



October 2015 New York

# Uscom (UCM) – Global Medical Devices and Revenue Growth



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**Executive Chairman/CEO**

*The Measure of Life*

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# Disclaimer



# Uscom

*“A rapidly growing Australian medical device company with world leading products and a strategic global vision...”*

## ***“Products generate profit”***

Outstanding science

Experienced and sector leading people

High growth (+50% pa), innovative medical device company

Key cardiovascular pulmonary markets with multiple products

De-risked technology

Strategic growth from recent acquisitions

Valuable IP with high margins (75+%)

Growth from US focus and reimbursement

Marketing of new product lines

Fundamentals to drive value

Value investment





# Uscom vision

***Company of the Year, 2014***

***Johnson & Johnson Innovation Industry Excellence Awards***

*“A milestone driven, rapidly growing global medical device company, with real products, real revenue, real growth and an aggressive growth strategy”*

**Johnson & Johnson** INNOVATION

**AusBiotech**  
AUSTRALIA'S BIOTECHNOLOGY ORGANISATION

# Current Business

- Premium noninvasive cardiovascular and pulmonary monitoring devices
- Addressing the growing threat of superbugs, heart failure, hypertension and asthma
- Validated, clinically accepted, cost and life saving devices with critical applications
- IP protected with regulatory approvals
- Uscom BP+ for market 2016 - \$7m over 5years Chinese contract in place
- +50% revenue growth in Asia and Europe, with US market ahead

## Corporate

- ASX listed (UCM)
- Headquartered in Sydney
- Market cap of \$15m
- 92m shares on issue
- Rob Phillips, Founder and CEO, holds 20% of company

## Board & Management

- Rob Phillips, Chairman & CEO
- Sheena Jack, Director (HCF, Moneytime Health)
- Christian Bernecker, Director (Stream)
- Nick Schicht, General Manager

## Financials

- Sales +59% 2015
- Revenue +48% 2015 (\$2+m)
- Cash consumption - <\$1m
- Gross Margins ~ 78%
- Cash ~ \$2m



# Strategic growth

*Complementary products and technology*

## Fluid, Sepsis & Heart Failure

- US 1.3bn market \*
- CAGR of 7.6% \*
- CE, FDA, TGA, CFDA

### USCOM 1A

Cardiac Output Monitoring



## Hypertension & Vascular Health

- US 1.7bn market \*
- CAGR of 11.5% \*
- CE, FDA, TGA

### BP+

Blood Pressure Monitoring



*Acquired July 2013*

## COPD & Asthma

- US 400m market \*
- CAGR of 6.5% \*
- CE, TGA, FDA

### Thor

Pulmonary Monitoring



*Acquired Sept 2015*

# USCOM 1A

***Non invasive, accurate, compact technology platform solution  
Heart failure, hypertension, sepsis***

Accurate cardiac output

Cardiac stroke volume

Systemic vascular  
resistance

Left + right heart  
measurement



Works with all other  
hospital equipment

Intuitive touch screen

Real time data

Platform technology  
with multiple uses

Non invasive, real time, beat-to-beat haemodynamics

# Uscom BP+



## ***Central BP - New Wave Supra-systolic Oscillometry Central Blood Pressure and Pulse Pressure Wave Analysis The new standard for hypertension***

- FDA, CE Mark, TGA approvals
- Supra-systolic Central BP+
- Reliable and accurate
- Central and Brachial BP
- Replaces sub-systolic methods (cuff)



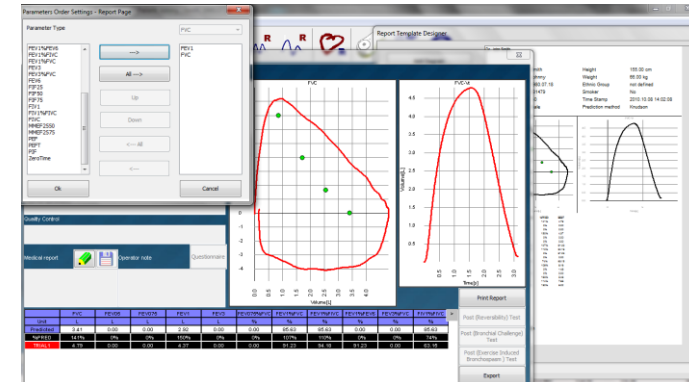
- Home or clinic
- PPW Analysis
- Results in 30 seconds
- No training required
- Platform technology with multiple uses

**Stand alone, non invasive, accurate, compact system**

# Uscom Thor Spirometry

***Thor (Uscom) – High fidelity digital Ultrasonic spirometry  
For asthma, COPD, and drug compliance monitoring***

- Digital ultrasonic spirometry
- Dual path ultrasonic sensing
- FDA, CE, and TGA approvals
- Reliable and accurate
- Auto calibration
- Research, home and clinic
- Wireless transmission
- Thorsoft analysis software
- FloFree tube – low resistance
- Software guided examination and report
- Simple disinfection
- Platform sensors with medical and industrial applications



**Stand alone, non invasive, accurate, compact system**

# De-Risked technology

*Featured in 400+ peer reviewed publications and presentations*



**Sepsis, Heart failure, Hypertension, Fluid management, Emergency, Pediatrics, Cardiac transplantation, Electrophysiology, Emergency transport, Anesthesia, Liver transplantation, ICU, Pre-eclampsia, Pulmonary hypertension, Nurse outreach, Organ procurement, Haemodialysis, Neonates, infants, Children etc.....**



