

## COMPANY PRESENTATION – AUSTRALIAN NON DEAL ROADSHOW

**Adelaide, Australia, 17 September 2018:** LBT Innovations Limited (ASX: LBT) (**LBT** or the **Company**), a leader in medical technology automation using artificial intelligence is pleased to announce that Brent Barnes, CEO and Managing Director will be leading a non-deal roadshow in Australia this week. Mr Barnes and Ray Ridge, CFO, will be attending meetings with existing and new institutional investors as well as brokers and research analysts in Sydney, Melbourne and Adelaide.

The Company's Presentation for the non-deal roadshow 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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ASX code: LBT  
[lbtinnovations.com](http://lbtinnovations.com)

# **LBT Innovations Limited (ASX:LBT)**

## **Company Presentation**

**Brent Barnes**

**Chief Executive Officer & Managing Director**

**September 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.

# Overview

## Artificial intelligence platform automating manual healthcare processes

**Commercial launch underway**  
EU & AU - US 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

**1<sup>st</sup> sale completed**  
St. Vincent's Hospital, Melb

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

**Expanding leadership**  
team & board



APAS® Independence

# Corporate Snapshot – ASX.LBT

## Key Statistics as at 14 Sep 2018

**Current Price** \$0.11 per share

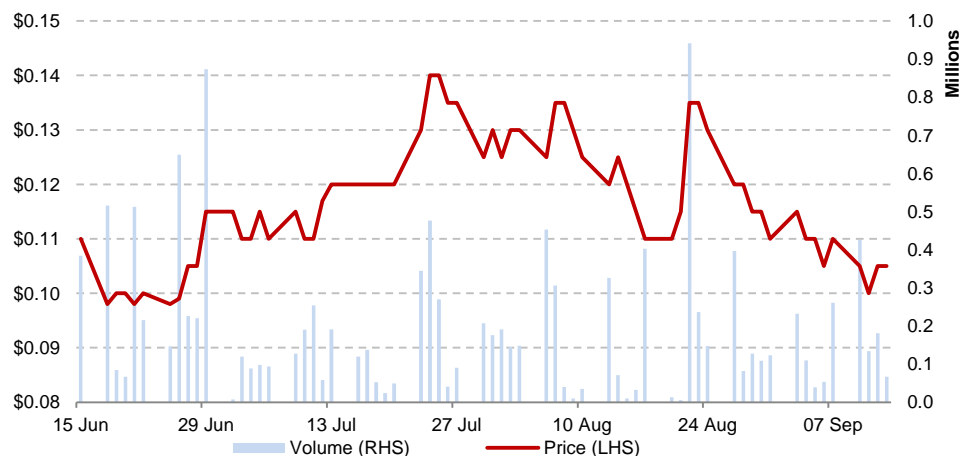
**12 month range** \$0.096 - \$0.325

**Shares Outstanding** 200.9 million

**Options Issued** 18.1 million

**Market Cap** ~\$22.1 million

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



## Financials

- \$7.9m raised - fund LBT to cashflow positive in early 2020
- Cash as at 30 June ~\$7.5m
- Focus on early commercial launch & global footprint

## 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
- ✓ Aug18 – First sale of APAS® Independence system AU
- ✓ Aug18 - \$4m facility from SA Government finalised

## Upcoming Milestones

- 2H 2018 – AM MRSA Clinical Trials commence
- 2H 2018 – 510(K) for US FDA
- 2H 2018 – US market entry meetings with labs

