



## INVESTOR PRESENTATION

*Investor and Industry meetings in New York and in Atlanta, USA, June 2018*

**Adelaide, Australia, 4 June 2018:** LBT Innovations Limited (ASX: LBT) (**LBT** or the **Company**), a leader in medical technology automation using artificial intelligence is pleased to announce that in conjunction with the American Society for Microbiology Microbe (**ASM Microbe**) conference in Atlanta; Managing Director and CEO Brent Barnes will be meeting with investors and potential industry partners. These meetings will be held from 4 June 2018 in New York and Atlanta, to introduce the Company and to also provide an update for those parties met in the January 2018 US investor roadshow.

The Company's Investor Presentation for these meetings is **attached**.

– ENDS –

### About LBT Innovations

LBT Innovations Limited (**LBT**) improves patient outcomes by making healthcare more efficient. Based in Adelaide, South Australia, the Company has two world class-leading products in microbiology automation: MicroStreak®, which provides automated culture plate streaking and Automated Plate Assessment System (**APAS**®). Based on LBT's intelligent imaging and interpretative software, US FDA-cleared APAS® automates imaging, analysis and interpretation of culture plates following incubation. LBT has entered into a joint venture Clever Culture Systems AG (**CCS**) with Hettich Holding Beteiligungs- und Verwaltungs-GmbH to commercialise APAS® products. LBT's third product WoundVue® is in early development; this is a proposed automated solution to assist in the management of chronic wounds.

### CONTACTS

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**LBT INNOVATIONS**

ASX code: LBT  
lbtinnovations.com

# LBT Innovations Limited (ASX:LBT) Company Presentation

**Brent Barnes**

**Chief Executive Officer & Managing Director**

**4<sup>th</sup> June 2018**

# 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.

# What are we trying to solve?



**Microbiology laboratories – still a manual processes**

# Overview

## Artificial intelligence platform automating manual healthcare processes

**Commercial launch underway** –  
EU & AU - US in late 2018

**FDA cleared** - 10,000  
patient clinical study

**Cost and efficiency** gains for  
Pathology labs **3 times**  
**faster** than manual reading

Proprietary **patented**  
technology

**Attractive revenue model**  
– upfront + annual fees

**Successful clinical validation**  
- St. Vincent's Hospital, Melb



APAS® Independence

Addressable market of  
**13,000 labs globally**

**Expanding leadership**  
team & board

# Commercial Focus

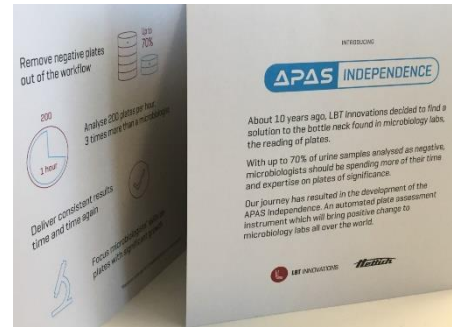
**Focus for 2018** is establishing a **global footprint** for APAS® Independence in strategic markets + **distribution partners** and establishing **customer reference labs**

 **sales commence in 2018**  scaling up in 2019 and beyond

- **Building awareness**
  - **Increased digital engagement** - updated CCS website + new video content
  - **Marketing campaigns** - direct mailers and online banner digital media
  - **Value proposition** - Cost justification tool developed to support customer business case
  - **Key global conferences** - Exhibiting APAS® Independence at a CCS booth
    - total attendee's ~25,000+ across ECCMID & ASM
  - **Abstract** (with St. Vincent's evaluation) presented at ECCMID meeting in Madrid (21-24 Apr)  
Title: "Image interpretation of urine cultures using the APAS® Independence - artificial intelligence in the routine clinical laboratory" (Paper poster #P0122)
- **Evaluation, Distribution and Development**
  - **Distributors** to be appointed for EU & US markets - Working with on the ground partner in EU
  - **First installation** of APAS® Independence to Labor Dr Wisplinghoff, Germany in April 2018
  - **Additional modules** – ongoing development to add analysis modules to APAS® instrument

# Launch Market: Australia

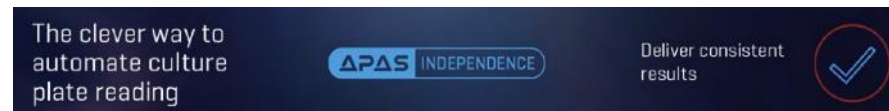
- Sales process commenced in Dec 17
- Capital procurement / sales process
  - > raise awareness
  - > place instrument to evaluate performance & efficiency
  - > buying decision (budget and timing)
- Sales specialist (ex large device) - March 2018 and service technician Oct-17 (east coast)
- Direct mailers sent to 100 targeted candidate labs Dec-17, follow up mailer in Mar-18
- Sales visits completed in major public and private labs in QLD, VIC, NSW, SA



