

LBT PRESENTATION - 121 TECH INVESTMENT CONFERENCE, SINGAPORE

Adelaide, Australia, 3 December 2018: Australian medical technology company LBT Innovations Limited (ASX: LBT) (LBT or the **Company**), a leader in medical technology automation using artificial intelligence is pleased to announce the Company will be attending and presenting at the 121 Tech Investment conference (<https://www.weare121.com/121techinvestment-singapore/>) being held in Singapore 4-5 December 2018.

LBT CEO and Managing Director Brent Barnes, will be presenting as well as conducting a number of one on one meetings with sophisticated and institutional investors.

The Company's presentation for these meetings is attached.

– ENDS –

About LBT Innovations

LBT Innovations (LBT) improves patient outcomes by making healthcare more efficient. Based in Adelaide, South Australia, the Company has a history of developing world leading products in microbiology automation. Its first product, MicroStreak®, was a global first in the automation of the culture plate streaking process. The Company's second product, the Automated Plate Assessment System (APAS®) is being commercialised through LBT's 50% owned joint venture company Clever Culture Systems AG (CCS) with Hettich Holding Beteiligungs- und Verwaltungs-GmbH. The APAS® instrument is based upon LBT's intelligent imaging and machine learning software, and remains the only US FDA-cleared artificial intelligence technology for automated imaging, analysis and interpretation of culture plates following incubation. LBT's third product WoundVue® is in early development; this is a proposed automated solution to assist in the management of chronic wounds.

CONTACTS

LBT Innovations	Investor Enquiries
Brent Barnes Chief Executive Officer & Managing Director Tel: +61 8 8227 1555 E: info@lbtinnovations.com	David Allen / John Granger Hawkesbury Partners Tel: +61 2 9103 9494 E: dallen@hawkesburypartners.com



LBT INNOVATIONS

121 TECH
INVESTMENT
4-5 DECEMBER 2018 SINGAPORE

Company Update

121 Tech Investment Conference, Singapore

Brent Barnes
Managing Director & Chief Executive Officer

4th December 2018

ASX code: LBT

lbtinnovations.com

Disclaimer

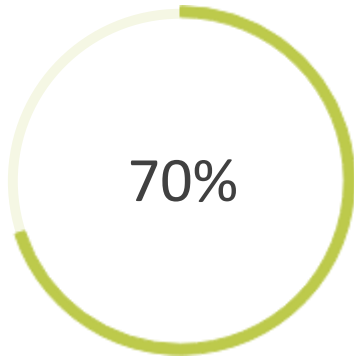
This document contains certain forward-looking statements that involve risks and uncertainties. Although we believe that the expectations reflected in the forward-looking statements are reasonable at this time, we can give no assurance that these expectations will prove to be correct.

Given these uncertainties, readers are cautioned not to place undue reliance on any forward-looking statements. Actual results could differ materially from those anticipated in these forward-looking statements due to many important factors, risk and uncertainties including, without limitation, risks associated with medical device development and manufacture, risks inherent in the extensive regulatory approval processes mandated by regulatory authorities, delays in clinical trials, future capital needs, general economic uncertainty and other risks detailed from time to time in the Company's announcements to the ASX.

Moreover, there can be no assurance that others will not independently develop similar products or processes or design around patents owned or licensed by the Company, or that patents owned or licensed by the Company will provide meaningful protection or competitive advantages.