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





# Problems facing our customers - Pathology laboratories



## Poor resource utilisation

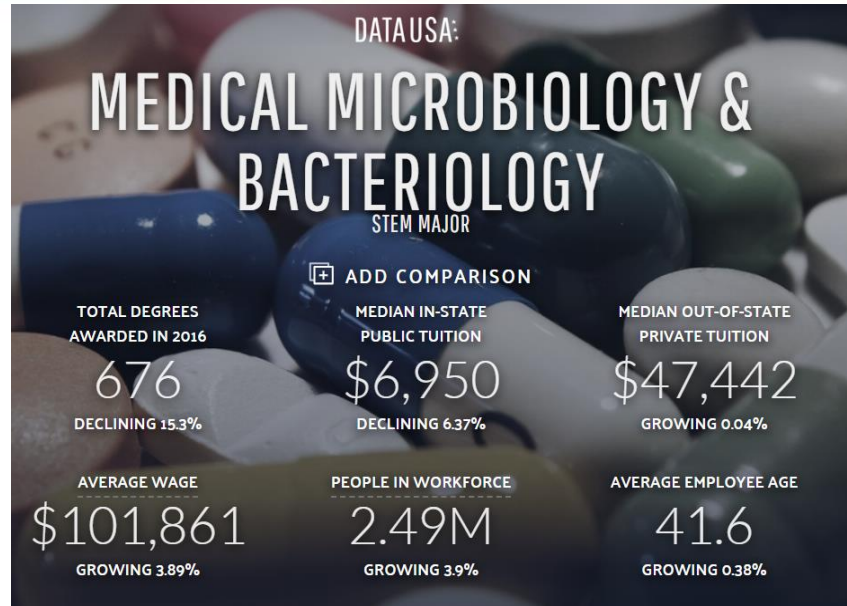
- Up to 85% of plates can be negative

## Ensuring consistent results

- Known variability in microbiologist plate reading – error rates of 5.5% - 6.6%; over 12% morphology<sup>4</sup>

## Increasing staff costs

- Microbiologist costs AUD\$80,000 - 150,000+



## Recruiting Microbiologists

- Average age of microbiologist is 51 years (AU)<sup>1</sup>, 42 (US)<sup>2</sup>
- US vacancy rate at any one time is 9%<sup>3</sup>
- Declining profession / labour shortage

## Workplace safety & staff management

- Strain injuries caused by repetitive manual processes
- Management: sick days, annual leave

# Launch Market - First Sale achieved August 18



- **Customer Evaluation – November 2017**
  - Confirmed utility and efficiencies in a “real life” clinical setting
  - > 3000 urine samples, automatically read and interpreted by APAS® Independence
- **Commercial sale – August 2018**
  - Terms undisclosed – pricing consistent with guidance

## Publication presented at ECCMID 2018

Image interpretation of urine cultures using the APAS® Independence – artificial intelligence in the routine clinical laboratory

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



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

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

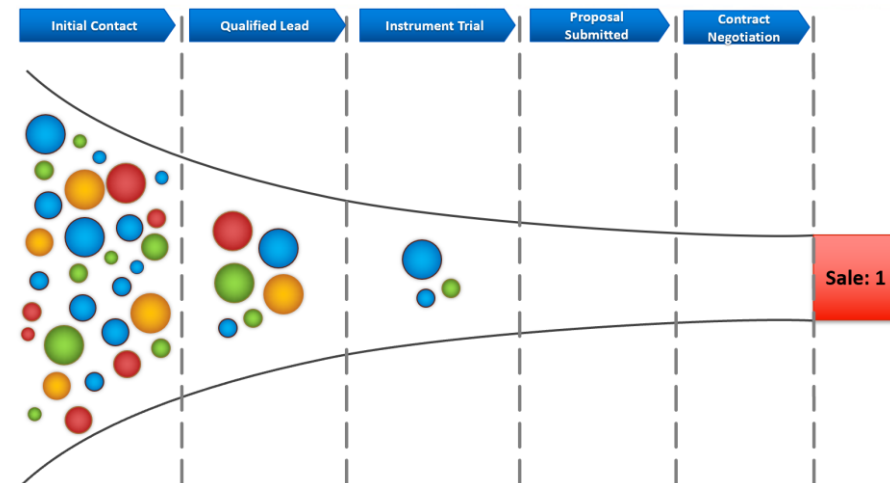
## Feedback from St Vincent's evaluation

- 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.

# Multiple sales focus: Australian Launch Market

- **1<sup>st</sup> sale** achieved in **August 2018**
- Positive market feedback
- Pipeline sales targets identified, exact sales timing difficult to predict
- Sales cycle **6 – 12+ months**
- Sales visits completed in major public and private laboratories in QLD, VIC, NSW, SA