# Global People

**Nick Schicht**



**Global**

**Steve Haken**



**Euro**

**Andrew Kenig**



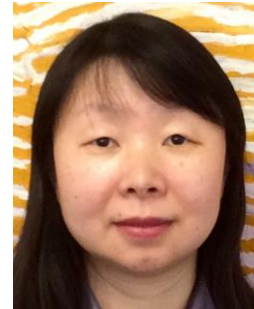
**Aus**

**Denise Pater**



**Global**

**Tina Wu**



**Global**

**Rik Denicke**



**USA**

**Rob Phillips**



**Global**

**Bev Jacobson**



**Global**

**Richard Scott**



**Global**

**George Tang**



**Aus**

**Lindy Belleza**



**Aus**

**George Ferenczi**



**Global**

**Hagay Gilad**



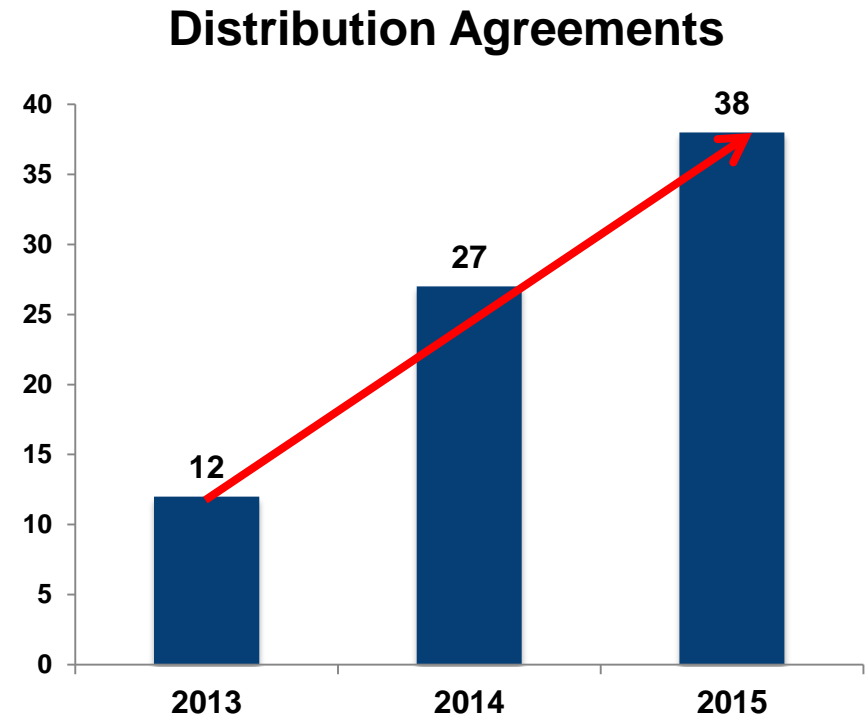
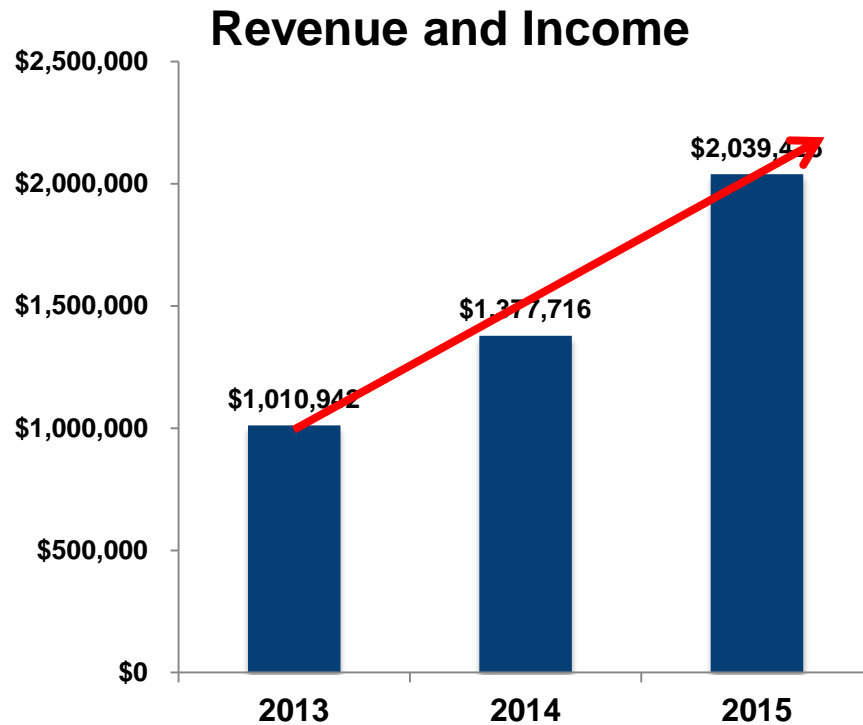
**Aus**

**Steve Wilson**



**USA**

# Results - Growth



*Current revenue only from USCOM 1A  
BP+ and Thor revenue in 2016  
Distribution – sales – revenue*



# New Acquisition



***Uscom has acquired 100% of Thor Laboratories - Asthma\****

## Company Overview

- High fidelity digital Doppler spirometers
- Established manufacturing - 15 years
- Global reach
- Reimbursement in multiple markets
- Strong R&D and grant history
- Seeking partners in US Home Care + Asthma

## Uscom benefits

- Cash flow positive, revenue of \$500k
- Accredited international manufacturing
- 4 + 3 products, CE, FDA, TGA approvals
- Global distribution
- Technical R&D team 16 engineers
- Marketing and management

**Synergy of science, operations and strategy**

# New Products – Asthma & COPDs

## Products in Market

### Digital Doppler Spirometer

Home use



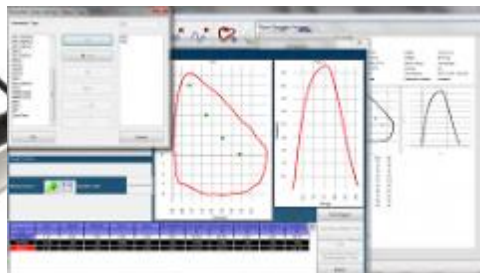
### With Diagnostics and WIFI

Digital wifi spirometer



### Professional System

Desktop with advanced software analytics



## New Products

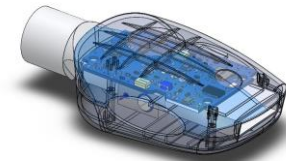
### New - SpiroSpacer

Drug delivery measure  
Telemetry to iPhone app  
Smart spacer  
Patient interactive



### New - SpiroNet

Digital wifi spirometer  
Remote clinical monitoring  
Cloud diagnosis



### New - Whistler

Neonatal Asthma diagnostic



# Thor Manufacturing



- ✓ Global approvals
- ✓ Manufacturing and R&D
- ✓ Experienced engineers
- ✓ Established reputation
- ✓ USCOM and BP+ reserve
- ✓ University Budapest links