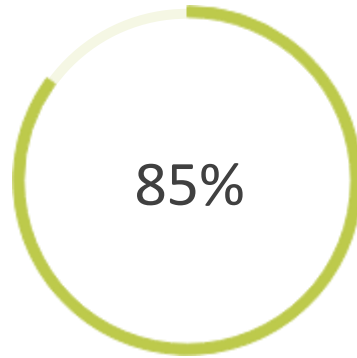


Customer problems: Microbiology labs



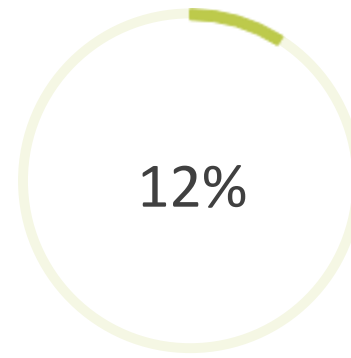
High Demand

70% of clinical decisions are based on in vitro diagnostic lab results



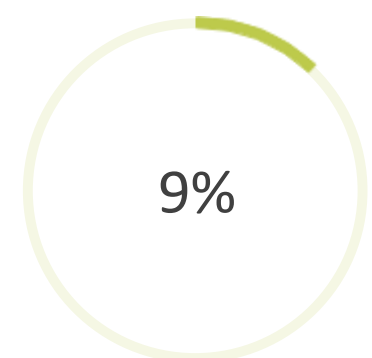
Inefficient resource utilisation

Up to 85% of plates read are negative or show no significant growth



Inconsistent results

Variability in plate reading with error rates 5.5-6.6%, and 12% for morphology⁴



Qualified microbiologists

9%³ vacancy rate in the US. Average age of microbiologist is 51 years (AU)¹, 42 (US)²



Solution: APAS® Independence

The **first** and only **automated culture plate reader**. Automated imaging, analysis and interpretation of agar culture. *Powered by AI.*



Improve Time Management

Remove negatives out of the workflow



Accuracy

Higher quality and consistency of results



Workplace Safety

Increase workplace safety by lowering manual handling



Cost Efficiencies

Through more efficient use of staff and reduced risk of injuries



LBT INNOVATIONS

Slide No. 4

© LBT Innovations 2018

Clinically Proven Technology

Scientific publication



AMERICAN
SOCIETY FOR
MICROBIOLOGY

Journal of Clinical Microbiology

Evaluation of an Image Analysis Device (APAS) for Screening Urine Cultures

John Glasson,^a Rhys Hill,^b Michael Summerford,^a Steven Giglio^c

LBT Innovations Ltd., Adelaide, South Australia^a; Australian Centre for Visual Technologies, University of Adelaide, Adelaide, South Australia^b; Healthscope Pathology, Wayville, South Australia^c

While advancements have been made in some areas of pathology with diagnostic materials being screened using image analysis technologies, the reporting of cultures from agar plates remains a manual process. We compared the results for 2,163 urine cultures read by a reference panel of microbiologists, by the routine laboratory process, and by an automated plate reading system, APAS (LBT Innovations Ltd., South Australia). APAS detected colonies with a sensitivity of 99.1% and a specificity of 99.3% on blood agar, while on MacConkey agar, the colony detection sensitivity was 99.4% with a specificity of 99.3%. The device's ability to enumerate growth had an accuracy of 89.2%, and the morphological identification of colonies showed a high level of performance for the colony types typical of *Escherichia coli* and other enteric bacilli. On blood agar, lactose-fermenting colonies were morphologically identified with a sensitivity of 98.9%, while on MacConkey agar they were identified with a sensitivity of 99.2%. In this first clinical evaluation, APAS demonstrated high performance in the detection, enumeration, and colony classification of isolates compared with that for conventional plate-reading methods. The device found all cases reported by the laboratory and detected the most commonly encountered organisms found in urinary tract infections.

Customer publication

Results – APAS Independence vs St Vincent's Pathology standard workflow

Table 1: Confusion matrix outlining average sample classifications by SVP and APAS Independence after the unbiased discrepant resolution method.

SVP		APAS Independence	
		NSG	SIG
NSG	NSG	333	
	SIG		35

These data demonstrated a high level of agreement (91.8%, Table 1). Where the APAS Independence was not interfaced to the laboratory workflow, a large percentage were urogenital and at low levels above the 10³ threshold, and 2 were slow growing alpha hemolytic which presented as a hazy growth after 18 hours. In the case of the latter, APAS Independence would re-route the plate away from NSG plate classification.

Table 2: Sample classification sensitivity of APAS

In this evaluation, APAS Independence was not interfaced to the laboratory workflow. Considering that approximately 70-80% of urine cultures return results as significant growth, there exists a potential for significant reduction (up to an estimated 30%) in microbiologist time for reporting.