1. Raise awareness → 2. Verify clinical utility → 3. Budget, buying decision?



## 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

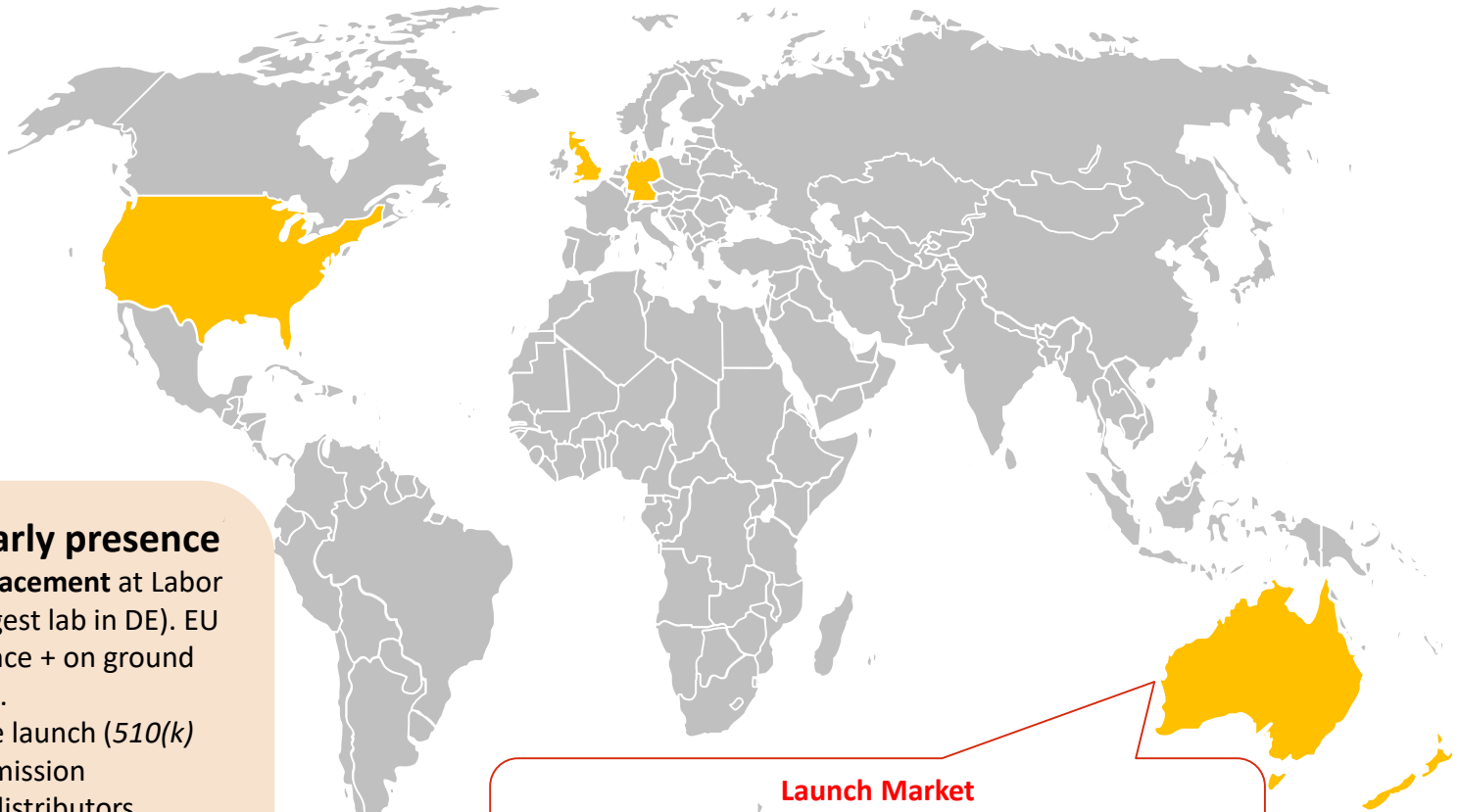


### 212 laboratories east coast

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



# 2018/19 Launch: Adoption & Footprint for scale



## Establishing early presence

- Germany: **First placement** at Labor Wisplinghoff (largest lab in DE). EU centre of excellence + on ground technical support.
- US: subject to pre launch (510(k) *supplement*) submission
- Appointment of distributors
- Analysis module development linked to market access

## Launch Market

Local and leading technology and microbiology knowledge. Establish training and sales tools which are modelled, tested & ready for expansion into larger markets.



# 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



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HETTICH  
LABORAPPARATE

**Profits and costs shared**

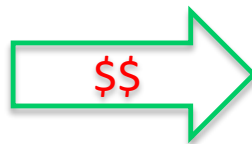


Instrument development



CLEVER CULTURE  
SYSTEMS

Legal manufacturer of  
APAS® Independence



\*Distributor Margin



**Sell, service, support**

Regional  
Distributors(s)

*\*20% - 40% margin*

**Supply at set transfer price**



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# Market Research: Sharpened focus on opportunity

## Macro Analysis



## Supporting Sales

Number of labs globally

Validating the opportunity

### 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

**Ideal lab profile:**

400+ plates per day which delivers ROI in 2.5 – 3.5yrs



**Over 100 labs, finalised Jul-18:**  
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*)

# LBT advantage: AI in medical technology

## Delivered capability – First Launch



APAS® Independence  
with Urine module

### 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

## Ongoing Development + Strategy:

- Utilise platform technology
- Extend into new medical applications
- Leveraging developed core capability