Direct mailer (Dec-17)



Online banner advertisements



## Market segmentation well understood:

- Target market: **~100 labs** (*processing a minimum of 400 plates per day*)
- Total market size **~272 labs**

### 60 laboratories

- NT: 8
- SA: 15
- WA: 37



### 212 laboratories east coast

- QLD: 78
- NSW: 79
- ACT: 3
- VIC: 44
- TAS: 8

# Launch Market: First Customer Evaluation Completed

- St Vincent's Hospital, Melbourne: Centre of Excellence reference laboratory
- First customer evaluation of APAS® Independence instrument completed, confirming utility and efficiencies in a “real life” clinical setting
- Evaluation successfully achieved performance targets and laboratory efficiencies realised
- Over 3000 urine samples, automatically read and interpreted by APAS® Independence
- Generated interest from other laboratories in Australia
- Results of the global first evaluation presented at ECCMID meeting in Madrid (21-24 Apr)



Channel 7 Melbourne, Sunday 8<sup>th</sup> October 2017

<https://www.facebook.com/7NewsMelbourne/videos/10155915549244301/>

## Feedback from St Vincent's evaluation:

- The instrument works and performance targets were successfully met
- Laboratory efficiencies were observed
- Installation was easy with no special requirements as the instrument is simply wheeled into a lab and plugged in
- High level of user engagement
- User interface intuitive and easy to use.



# Attractive Revenue Model

## End Customer Pricing



Instrument once off purchase price:  
**~USD\$300,000**

Annual Software License:  
**~USD\$20K - \$40K**

Annual accessories:  
**~USD\$1K - \$2K**

5 year revenue opportunity  
**~USD\$0.45m**  
per instrument

## 50:50 Joint Venture



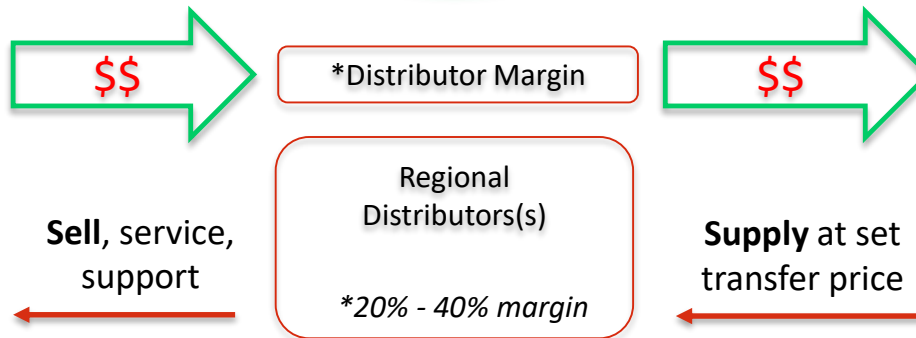
**Profits and costs shared**



Instrument development



Legal manufacturer of APAS® Independence



# Global Market Opportunity – APAS® Independence

Number of labs globally

**Small Labs**  
Less than 400 plates  
per day

15,000 labs

**Medium Labs**  
400 – 1,000 plates per  
day

12,000 labs

**Large Labs**  
More than 1,000 plates per  
day

1,000 labs



Total market opportunity:  
**~13,000 laboratories**

*Solution for all sized laboratories*

## APAS® Independence:

- First and only **artificial intelligence** technology in microbiology to be cleared by FDA
- At least 3 times faster than manual process
- Stand-alone instrument; fast, flexible and affordable

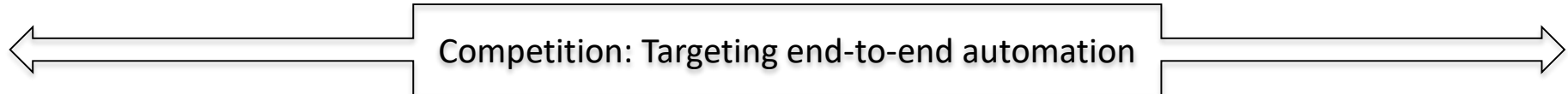
# Competitor Landscape – Culture plate workflow

## APAS® Independence Difference:

- First & only FDA-Cleared: automated reading & interpretation
- Modular in design
- Affordable: USD\$300K
- Large market segment



APAS® Independence



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/>

# LBT advantage: AI in medical technology

## The LBT Difference:



### Clinical Trials

- ✓ 10,000 patient global clinical trial conducted in US and AU, reviewed and clearance by FDA