Operator feedback

Microbiologists rated the instrument's usability on a scale from 1 to 5, with 1 being "very complex to use" and 5 being "very easy to use". Three of the four microbiologists rated APAS Independence usability as 5, whilst the other rated it as 4. They considered the availability of imaged cultures to be a key feature, along with the speed of APAS Independence in both sorting and reading agar plates. Both the microbiologist and laboratory assistant groups cited the benefits of a simplified workflow, particularly in specimen set-up, as a major advantage of the instrument.



Published confirmation of clinical utility and efficiency in a lab

Conclusions

APAS Independence performed with a high level of sensitivity and specificity and facilitated operational efficiencies in both specimen processing and culture reading.

By removing the negative and non-significant urine cultures from the hands of microbiologists, APAS Independence allows for the redirection of microbiologist time to more complex tasks. Users reported a high level of engagement with the technology, most frequently citing the instrument's ease of use, high-quality image resolution and accuracy as the primary benefits.

10,000 patient clinical trial

"APAS® Independence facilitated operational efficiencies in both specimen processing and culture reading"

APAS® technology US FDA cleared as class II medical device



LBT INNOVATIONS

Slide No. 5

© LBT Innovations 2018

Corporate Snapshot – ASX.LBT

Key Statistics as at 29 Nov 2018

Current Price \$0.09 per share

12 month range \$0.09 - \$0.27

Shares Outstanding 200.9 million

Options Issued 18.1 million

Market Cap ~\$20 million

Shareholders Insto (10%), Industry (8%), Dir + Mgmt (5%)



Financials

- \$7.9m raised May18 - LBT well funded
- Cash 30-Sep-18 ~\$5.3m, ~\$6m additional funding available
- Focus on early commercial launch & global footprint

Recent Achievements

- ✓ Dec17 – \$2m AutoBio strategic placement completed
- ✓ Jan18 – \$4m funding from South Australian Government
- ✓ Apr18 – First EU installation - Labor Dr Wisplinghoff
- ✓ Apr18 – APAS® data presented at ECCMID meeting
- ✓ May18 – \$7.9m oversubscribed private placement & SPP
- ✓ Aug18 – First sale of APAS® Independence system AU
- ✓ Aug18 - \$4m facility from SA Government finalised
- ✓ Nov18 – First US installation – Hennepin Healthcare

Upcoming Milestones

- AM MRSA Clinical Trials commence
- 510(K) submission for US FDA, followed by clearance
- Publications presented at global conferences
- Development international sales pipeline



Australia: Launch Market

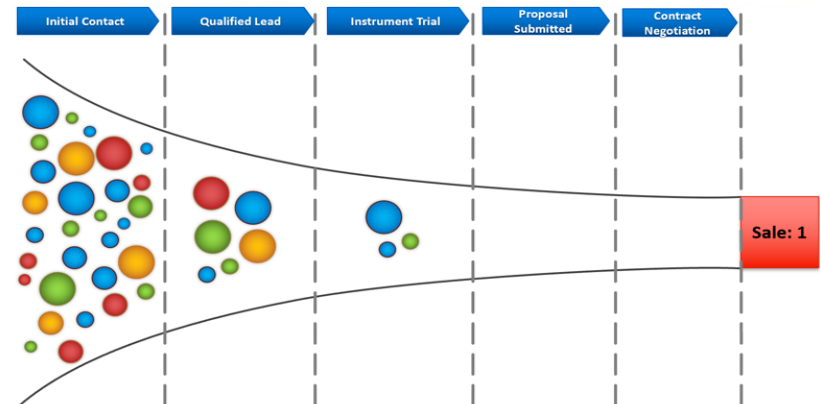


First global sale
August 2018



Channel 7 Melbourne, Sunday 8th October 2017
<https://www.facebook.com/7NewsMelbourne/videos/10155915549244301/>

- Positive market feedback
- Pipeline sales targets identified, exact sales timing difficult to predict, sales cycle 6 – 12+ months
- Multiple opportunities in pipeline
 1. Raise awareness
 2. Verify clinical utility
 3. Budget, buying decision?