**Analysis Module for APAS®: More modules extend instrument utility and opens new markets.**

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

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

### New market opportunities:

- Water, dairy

**LBT has delivered clinically proven AI capability in highly regulated environment**



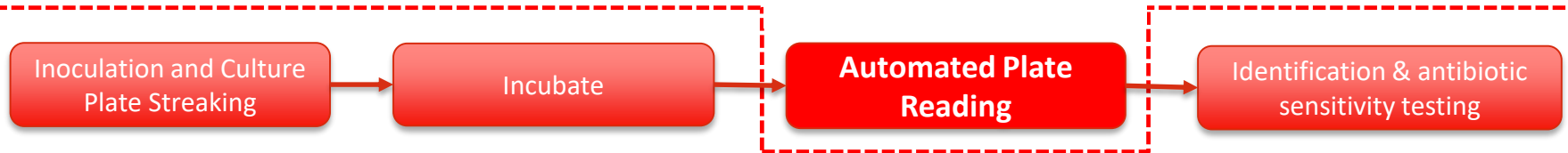
# Competitor Landscape – Culture plate workflow

## APAS® Independence Difference:

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



APAS® Independence



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



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+



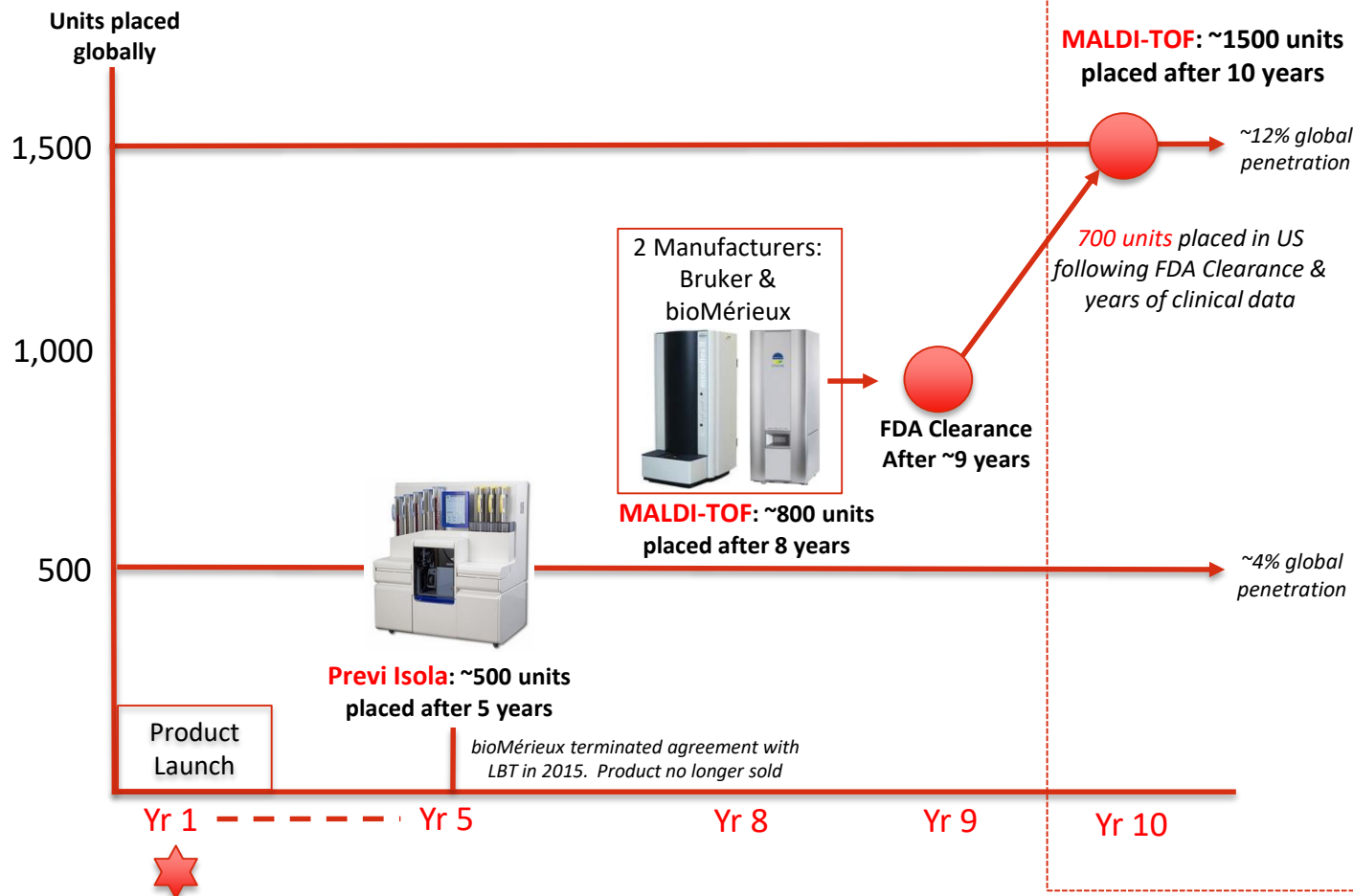
<http://www.bd.com/europe/labautomation/>



