

## **\$0.75M FUNDING AWARDED FOR APAS®-AMR ANALYSIS MODULE**

*Biomedical Translation Bridge funding accelerates medical technology development*

**Adelaide, Australia, 03 September 2020:** 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 has been awarded funding under MTPConnect's Biomedical Translation Bridge (**BTB**) program for the development of the Company's APAS®-AMR analysis module to be used for antibiotic susceptibility testing (**AST**) and assessment of antimicrobial resistance (**AMR**).

### **Key Points**

- **APAS®-AMR: Antimicrobial resistance analysis module for antibiotic susceptibility testing**
- **Millions of antibiotic susceptibility tests performed each year – Annual cost >\$45m in Australia alone**
- **BTB Funding allows LBT to add resources to accelerate planned APAS®-AMR analysis module development**
- **BTB \$0.75m funding will be matched with \$0.75m of LBT expenditure**

The BTB program is an initiative of the Medical Research Future Fund, operated by MTPConnect in partnership with the Medical Device Partnering Program and other industry partners, to support the translation of new therapies, technologies and medical devices to market. LBT were selected as part of a highly contested and independent assessment process and have been awarded \$0.75 million in matched funding to support the development of the Company's planned APAS®-AMR analysis module over the next 2 years.

This funding enables LBT to engage additional resources to accelerate the development of the new APAS®-AMR analysis module, enabling the APAS® Independence instrument to be used to read AST culture plates. The funding accelerates the development timeframe for the module, helping LBT bring this new technology and feature for the APAS® Independence to customers sooner.

MTPConnect Managing Director and CEO, Dan Grant said:

*"LBT Innovations research project to improve the speed of antibiotic susceptibility testing is another example of translation of research occurring in Australia's medical technology sector. It has potential to improve patient outcomes through faster delivery of targeted antimicrobial treatment"*

### **What is APAS®-AMR**

The APAS®-AMR analysis module adds another valuable analytical capability to the APAS® suite of technologies enabling the reading and reporting of AST disc diffusion plates for assessment of AMR. ASTs are critical tests performed routinely by every laboratory and are used to help determine the optimal course of antibiotic treatment for patients. Rapid and accurate reporting of ASTs is essential for patient safety and managing the correct use of antibiotics for AMR.

Millions of ASTs are undertaken in Australia each year, costing the health system an estimated \$45 million<sup>1</sup>, whilst in the United States there are over 2.8 million AMR infections each year causing more than 35,000 deaths<sup>2</sup>. The tests are extremely time consuming with numerous accurate measurements having to be taken manually on each plate. Using advanced image analysis algorithms, the APAS®-AMR analysis module will deliver significant efficiencies in the plate reading process, providing actionable results to clinicians sooner.

The addition of the APAS®-AMR analysis module extends the capability of the APAS® Independence to enable it to be used across multiple stages of the culture plate workflow as illustrated in the slide below. This module will significantly expand the number of tests the laboratory can run through the APAS® instrument helping customers gain greater clinical utility from the instrument and therefore increasing the value of the technology.

<sup>1</sup> Estimated cost: Medicare Benefits Schedule Data 2018-2019

<sup>2</sup> CDC. Antibiotic Resistance Threats in the United States, 2019. Atlanta, GA: U.S. Department of Health and Human Services, CDC; 2019.

Once finalised, the APAS®-AMR analysis module will be released and sold to customers as a separate annual software licence. By building a menu of analysis modules for our customers LBT is able to increase the recurring revenue potential for each APAS® instrument sold.

LBT CEO and Managing Director, Brent Barnes said:

*“APAS®-AMR is a really exciting addition to the APAS® suite of technologies. We first presented the technology at ECCMID 2019 and received great interest in the product as an extension for the APAS® independence. Now with the support of the BTB Funding, and the capital raise in July, we are in a great position to bring forward this key development project.*

*It was very rewarding for us to be one of the few companies selected from a large field of companies vying for these funds and we would like to thank the Minister for Health, the Hon Greg Hunt MP, MTPConnect and the Medical Device Partnering Program for their support of this project.”*

Approved for release by the Chair of the LBT Board.

– 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.

#### **About Biomedical Translation Bridge (BTB) program**

The BTB program is operated by MTPConnect, in partnership with BioCurate (University of Melbourne and Monash University), UniQuest (University of Queensland through its drug discovery initiative QEDDI), the Medical Device Partnering Program (MDPP, led by Flinders University), and the Bridge and BridgeTech programs (Queensland University of Technology); all pre-eminent organisations engaged in the translation and commercialisation of health and medical research.

#### **CONTACTS**

<b>LBT Innovations</b>	<b>Investor Enquiries</b>
<b>Brent Barnes</b> Chief Executive Officer & Managing Director Tel: +61 8 8227 1555 E: <a href="mailto:info@lbtinnovations.com">info@lbtinnovations.com</a>	<b>David Allen / John Granger</b> Hawkesbury Partners Tel: +61 2 9103 9494 E: <a href="mailto:jgranger@hawkesburypartners.com">jgranger@hawkesburypartners.com</a>

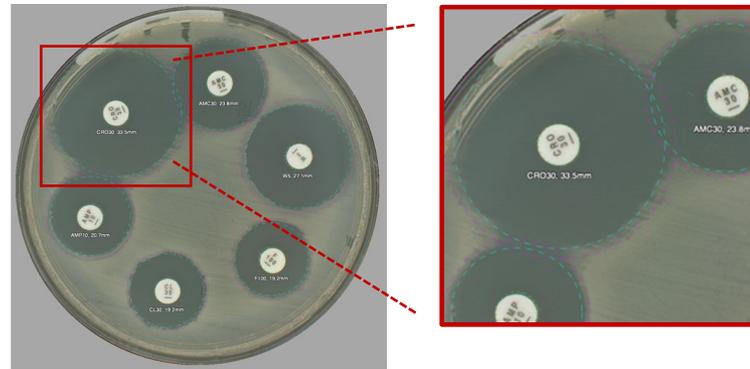
# APAS<sup>®</sup>-AMR

Automated Plate Assessment System (APAS<sup>®</sup>) for Anti-Microbial Resistance (AMR) using Artificial Intelligence (AI)

APAS INDEPENDENCE



APAS<sup>®</sup>-AMR



Patent protected technology



Global regulatory clearances  
(TGA, FDA, CE)



Industry leading platform  
technology

**APAS<sup>®</sup>-AMR application delivers a new analytical capability to the APAS<sup>®</sup> suite of technologies:**

- Automated reading of disk diffusion plates
- Accurate measurements of zones of inhibition caused by antibiotics – including detection of antibiotic induced resistance mechanisms
- Unique image based antibiotic disc recognition
- Significant time-saving of highly manual task

# APAS<sup>®</sup>-AMR Value Proposition

**FDA Cleared** - First mover advantage in clinical plate reading



## MAXIMISE STAFF UTILITY

Decreased time to report



## SMALL footprint

Simple connectivity



## START AND WALK AWAY

Plug and play workflow integration



## GROWING MENU OF ANALYSIS MODULES

Increased revenue potential for each APAS<sup>®</sup> instrument sold



## BROAD market applicability

Suitable for large and medium labs



## ONE INSTRUMENT

Multiple laboratory tests



**APAS INDEPENDENCE**



**Urine, MRSA**

**APAS<sup>®</sup>-AMR**

**Automated Plate Reading**

**Antibiotic Susceptibility Testing**