Strategic placements: centre of excellence

DE: Sales Executive
Dec-18



Labor Dr Wisplinghoff
Cologne, Germany



St Vincent's Hospital
Melbourne, Australia

Hennepin Health System
Minneapolis, USA



AU: Sales Executive
Apr-18



Attractive Revenue Model

Customer:
Pathology laboratories



Instrument
USD\$300,000



Annual software license
USD\$30K



**5 year revenue
opportunity**

**~USD\$0.45m
per instrument**



***Distributor Margin**

**Regional
Distributors(s)**

***20% - 40% margin**



**Legal manufacturer of
APAS® Independence**

50:50 Joint Venture



LBT INNOVATIONS



HETTICH
LABORAPPARATE

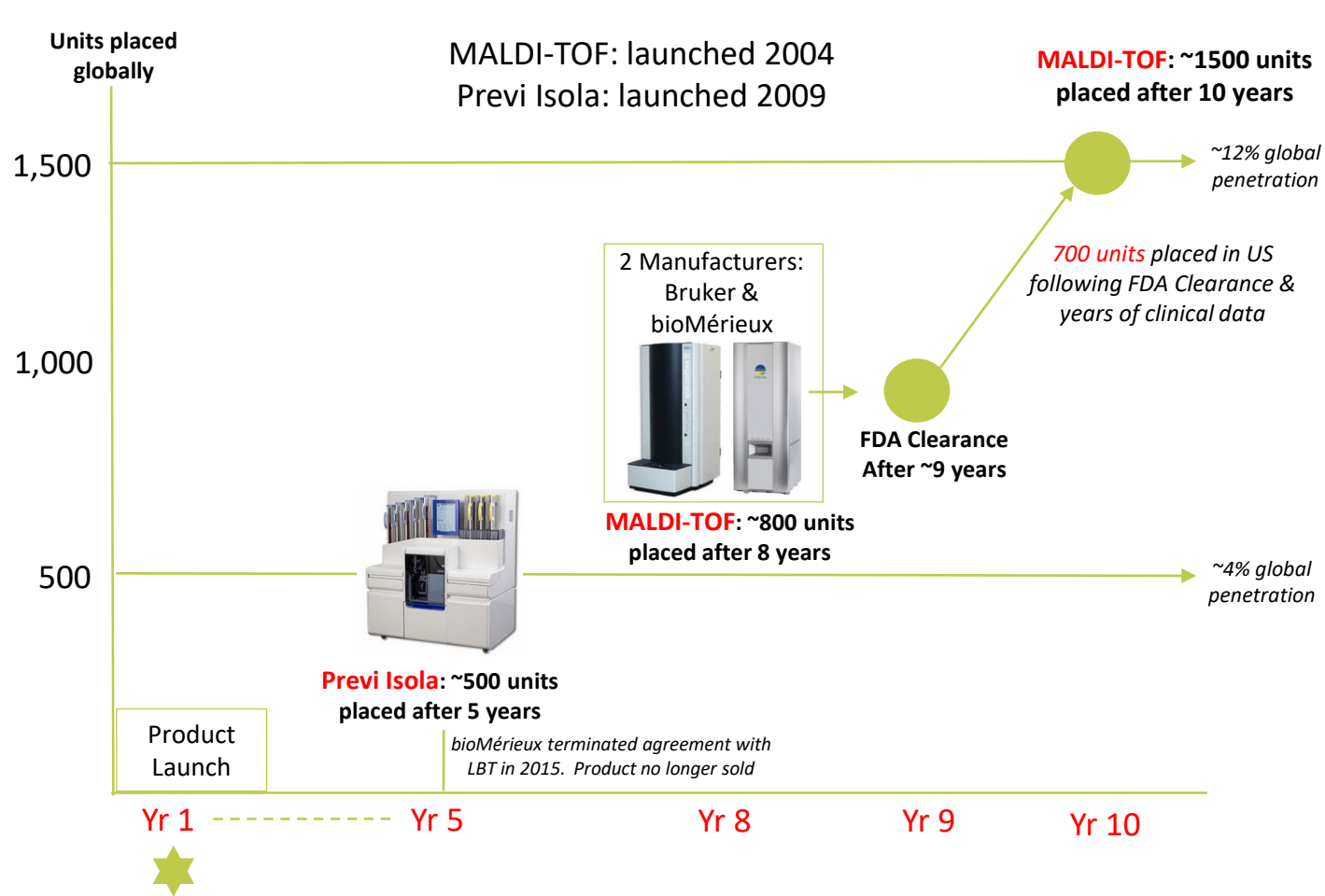


LBT INNOVATIONS

Slide No. 9

© LBT Innovations 2018

Sales forecast: similar products case study



Case Study APAS® Independence:

1,500 units after 10 years

1. Cumulative Instrument sales:
~AUD\$600M

50% flows to LBT
(after distributor fees & JV costs)

2. Licence fees, building to:
~AUD\$60M per annum

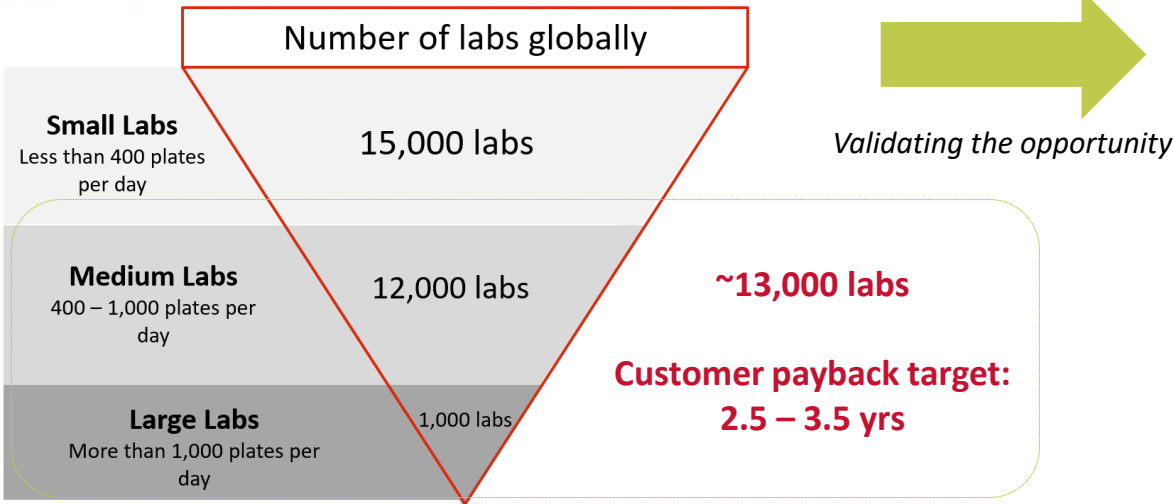


majority flows to LBT
(after distributor fees)