# Similar product uptake in sector

MALDI-TOF: launched 2004

Previ Isola: launched 2009



## 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)

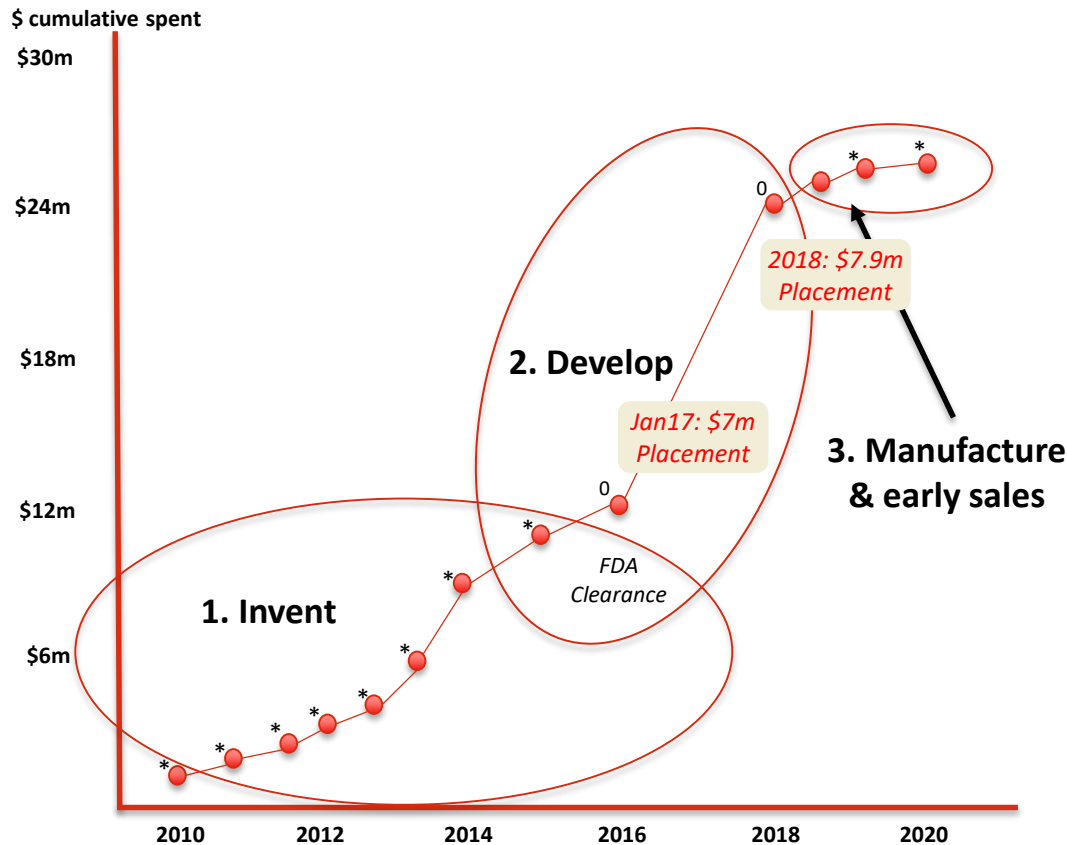
**2. Licence fees, building to:** **~AUD\$60M per annum**



majority flows to LBT  
(after distributor fees)

# APAS® Development Evolution and Capital Management

- Invention to Launch - **8 years ~\$24m**
- Commercialisation capital – recently secured > \$10m to reach breakeven in 2 years
- Current research validates the market need and that our technology remains unique



## Capital Management

### Funding the early sales process

- Cover costs as sales build:
  - Ongoing Module Development
  - 50% of JV operating costs
- Corporate costs

### Funding secured early 2018

- \$7.9M placement & SPP
- \$4M SA Gov't loan facility drawdowns available to Dec 19
- LBT fully funded to early 2020 (*estimated break even point*)
- New institutional investors

\* Incremental cumulative spend for guidance only  
0 Reported



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