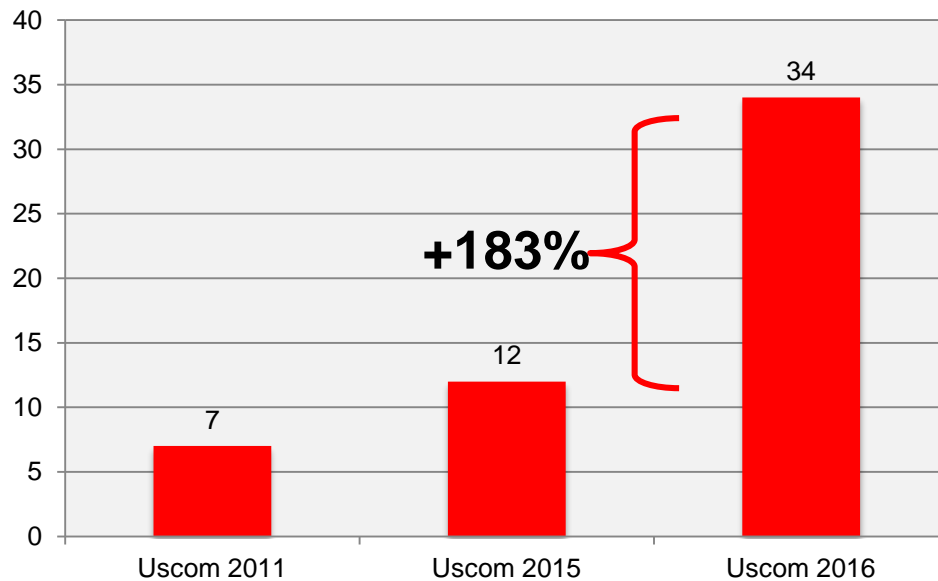


*Internationally ISO accredited medical device manufacturing*

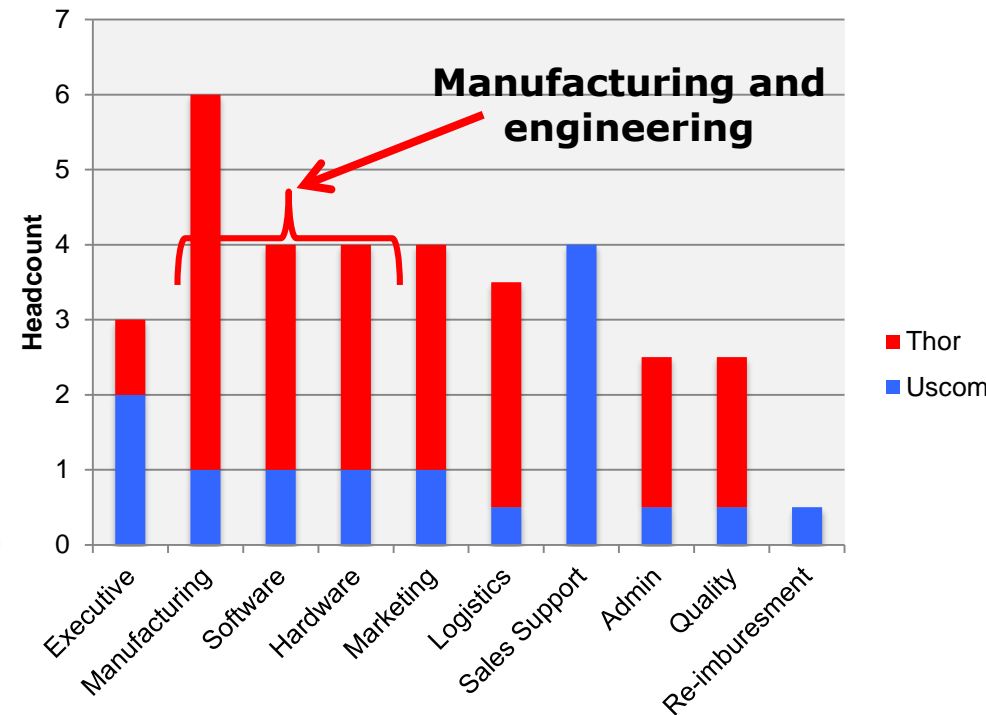
# People and Manufacturing

Post acquisition headcount

Total Headcount

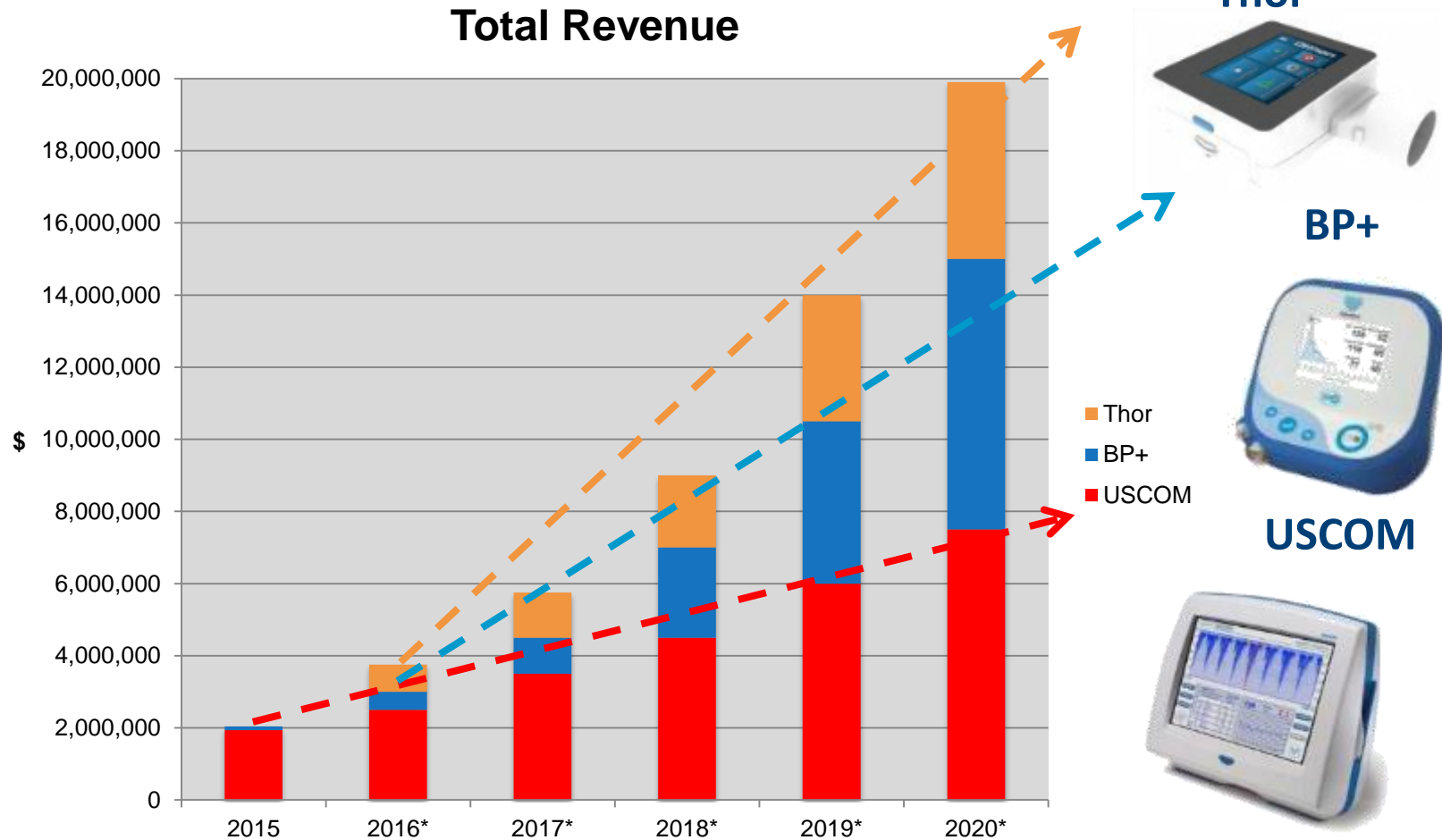


Combined Headcount



More people and More Manufacturing = More Revenue

# Revenue Targets



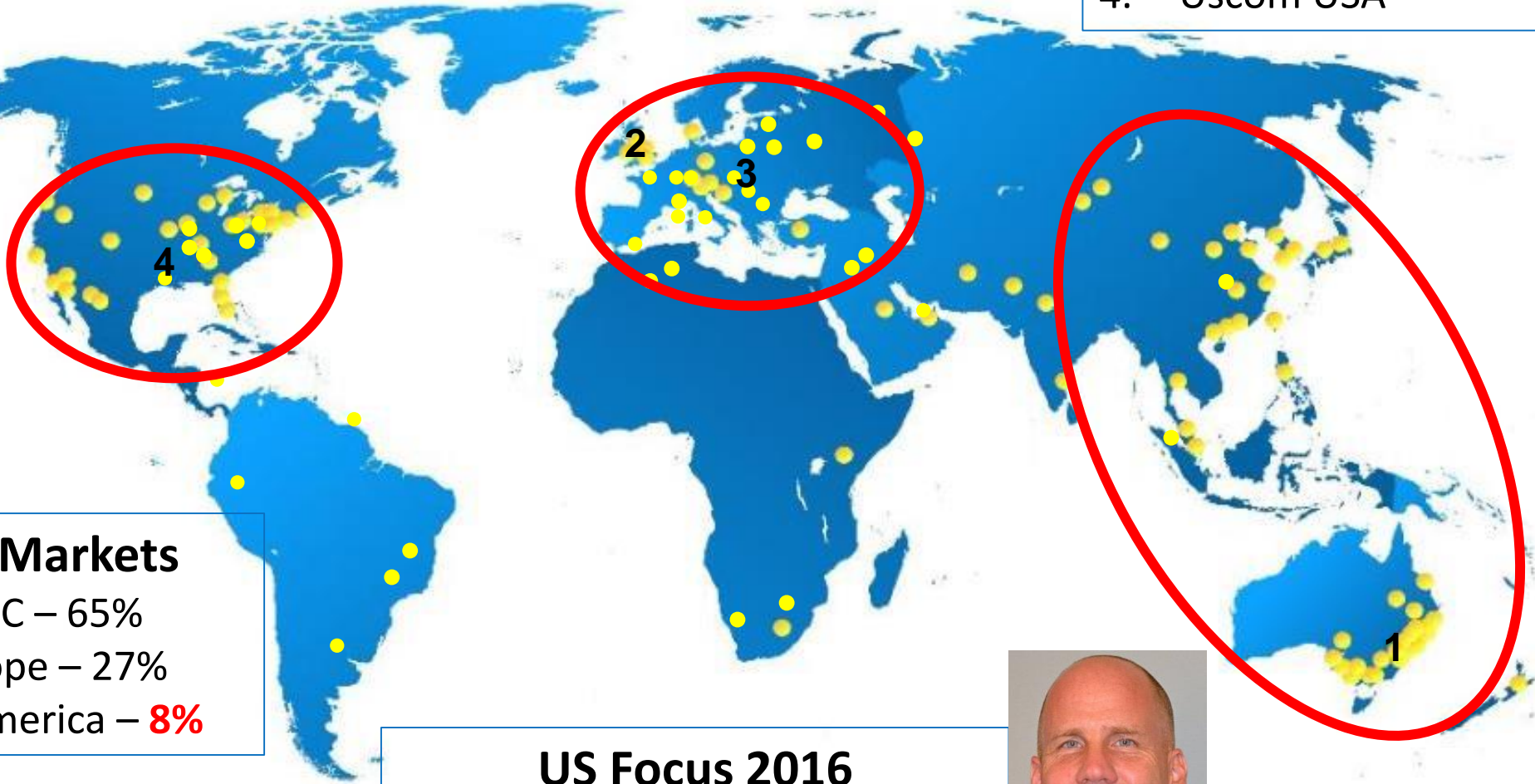
***\$20m revenue by 2020 - 5 year CAGR of 58%***



# Maintaining growth

## Operations growth

1. Uscom Aus
2. Uscom UK
3. Uscom Budapest
4. Uscom USA



## Key Markets

1. AsiaPAC – 65%
- 2/3. Europe – 27%
4. Nth America – **8%**

## US Focus 2016

Stephen Wilson – Former VP Corporate Development Welch Allyn appointed



# US Marketing

## OTTHON 2.0 Mobile Handheld Spirometer



Otthon is a pulmonary function diagnostics and monitoring device for use by general practitioners and patients. Otthon is a compact and mobile solution to screening COPD and asthma.