Large Market Opportunity

Macro Analysis



Supporting Sales

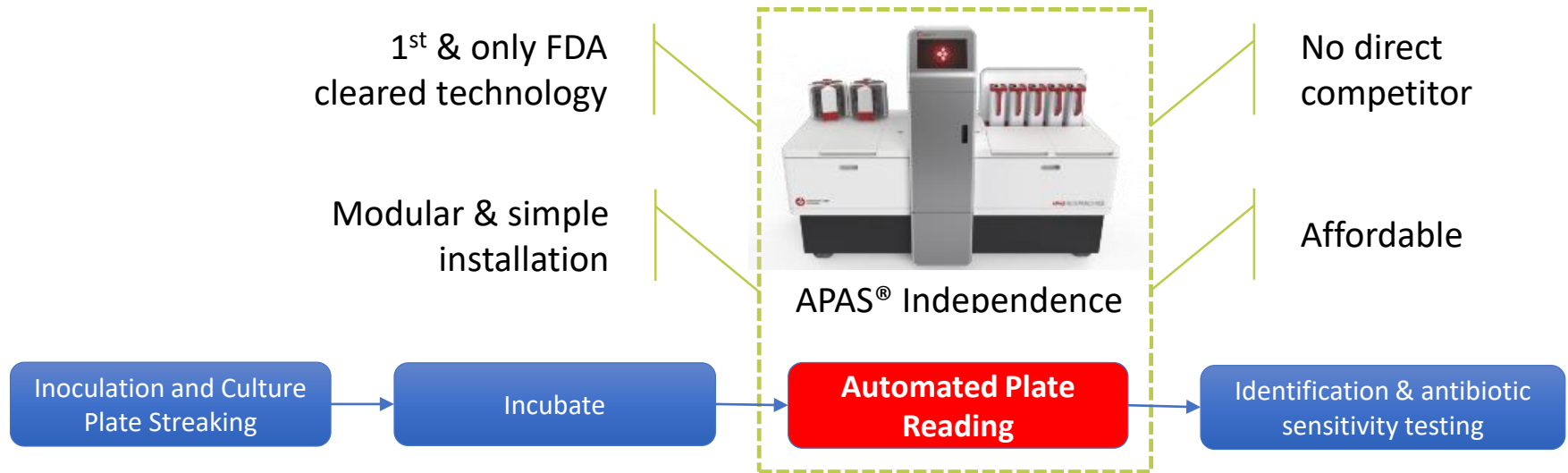


Over 160 labs, finalised H2CY18:
Australia, UK, Germany, USA

Feedback that influences customer interest and sales:

- ✓ Media Used – brand and product codes. High acceptance to change media
- ✓ Full plates, bi-plates, multiple specimens per plate
- ✓ Specimen type processed
- ✓ Incubation time
- ✓ Lab size (*feedback received from labs > 400 plates per day*)

Competitor Landscape



Competition snapshot: Existing automation targeting different market segments:
Large, connected, complex, expensive, low global penetration.



WASPLab™

Image: <http://www.copanusa.com/products/automation/wasplab/>

Large labs only:
~150 installs over
~11 years

Plate Reading:
Still requires
manual assessment

Large capital cost:
USD\$2.5m+



BD Kiestra™
Total Lab
Automation

<http://www.bd.com/europe/labautomation/>



Innovating AI and intelligent imaging for the future of healthcare



Future: Building Strategic Capability

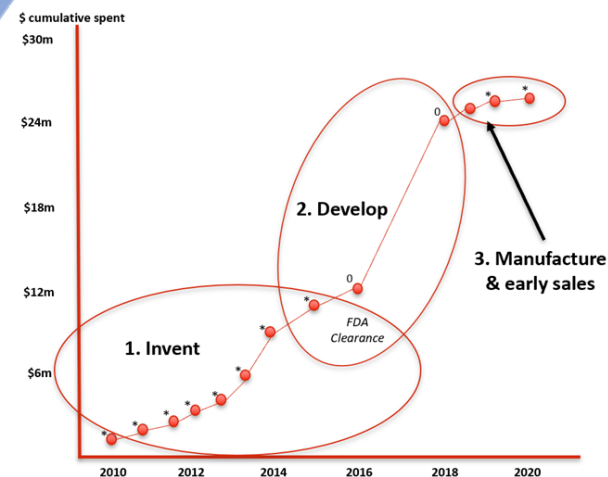
Transitioning from outsourced development to internal capability. Critical to develop future analysis modules

Our Values:

