP unit (see next page). LBT took back the rights, and sold to AutoBio for \$2m in 2017.

Global distributors have pitched to LBT for rights to APAS®. LBT wanted to wait for full regulatory approval and first commercial sale to finalise agreements with distributors.

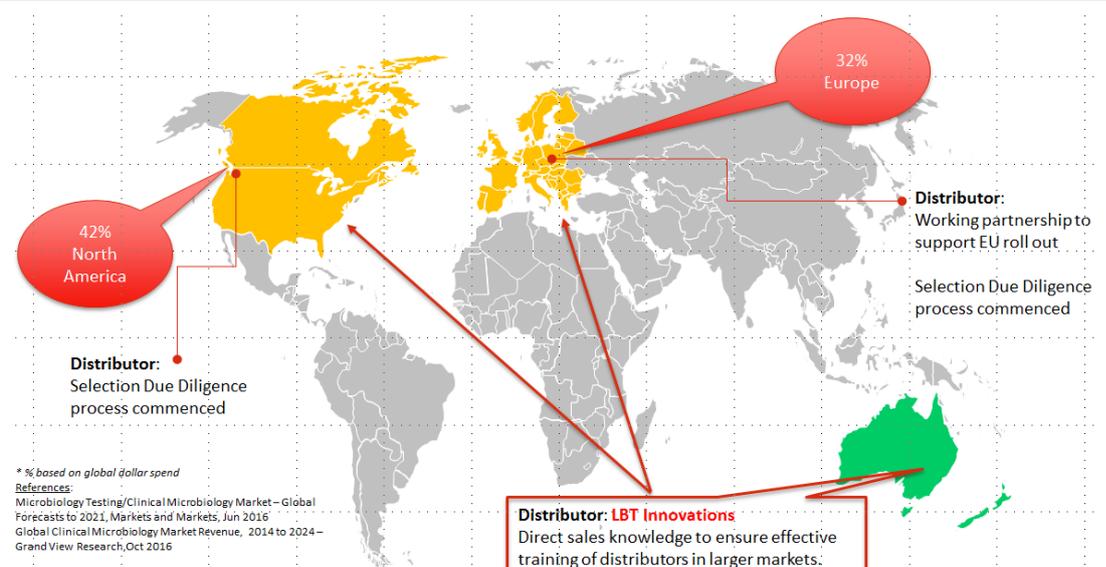
...to engage with most global pathology lab distributors

Impending CE Mark approval and successful 3,000 plate trial at St Vincent's Hospital will assist finalisation of deals

With two large of global agar plate market there is scope to award Nth American distribution first...

...and wait for CE Mark approval with Europe

Global agar plate reading market



Source: LBT Innovations

THREE AGAR PLATE AUTOMATORS

Wasp and Kiestra aim to be one stop shop for agar plates...

...but miss automation the primary screening of agar plates...

...possibly due to complexity of AI, and engineers wanting to do too much

Competitors are 10x the cost...

...and limited to top 1000 laboratories...

...with 15% penetration after 11 years

We estimate APAS® sales of 75/annum by 2020...

...which is 4.5x times recent pathology automator at same cost

We understand that the Wasp and Kiestra units do a lot more agar plate preparation and analysis than LBT APAS® - see the descriptions below.

The surprising gap in the service for us is LBT's automation of primary screening of agar plates. LBT sorts negative, possible positive and positive plates with no analytical intervention required by trained physicians. Wasp and Kiestra take images of these plates and send them for human analysis.

We have discussed this "miss" with some medium sized labs and the answer has been automating human analysis has been tricky and regulatory pathway is long and expensive. In my 10 years of being a professional engineer I did notice that designers preferred to automate many simple steps and present a full package rather than a module approach.

For these extra services LBT competitors are ten times as expensive, and at least five times bigger.

Competitor US\$3m price tag and large space requirement may limit their target market to the 1000 large laboratories.