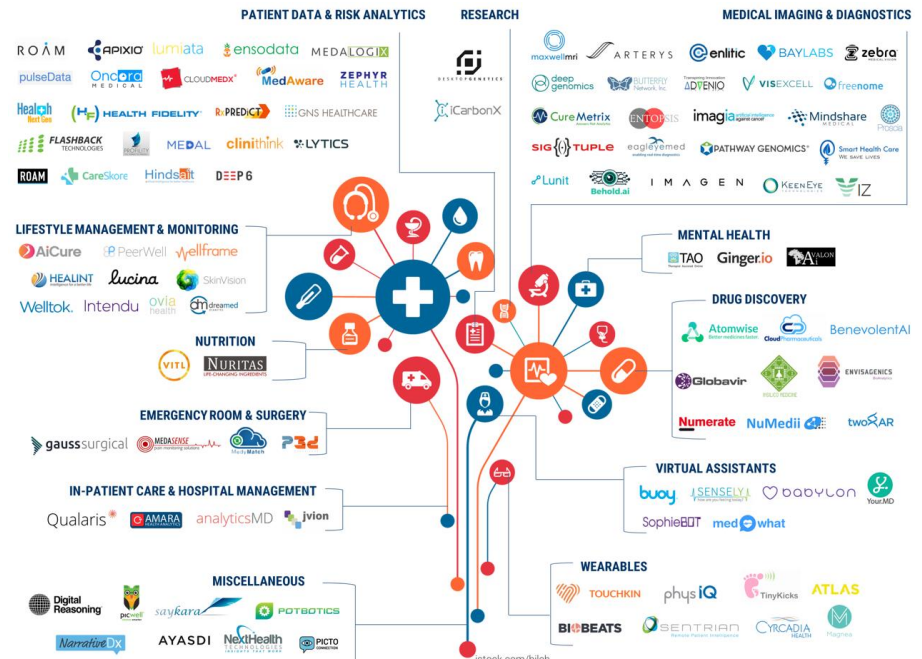
### Regulatory

- ✓ FDA: Class II medical device
- ✓ FDA: de novo (first ever) clearance of AI technology for clinical microbiology

### Patent Protection

- ✓ 4 patent portfolios to protect the IP of imaging and algorithm

## Artificial Intelligence (AI) “Buzz word”, becoming crowded



LBT has delivered clinically proven AI capability in highly regulated environment

# LBT – a platform technology in artificial intelligence (AI)

## Example platform extensions



Current technology horizon

Pipeline technology extension

### Delivered Capability

#### APAS®

- Core technology incorporated into saleable product in 2017 (6 year development)
- 10,000 patient clinical trial completed
- Only FDA Cleared AI technology in Microbiology
- Continued machine learning development to expand analysis modules

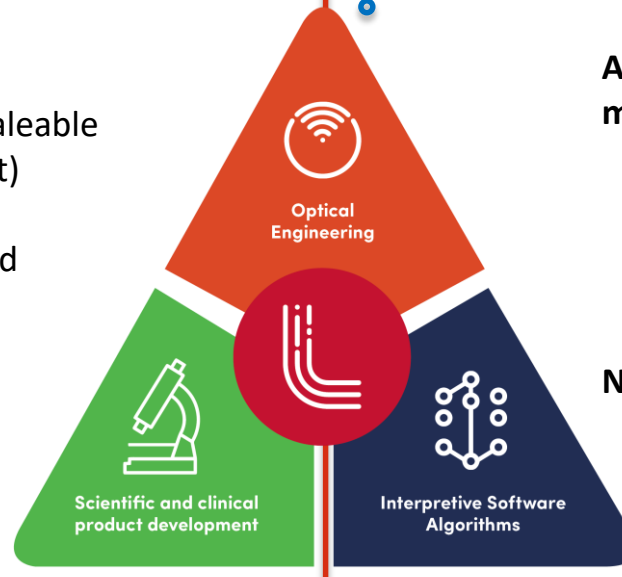
### In Development

#### Additional APAS® analysis (*software*) modules:

- MRSA being developed ~ 10 to 15% of all pathology tests
- Infection control, sputum, faeces in pipeline

#### New market opportunities:

- Water, agriculture, industrial tests (*similar culture plate process is used*)