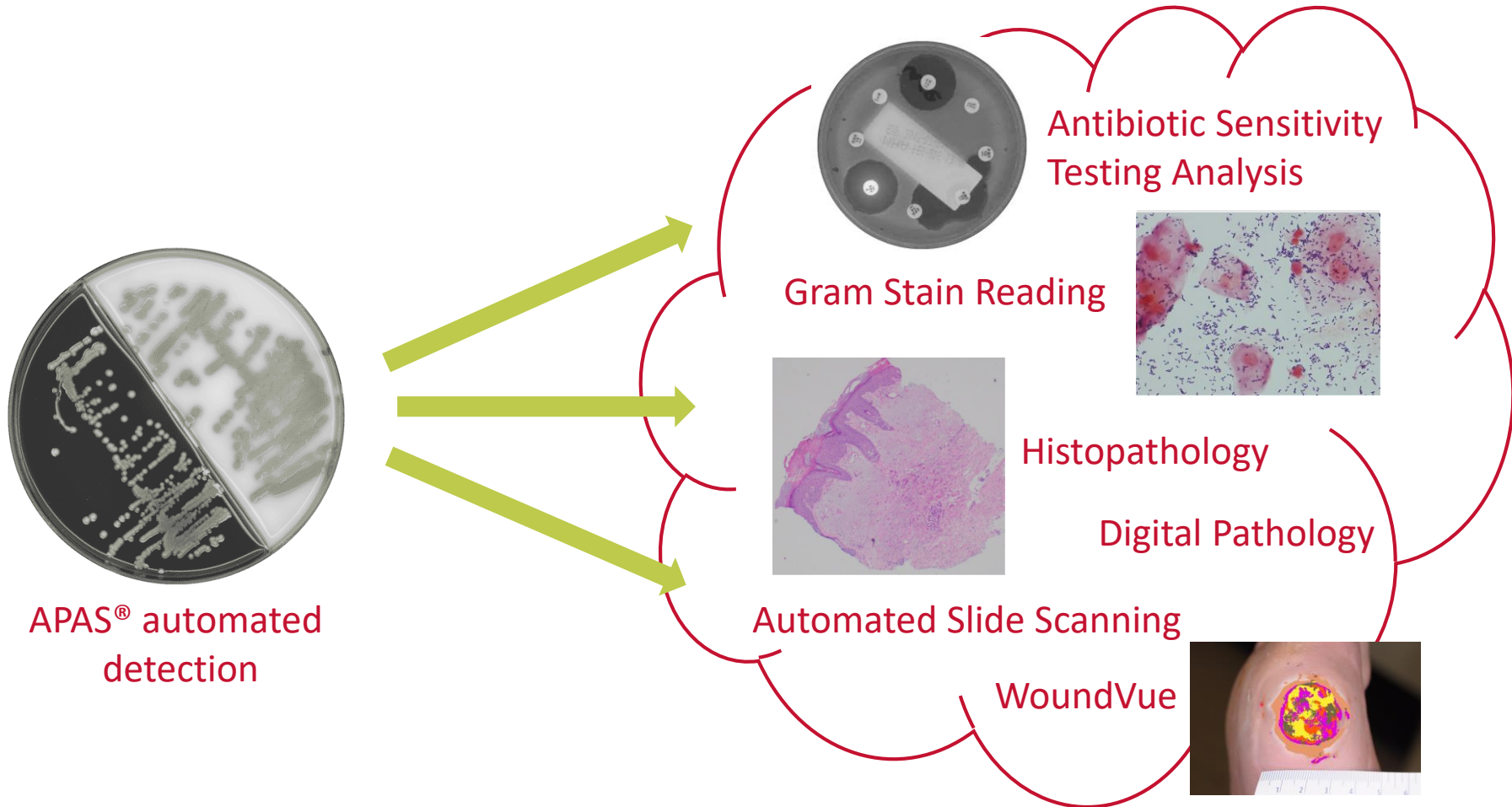


- People investment: Artificial intelligence, software engineering, science. *Unique value proposition.*
- Technology proven -> insourcing increases efficiency and reduces cost
- Directly control development of additional analysis modules in sustainable way

APAS Development History (*outsourced*)