**Additional options:**

- Wireless Thermometer (handheld)
- ThorSoft PC Software
- Integrated Pulse Oximeter

### Specifications

- Flow measurement principle: Multiple-path sensor
- 30mm (OD) flow tube diameter
- Dead Space: 16.8 mL
- Flow resolution: 8 mL/s
- Flow precision: 3%
- Flow range:  $\pm 18$  L/s
- Dimensions: 35 x 80 x 150 mm
- Bluetooth connection to mobile devices
- USB connectivity
- Powered by internal Li-Ion battery
- Touch screen LCD display
- Automatic internal calibration

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Preliminary specifications, subject to change without prior notice. The listed parameters / features may be for unique setups and are not in general characteristic for all the provided products and/or technologies.  
Document Rev 0001 Draft 3

## SPIROTUBE PC Spirometer



SpiroTube is a pulmonary function diagnostics and monitoring device. SpiroTube is suitable for screening COPD and asthma.

### Specifications:

- Easily integrated to Hospital Information systems
- Automatic internal calibration
- Software upgrade options
- Pharmaceutical testing subsystem
- Easily disinfected with InstruMed
- Flow tube diameter: 30mm
- Dead space: 16, 8 mL
- Flow resolution: 8 mL/s
- Flow range:  $\pm 18$  L/s
- Connection: USB to PC
- Device dimensions: 27 x 60 x 150 mm
- Power supply: USB 5V



ThorSoft Pulmonary Diagnostics PC Software

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Document Rev 0001 Draft 3

## SPIRODESK

Stand-alone Cardio-Pulmonary Diagnostic Station



### Specifications

- Communication options: Bluetooth or USB
- In-built medical diagnostic support system
- Animated medical visualization system
- Configurable medical report system with built-in report editor
- Audible human voice guidance
- Device weight: 2500g
- Dimensions: 290 x 280 x 67 mm
- Power Supply: Battery (7200 mAh) or 9.5V DC adapter

SpiroDesk is a complete standalone Pulmonary Diagnostics Desktop Station. It can be connected to SpiroTube Mobile Edition and SpiroTube PC via Bluetooth or USB. SpiroDesk features a large touchscreen, an optional integrated Thermo Printer and the ThorSoft Pulmonary Diagnostics Software with an audible automatic decision support system. It then archives measurement results to an integrated database, print spirometry reports and more.

SpiroDesk can be upgraded to a stand alone Cardio-Pulmonary Diagnostic Desktop Station, complete with an Oximeter, built-in Thorax EKG and Cardiac Cardiology Diagnostic Software. The Cardio-Pulmonary Diagnostic Desktop Station performs Forced Vital Capacity, Relaxed Vital Capacity, Maximum Voluntary Ventilation, Oximetry and 12-channel ECG with stress tests.

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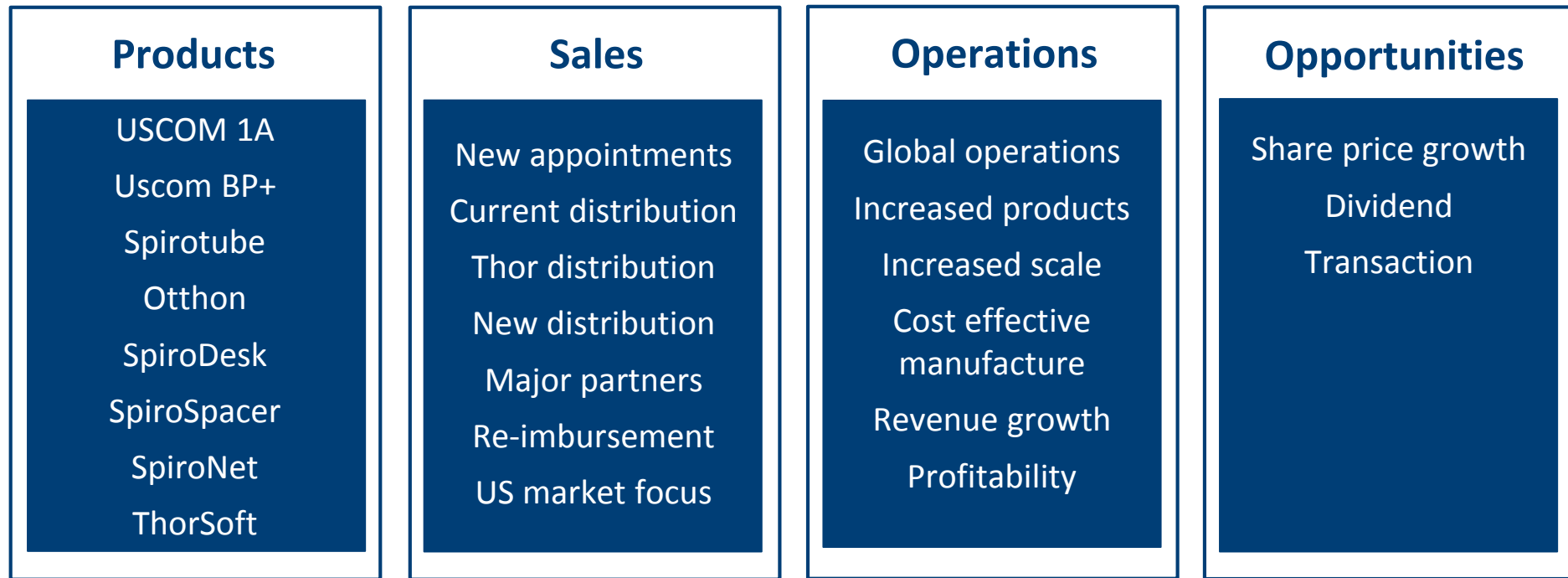
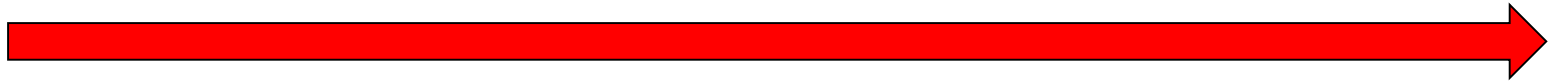
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# The Future