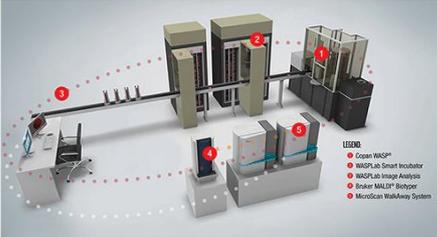
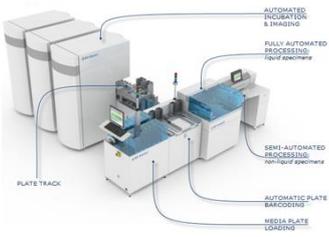
We understand that less than 150 of these large agar plate automators have been sold over the past 11 years, which is just 15% of the target market.

In estimating the possible roll-out of APAS we can consider two similar units:

- LBT/bioMerieux sales of Microstreak (400 in five years to 2015) at ~80/annum;
- MALDI-TOF units identifies bacteria with AI and are a similar price to APAS®.
 - 800 MALDI-TOF were sold in the 10 years to 2013 at 80/annum.
 - After FDA approval was secured in 2013 there were 700 units sold during the next two years, 350/annum, and 4.5x increase.

We assume APAS® sales in 2020 to be 75/annum. 4.5x times the rate of MALDI-TOF (350/annum) post FDA clearance, and similar rate to Microstreak before bioMerieux stopped distributing.

LBT vs Competitors

Company	LBT/Hettich	Copan	Becton Dickinson
Name	APAS® Independent	Wasp	Kiestra
Capital Cost (US\$m)	0.30	3.0	3.0
Service cost (US\$m/a)	0.03	~0.3	~0.3
Dimensions (LxWxH, m)	1.5x0.6x1.6	Plating = 1.9x1.1x1.9 Incubator = 2.5x2.0x2.0	Plating = 1.9x1.1x1.9 Incubator = 2.5x2.0x2.0
			
	http://www.lbtinnovations.com/products/apas/	http://www.copanusa.com/products/automation/wasp-automation	http://www.bd.com

Source: Company reports, PAC Partners estimates

LBT Innovations

Price \$ 0.105
Number of shares 197 m Market Cap \$21 m

PROFIT & LOSS (A\$m)

Y/End June	FY2018A	FY2019F	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F	FY2025F
Revenue	0.0	0.7	3.4	10.5	17.2	23.4	30.9	43.3
EBITDA	-5.6	-8.3	-1.9	3.1	7.0	11.6	16.7	24.7
Depreciation & Amortisation	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8
EBIT	-6.4	-9.1	-2.7	2.3	6.2	10.8	15.9	23.9
Net Interest	0.1	0.3	0.2	0.0	0.1	0.3	0.6	0.9
Income tax expense	1.6	2.6	0.8	-0.7	-1.9	-3.3	-4.9	-7.4
NPAT underlying	-4.7	-6.2	-1.8	1.6	4.4	7.7	11.5	17.4
Equity Accounting Profits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Less non-controlling Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NPAT underlying	-4.7	-6.2	-1.8	1.6	4.4	7.7	11.5	17.4
Abnormal items	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NPAT Reported.	-2.7	-6.2	-1.8	1.6	4.4	7.7	11.5	17.4

CSS - Revenue and Reimbursement stripped out of numbers above

BALANCE SHEET (A\$m)

Y/End June	FY2018A	FY2019F	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F	FY2025F
Cash	7.6	0.7	0.9	2.5	8.5	14.1	22.8	35.9
PP&E	0.1	0.9	1.7	2.5	3.3	4.1	4.9	5.7
Debtors & Inventory	0.3	0.4	0.9	2.1	2.8	3.6	4.4	5.8
Intangibles	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1
Other assets	10.1	10.2	10.3	10.2	10.1	10.0	9.9	9.8
Total Assets	36.1	30.2	31.8	35.4	42.8	49.8	60.0	75.3
Borrowings	-	2.0	5.0	5.0	5.0	3.5	2.0	0.5
Trade Creditors	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Other Liabilities	5.1	5.1	5.1	5.5	6.1	6.8	7.6	8.9
Total Liabilities	7.0	9.0	12.0	12.3	12.9	12.2	11.5	11.2
NET ASSETS	29.1	21.2	19.8	23.0	29.9	37.6	48.5	64.1
OEI and Pref Shares	-	-	-	-	-	-	-	-
Shareholder Equity	29.1	21.2	19.8	23.0	29.9	37.6	48.5	64.1