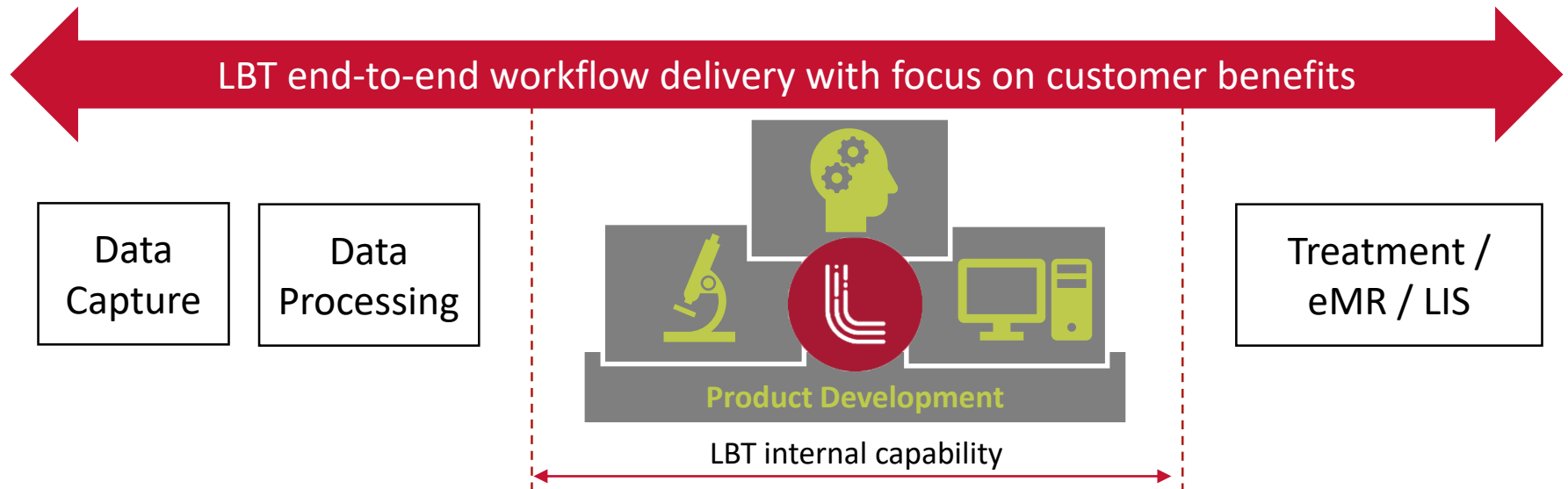


Extension of APAS Algorithm



Broader APAS® Opportunities

LBT's proven artificial intelligence capability and experience means we are well placed to grow through partnerships / acquisition to extend the application into new clinical disciplines.



LBT understand the **end-to-end workflow** in addition our artificial intelligence platform. LBT deliver **trusted** and **actionable** solutions that:

- (1) Reduce cost (2) Deliver faster and (3) improved diagnosis (consistency / accuracy)

Outlook

2019



Regulatory

Submit 510(k) for APAS
Independence (*update to be
given by 31-Dec-18*)

FDA clearance



Market Development

Present publications

- ECCMID
- ASM

Expand reference sites

Analysis module development



Sales Activity

Develop international sales
pipeline, leading to local
distributor(s) placement

Modest sales – building
adoption during CY2019





LBT INNOVATIONS

Brent Barnes

Managing Director & CEO
Level 8, 44 Waymouth Street
Adelaide SA 5000
+61 (0)8 8227 1555
info@lbtinnovations.com

lbtinnovations.com

Experienced Board of Directors



Brent Barnes
Managing Director

Commenced Oct-16

Experience

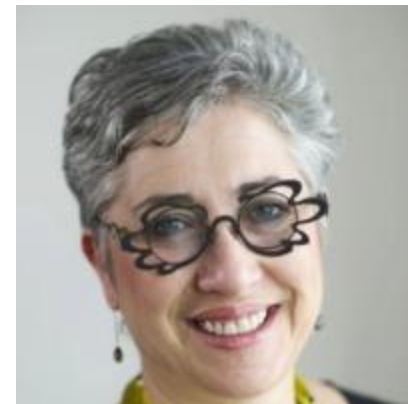
- Prior to LBT, executive working for #1 cochlear implant global medical device company, Cochlear Limited (ASX:COH)
- Lived in United States (Colorado and Texas) – establishing manufacturing business and running regional sales;
- General Manager, Asia Growth Markets responsible for 12 countries in Asia, based out of Singapore
- Non-Executive Director of telecommunications company Connek Pty Ltd



Kate Costello
Chairman



Steve Mathwin
NED



Caroline Popper
NED



Glenn Haifer
NED