## *Value Cascade*



*Products – Sales – Revenue - Opportunities*

# Multiple Products

*Three product ranges entering profit phase*

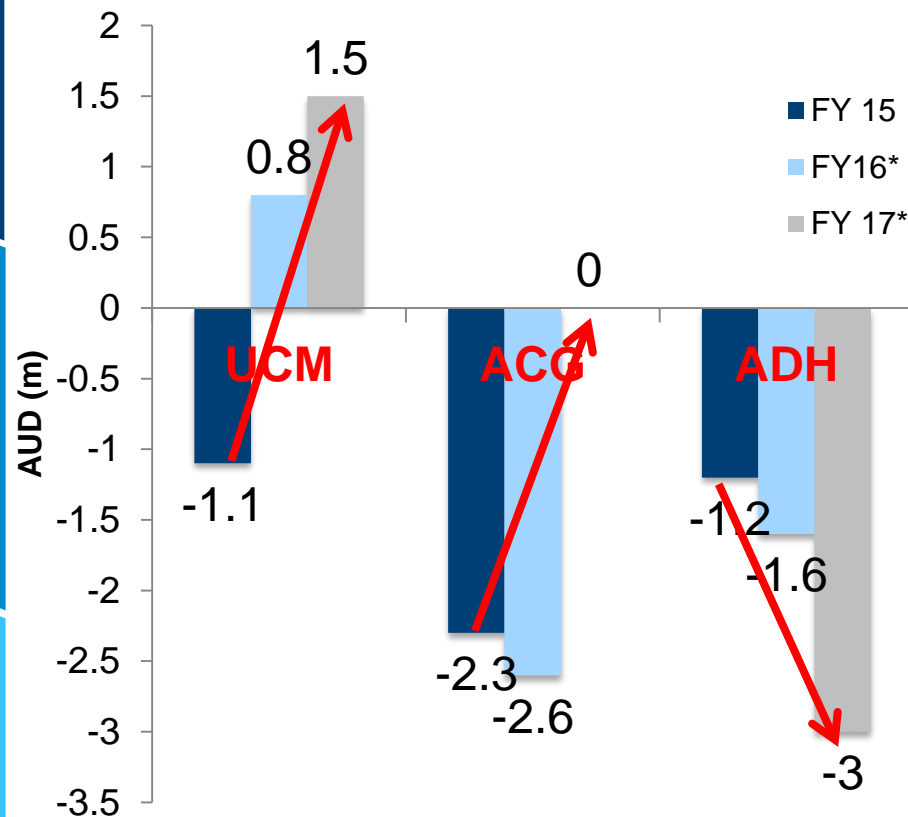
|           | Concept | Product | Pilot | Validation | Regulatory | Revenue | Global Distribution | Profit 2016 |
|-----------|---------|---------|-------|------------|------------|---------|---------------------|-------------|
| USCOM     | ✓       | ✓       | ✓     | ✓          | ✓          | ✓       | ✓                   | ±✓          |
| Uscom BP+ | ✓       | ✓       | ✓     | ✓          | ✓          | ✓       | ✓                   | ±✓          |
| Thor      | ✓       | ✓       | ✓     | ✓          | ✓          | ✓       | ✓                   | ✓           |