**Platform Technology: Patent Protected, FDA Cleared, proven technology**



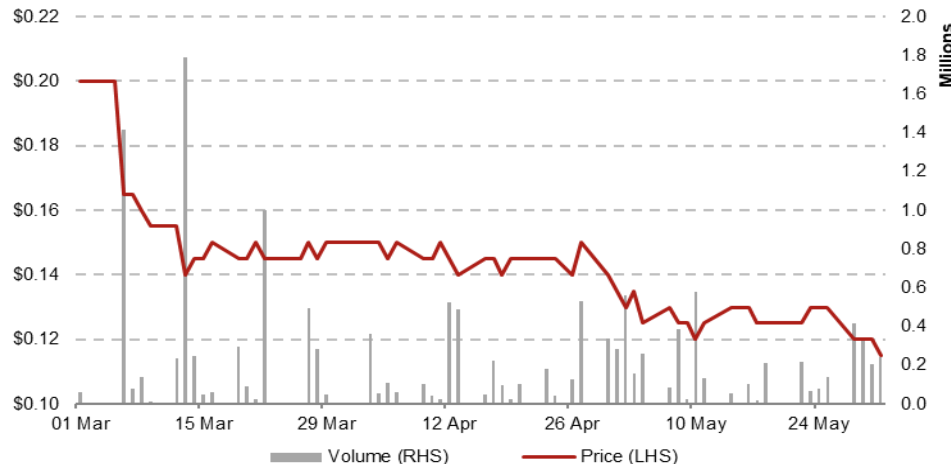
# Corporate Snapshot - \$AUD

## Key Statistics as at 31-May-18

Code	ASX:LBT
Current Price	\$0.115
12 month range	\$0.115 - \$0.340
Shares Outstanding	200.9 million
Options Issued	18.1 million
Market Cap	~\$23.1 million

## Successful \$7.9m fund raising

Total raised	<b>\$7.9m</b> Private Placement & SPP
Price	\$0.15
Shares issued	~52.1m
Investors	New institutions Existing HNW Board/Mgt (~\$0.5m) Strategic (\$0.4m)



## Financials

- **\$7.9m raised - fund LBT to cashflow positive in early 2020**
- **Cash as at 31 March ~\$5.7m** – a further \$4.1m received
- Access to additional \$4m facility from Government
- Commercialisation costs largely completed
- Focus on commercial launch sales, marketing & production

## Recent Achievements

- Nov17 – St Vincent’s Melbourne evaluation completed
- 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

## Upcoming Milestones

- 1H 2018 – First sale of APAS® Independence system AU
- 1H 2018 – APAS® lab trials and pre-sales commence in EU
- 2H 2018 – APAS® trial access for US
- 2H 2018 – Extend APAS® for different specimens and uses

**Commercialisation commenced following 6 years technology development  
Capital secured until cashflow positive expected in early 2020**

# Achievements and Milestones

Delivered on technology and instrument development

CY 2017

- ✓ *CCS showcased the first functional APAS® Independence instrument at major global conferences, starting in April 2017*
- ✓ *Global first laboratory evaluation of APAS® Independence at St Vincent's Hospital in Melbourne, Australia. Validates utility and efficiencies of the instrument in a clinical setting*
- ✓ *Built internal capability to deliver milestones, while creating bench strength for the future*
- ✓ *Raised capital to ensure critical milestones could be achieved*

Focus: Commence sales, customer awareness.  
Establishing a global footprint for scale.

CY 2018

- **FDA 510(k) Supplement cleared for APAS® Independence (APAS® technology already cleared)**
- **CE Marking for APAS® Independence instrument**
- **Sales process of APAS® Independence commence: Australia, then EU and US**
- **Signing of alliance / distribution agreement with global partner(s) for APAS®**
- **CCS booth and demonstration of APAS®, with key opinion leader / customer publications, white papers at major trade shows**
- **Continued development of new analysis modules to extend applications of use in global markets**



**LBT INNOVATIONS**

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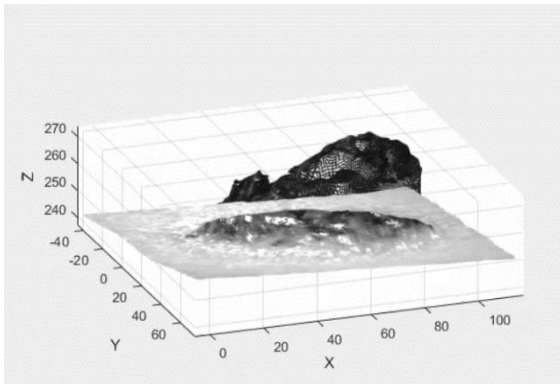


# APPENDIX - WoundVue® (development)

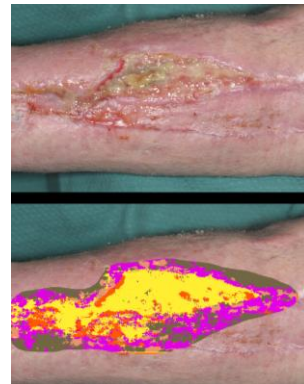
- WoundVue® is a handheld device that will provide **objective** measurements of surface area, depth, and volume
- Uniquely positioned device with a differentiated feature of automatic tissue type classification
  - Additional information that adds to the overall decision support system for wound care
- Proof of principle prototype
  - Currently used in a Clinical Trial at the Royal Adelaide Hospital Wound Clinic (Vascular Unit)
- Technology extension proven, investigating partnering opportunities for further development



Prototype in use



3D model reconstruction



Tissue Classification



Design Concepts