Cash Flow (\$Am)

Y/End June	FY2018A	FY2019F	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F	FY2025F
Operating EBITDA	(5.6)	(8.3)	(1.9)	3.1	7.0	11.6	16.7	24.7
Interest & Tax Paid	4.4	(0.3)	(0.2)	(0.0)	(0.1)	(3.6)	(5.5)	(8.4)
Working Cap.	2.5	(0.1)	(0.5)	(1.2)	(0.7)	(0.8)	(0.8)	(1.5)
Operating CF	1.3	(8.7)	(2.6)	1.8	6.3	7.2	10.4	14.9
Maintenance Capex	0.0	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)
Expansion Capex	(2.6)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acquisitions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Free Cashflow (FCF)	(1.2)	(8.9)	(2.8)	1.6	6.1	7.0	10.2	14.7
Ord & Pref Dividends	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Equity raised	10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Debt and Net Other	(5.0)	2.0	3.0	0.0	0.0	(1.5)	(1.5)	(1.5)
Net Cashflow	4.1	(6.9)	0.2	1.6	6.1	5.5	8.7	13.2

Segment Analysis (\$Am)

Y/End June	FY2018A	FY2019F	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F	FY2025F
# of APAS units								
New		5	25	75	100	125	150	200
Total		5	30	105	205	330	480	680
Revenue	1/3 of Revenue paid to distributor is not in APAS unit sales							
APAS Units	0.0	0.7	3.3	10.0	13.3	16.7	20.0	26.7
APAS Services	0.0	0.0	0.1	0.5	1.9	3.7	5.9	8.6
Licensing revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	2.0	3.0	5.0	8.0
Total	0.0	0.7	3.4	10.5	17.2	23.4	30.9	43.3
Gross Margin								
APAS Units	25.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
APAS Services	0.0%	10.0%	25.0%	55.0%	70.0%	70.0%	70.0%	70.0%
Licensing revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Other					100.0%	100.0%	100.0%	100.0%
Gross Profit								
APAS Units	0.0	0.3	1.7	5.0	6.7	8.3	10.0	13.3
APAS Services	0.0	0.0	0.0	0.3	1.3	2.6	4.2	6.0
Extended Services	0.0	0.0	0.0	0.0	2.0	3.0	5.0	8.0
Total	0.0	0.3	1.7	5.3	10.0	13.9	19.2	27.4
R&D	-4.5	-6.2	-1.5	-1.1	-0.4	-0.4	-0.5	-0.5
SG&A	-1.1	-2.4	-2.1	-1.2	-2.5	-1.9	-2.0	-2.2
EBITDA	-5.6	-8.3	-1.9	3.1	7.0	11.6	16.7	24.7

LBT Innovations

Date: **18-Sep-18**
 Model Updated: **18-Sep-18**

KEY RATIOS

Y/end June	FY2018A	FY2019F	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F	FY2025F
EBITDA Margin (%)		-1242.5%	-56.8%	29.3%	40.9%	49.6%	54.0%	57.0%
NPAT Margin (%)		-924.7%	-51.9%	15.5%	25.7%	33.2%	37.3%	40.1%
ROE (%) y/e	-16.1%	-29.0%	-9.0%	7.1%	14.8%	20.6%	23.8%	27.1%
ROI (%) y/e	-32.5%	-41.2%	-11.8%	9.3%	24.1%	40.4%	58.0%	84.5%
ROIC (%) Av.	-21.2%	-20.3%	-6.6%	5.1%	12.0%	17.5%	21.8%	26.6%
NTA per share (cps)	0.06	0.02	0.01	0.02	0.06	0.10	0.15	0.23
Eff Tax Rate (%)	25.6%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%
Interest Cover (x)	64.0	32.8	13.3	(59.2)	(75.0)	(39.1)	(28.1)	(25.9)
Net Gearing (%)	-26.0%	6.1%	21.0%	11.0%	-11.9%	-28.1%	-42.7%	-55.2%