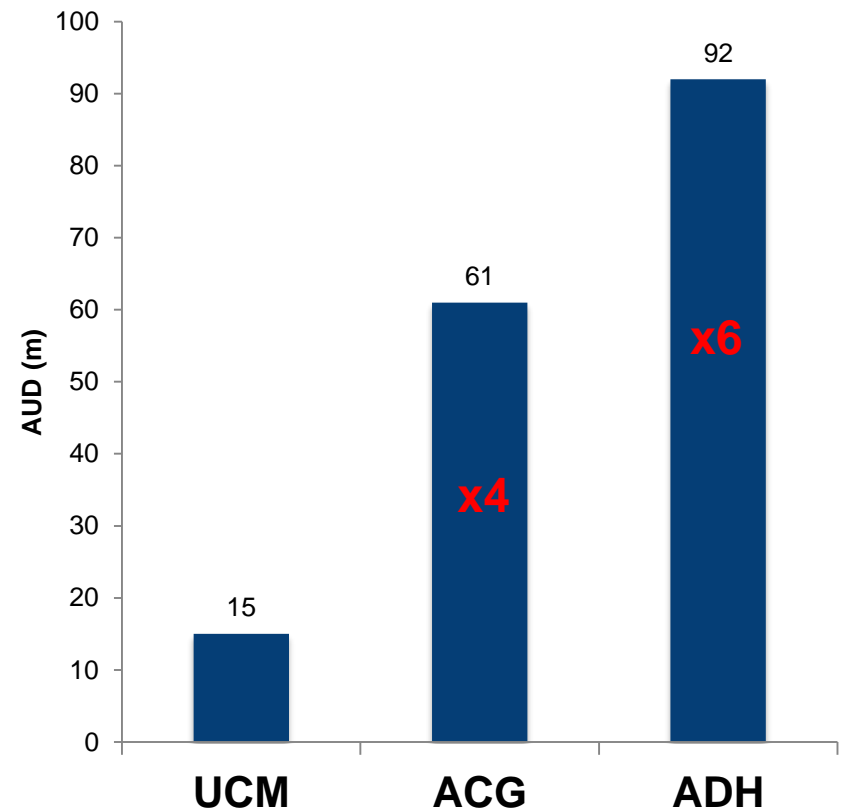
*IP shifting to profit*

# Industry comparators

## Reported and Predicted EBITDA

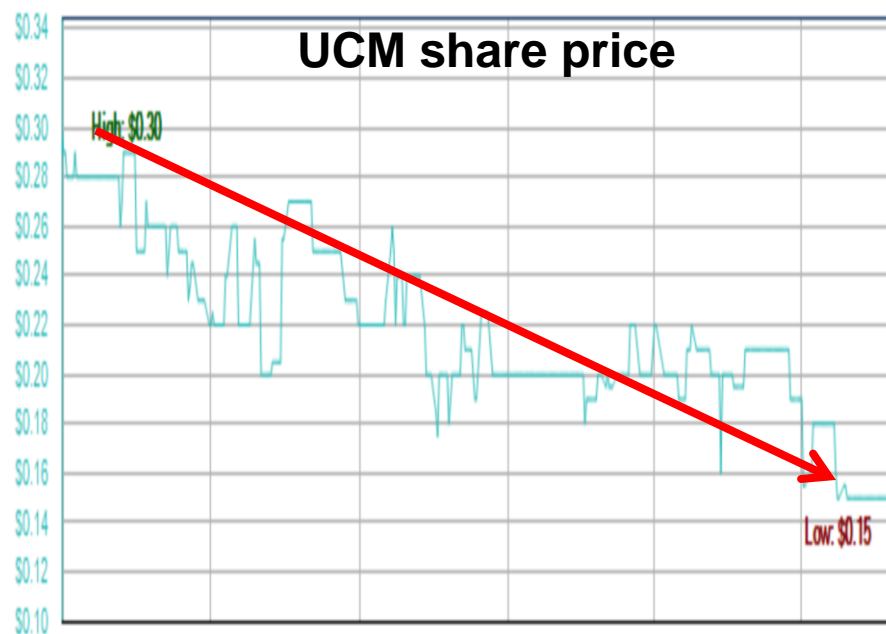


## Capitalised Value

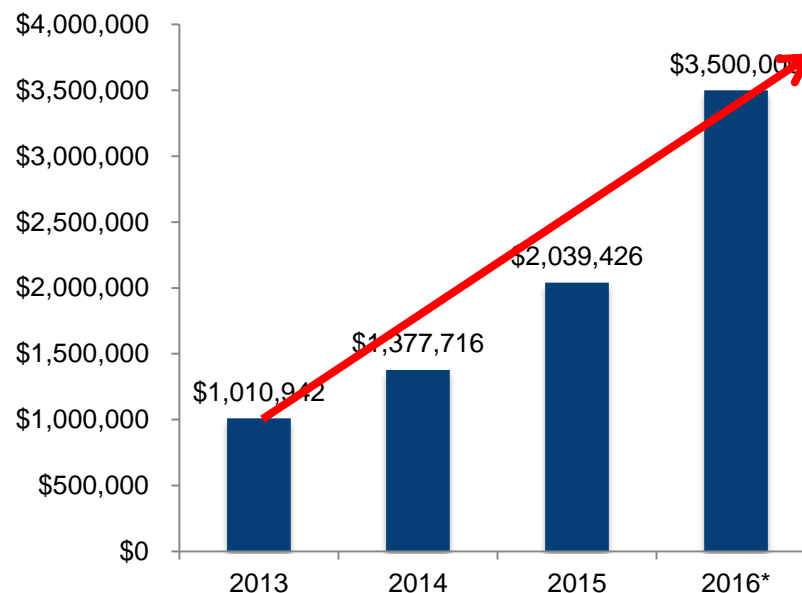


# ASX:UCM

**Disconnect between performance and price!**



## Revenue and Income



*Tightly held, few traders, difficult to acquire volume*

# New Research

USCOM LIMITED



Research Note

GLOBAL LAUNCH OF EXPANDED PRODUCT PORTFOLIO

Investment Highlights

5 October 2015

| 5 <sup>th</sup> Oct 2015 | 5 <sup>th</sup> Oct 2016 | 12mth Change |
|--------------------------|--------------------------|--------------|
| 0.14c (14m)              | 0.42c (42m)              | +200%        |

*12 month Projections and price and cap value targets*

# Uscom

- Value investment ✓*
- Experienced management ✓*
- Strong underlying business ✓*
- Strong growth phase ✓*
- Invested in future growth ✓*
- Premium global markets ✓*
- Diversified and lifesaving technologies ✓*
- Aggressive global growth strategy ✓*
- Two new product ranges for market in the next 12mths ✓*
- Right time – Q1 2016 results imminent ✓*



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**Thanks**

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Associate Professor, Critical Care Research Group, School of Medicine, The University of Queensland

**Executive Chairman/CEO**



# USCOM 1A Competitive Advantage

| Method              | Manufacturer | Technology        | Rel+Rep | Non-invasive | Simple | Cost | Portable | SV beat to beat |
|---------------------|--------------|-------------------|---------|--------------|--------|------|----------|-----------------|
| <b>USCOM 1A</b>     | <b>Uscom</b> | <b>Doppler</b>    | ✓       | ✓            | ✓      | ✓    | ✓        | ✓               |
| BioZ                | Samsung      | BioImpedance      | ✗       | ✓            | ✓      | ✗    | ✓        | ✗               |
| NiCOM               | Cheetah      | BioReactance      | ✗       | ✓            | ✓      | ✗    | ✓        | ✗               |
| Nexfin              | Bmeye        | APP               | ✗       | ✓            | ✓      | ✓    | ✓        | ✗               |
| CardioQ             | Deltex       | Doppler           | ✓       | ✗            | ✓      | ✗    | ✓        | ✗               |
| LiDCO               | LiDCO        | LiCl dilutio +APP | ✓       | ✗            | ✗      | ✗    | ✗        | ✗               |
| LiDCOrapid          | LiDCO        | APP               | ✗       | ✗            | ✓      | ✗    | ✗        | ✗               |
| PiCCO (mod Tx + PP) | Pulsion      | APP               | ✓       | ✗            | ✗      | ✗    | ✗        | ✗               |
| FloTrac             | Edwards      | APP               | ✗       | ✗            | ✗      | ✗    | ✗        | ✗               |
| PAC (Tx)            | Many         | Thermodilution    | ✗       | ✗            | ✗      | ✗    | ✗        | ✗               |

# Testimonials

*"This machine is **saving lives**, there are no two ways about it."*

*Professor Brendan Smith, Anesthetist, Intensivist and Emergency Physician, N.S.W. Dept of Health, Australia*

*"USCOM has changed the way I look at the cardiovascular status of my patients. It's part of the initial shock evaluation and monitored regularly thereafter.... USCOM has now been established as the **standard of care**."*

*Dr Akash Deep, Director of Paediatric ICU, King's College Hospital, London*

*"The USCOM device is a simple method of accurately and noninvasively measuring central circulation, a **goal of cardiology** for many years. The device has the potential to change the way we approach management of sepsis, heart failure and hypertension."*

*Professor Malcolm West, Cardiologist, Mayne Professor of Medicine at The University of Queensland School of Medicine, Brisbane, Australia and Uscom Medical Advisory Board Member.*

*"I have used USCOM for over 5 years now on our very sick children, and use it to guide management. We are now beginning multi-centre, global research which will define the way USCOM is **used in Paediatric Departments across the world**."*

*Dr Joe Brierley, Consultant Intensivist, Great Ormond Street Hospital for Sick Children, London, UK.*

*"The USCOM device is really good; I use it in all my anaesthetics. I think **there should be one on every ICU bed and on every anaesthetic patient**."*

*Dr Steve Woodford, Consultant Anaesthetist, circulatory researcher at Australian School of Advanced Medicine, and Uscom Investor,*

*"To parents and doctors this machine, **USCOM, is priceless**. This machine is thought to have saved baby Abbie's life.*

*BBC Documentary "New machine helps save babies life", 2010, Nottingham Children's Hospital*

# BP+ Competitive Advantage



| Uscom BP+                  | TensioMed              | BPLab               | IEM                 | Centron           | AtCor             |
|----------------------------|------------------------|---------------------|---------------------|-------------------|-------------------|
| Australia                  | Hungary                | Russia              | Germany             | UK                | Australia         |
| USD 3,500                  | USD 6,000              | USD 7,000           | USD 7,000           | USD 6,300         | USD 20,000        |
| 1 min                      | 2 min                  | 2 min               | 2 min               | 1 min             | 1 min             |
| Stand-alone                | ABP, needs computer    | ABP, needs computer | ABP, needs computer | Stand-alone       | Needs computer    |
| CE, FDA, TGA               | CE                     | CE                  | CE, FDA             | CE                | CE, FDA           |
| Aortic + brachial waveform | Central systolic BP    | Rough waveform      | Rough waveform      | Rough waveform    | Rough waveform    |
| Physical model             | Statistical regression | Transfer function   | Transfer function   | Transfer function | Transfer function |

# Why ?

*Independent research from Cambridge University, Weill Cornell, University of California, Wales Heart Institute – BP+ = Four stars*

**Table 1** Indirect, non-invasive methods for estimating central pressure

| Method of waveform recording    | Device                              | Company             | Method of calibration   | Method of estimation         | Clinical applicability <sup>†</sup> |
|---------------------------------|-------------------------------------|---------------------|-------------------------|------------------------------|-------------------------------------|
| Radial tonometry                | BPro <sup>86,87</sup>               | HealthSTATS         | Brachial–radial cuff BP | GTF (radial-aortic)          | ++                                  |
|                                 | SphygmoCor <sup>12,88</sup>         | AtCor Medical       | Brachial–radial cuff BP | (i) GTF (radial-aortic)      | +                                   |
|                                 |                                     |                     |                         | (ii) Late systolic shoulder  | +                                   |
|                                 | HEM9000AI <sup>39,77</sup>          | Omron               | Brachial cuff BP        | (i) Algorithm                | ++                                  |
| Brachial cuff PVP               |                                     |                     |                         | (ii) Late systolic shoulder  | ++                                  |
|                                 | *ARCSolver <sup>89,90</sup>         |                     | Brachial cuff BP        | GTF (brachial-aortic)        | +++                                 |
|                                 | Centron cBP301 <sup>35,91</sup>     | Centron Diagnostics | Brachial cuff BP        | GTF (brachial-aortic)        | ++++                                |
|                                 | Vicorder <sup>92</sup>              | Skidmore Medical    | Brachial cuff BP        | GTF (brachial-aortic)        | +++                                 |
|                                 | XCEL                                | AtCor Medical       | Brachial cuff BP        | GTF (brachial-aortic)        | +++                                 |
| Suprasystolic brachial cuff PVP | Method of Sung et al. <sup>42</sup> |                     | Brachial cuff BP        | Algorithm                    | ++                                  |
|                                 | Arteriograph <sup>37,93</sup>       | TensioMed           | Brachial cuff BP        | Late systolic wave amplitude | +++                                 |
|                                 | Cardioscope II <sup>36,94</sup>     | PulseCor            | Brachial cuff BP        | Algorithm                    | ++++                                |

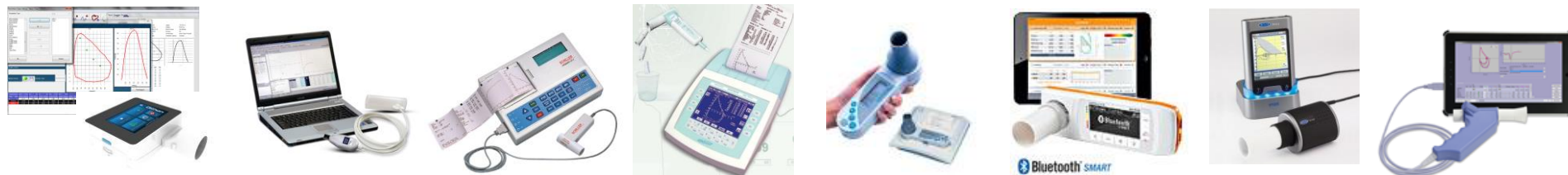
PVP, pulse volume plethysmography; GTF, generalized transfer function.

\*Incorporated in Mobil-O-Graph PWA device (IEM GmbH).

<sup>†</sup>Personal view based on experience, operator-dependency, need for computer/software interface, with + indicating limited applicability to routine clinical practice and ++++ indicating high applicability.

***BP+ is on the international space station***

# Thor Competitive Advantage



| Uscom Thor  | Welch Allyn            | Schiller               | Sibelmed               | Vitalograph            | MIR  | Carefusion             | NDD                            |
|---|------------------------|------------------------|------------------------|------------------------|--|------------------------|--------------------------------|
| Australia   | USA                    | Switzerland            | Spain                  | USA                    | Italy  | USA                    | Switzerland                    |
| SpiroSonic  | SpiroPerfect           | Spirovit SP-1          | Dataspir Touch         | Pneumotrac             | Spirodoc   | Microloop              | EasyOne PLus                   |
| USD 1,890   | USD 2,100              | USD 1,850              | USD 2,300              | USD 2,030              | USD 1,580  | USD 2,180              | USD 1,990                      |
| Dual Path<br>Ultrasound   | Diff Pressure          | Diff Pressure          | Turbine                | Diff Pressure          | Turbine  | Turbine                | Single Path<br>Ultrasound      |
| Accurate<br>Auto calibration<br>SpiroReporter<br>Fully digital<br>FreeFlo sensor<br>Hygeinic<br>SpO2<br>Bluetooth<br>Rechargeable | Multiple<br>iterations | Multiple<br>iterations | Multiple<br>iterations | Multiple<br>iterations | Multiple<br>iterations<br>Consumable<br>turbines | Multiple<br>iterations | Accurate<br>Consumable<br>tube |