VALUATION PARAMETERS

Y/end June	FY2018A	FY2019F	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F	FY2025F
EPS Adj (cps)	-2.8	-3.1	-0.9	0.8	2.3	3.9	5.9	8.8
PE Adj (x)	-3.8	-3.3	-11.6	12.7	4.7	2.7	1.8	1.2
Enterprise Value (m)	13.1	22.0	24.8	23.2	17.1	10.1	-0.1	-14.8
EV / EBITDA (x)	-2.3	-2.7	-12.7	7.5	2.4	0.9	0.0	-0.6
EV / EBIT (x)	-2.0	-2.4	-9.0	10.1	2.7	0.9	0.0	-0.6
Price / NTA	1.9	6.6	12.3	4.2	1.8	1.1	0.7	0.4
DPS (cps)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dividend Yield (%)	0	0	0	0	0	0	0	0
Franking (%)	0%	0%	0%	0%	0%	0%	0%	0%
Free Cash / Share (cps)	-0.01	-0.05	-0.01	0.01	0.03	0.04	0.05	0.07
Price / FCF PS (x)	-14.4	-2.3	-7.3	12.7	3.4	2.9	2.0	1.4

DCF VALUATION & SENSITIVITY

PV of Cashflows 2018 to 2020	(10.8)	Risk Free Rate	4.0%
PV of Cashflows 2021 to 2025	19.0	Equity Risk Premium	8.5%
PV of Term Year Cashflow	74.9	Equity Beta	1.1
Cash from Options & Equity	0.0	Cost of Equity	13.0%
		After Tax WACC	13.0%
Less Net Debt	3.5	Terminal Growth	3.0%
PV of Equity	86.7		
Number of shares (Fully diluted - FY18)	196.6		
PV of Equity per share	\$ 0.44		

DIRECTORS

		Shares (m)
Kate Costello	Chairman	3.4
Brent Barnes	MD	0.4
Stephen Mathwin	NED	2.8
Dr Caroline Popper	NED	0.3
Matthew Michalewicz	NED	0.3
Glenn Haifer	NED	1.7
Total		8.9

TV WACC

	15.0%	13.0%	11.0%	9.0%
2.0%	\$ 0.30	\$ 0.40	\$ 0.55	\$ 0.80
2.5%	\$ 0.32	\$ 0.42	\$ 0.59	\$ 0.86
3.0%	\$ 0.33	\$ 0.44	\$ 0.62	\$ 0.93
3.5%	\$ 0.34	\$ 0.46	\$ 0.66	\$ 1.01
4.0%	\$ 0.36	\$ 0.49	\$ 0.70	\$ 1.11

MAJOR SHAREHOLDERS

	%	%
BioMerieux SA	5.0%	
Brendan Moran	3.9%	
		Top 20

GROWTH PROFILE (YoY)

Y/end June	FY2018A	FY2019F	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F	FY2025F
Sales (\$m)			414%	208%	63%	36%	32%	40%
EBITDA inc EAT (\$m)	96%	48%	-77%	-259%	128%	64%	44%	48%
EBIT (\$m)	77%	42%	-70%	-183%	173%	73%	47%	50%
NPAT (\$m)	30%	32%	-71%	-192%	172%	75%	49%	50%
EPS (cps)	10%	13%	-71%	-192%	172%	75%	49%	50%
DPS (cps)	0%	0%	0%	0%	0%	0%	0%	0%

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Investment View

PAC Partners Investment View is based on an absolute 1-year total return equal to capital appreciation plus yield.

A Speculative recommendation is when a company has limited experience from which to derive a fundamental investment view.

Buy	Hold	Sell
>20%	20% – 5%	<5%

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