



Commercialisation of USCOM; The Big Leap Forward

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Our goal

Uscom's mission is to create long-term shareholder value by transforming and improving cardiovascular monitoring and making USCOM the standard of clinical care worldwide

Agenda

- Who we are
 - What we have done
 - What we can do - current market and the future potential
 - Our strategy to create shareholder value
 - Next steps – the business model
 - The future and new product pipeline
-

“This machine is thought to have saved Abbie’s life.”
“There are no words to describe how we felt“

Abbie's mother Charlotte Pattison



Uscom Ltd

- Uscom Ltd – Australian medical device Company
- Mission - develop and commercialise non invasive cardiovascular monitoring devices that will improve global health care
- Focus - improving medical care and management of hemodynamics worldwide
- Outcome – lives are being saved by the Uscom device daily
- Great Company – great science, great product, great people and an emerging global brand

What it is...

“The most accurate clinical method of measuring cardiac output”

Cardiac output monitor

Replaces invasive catheters

Noninvasive

Ultrasound based

Real time blood flow measure

22 parameters

Portable

Accurate

Simple

Effective

Safe

New gold standard of clinical care



Improved care, reduced risk, reduced cost

What it does...

Practice changing platform technology!

Catheters

Invasive
Inaccurate
Infections
Mortality
Expensive



USCOM

Noninvasive
Accurate
Safe
Rapid
Inexpensive

How it works...

“Improving care, reducing risk and reducing cost”

Safe and smart ultrasound technology

SV:	Stroke Volume
SVI:	Stroke Volume Index
CO:	Cardiac Output (l/min)
CI:	Cardiac Index
SVR:	Systemic Vascular Resistance
SVRI:	Systemic Vascular Resistance Index
HR:	Heart Rate
SVV:	Stroke Volume Variability
CPO:	Cardiac Power
SW:	Stroke Work
SpO ₂ :	Mixed Venous Oxygen Saturation
DO ₂ :	Oxygen Delivery
Vpk:	Peak Velocity of Flow
vti:	Velocity Time Integral
MD:	Minute Distance
ET%:	Ejection Time Percent
Pmn:	Mean Pressure Gradient
FT:	Flow Time
FTc:	Flow Time corrected

Multiple parameters



Software works
with all touch
screen units

Non-invasive
Compact
Intuitive

Real time
Accurate
Simple

Gold standard evidence



Emergency, Pediatrics, Cardiac transplantation, Electrophysiology, Heart Failure, Emergency transport, Anesthesia, Liver transplantation, ICU, Septic shock, Pre-eclampsia, Pulmonary hypertension, Nurse outreach, Organ procurement, Haemodialysis, Neonates, infants, Children etc.....

The new gold standard cardiac monitor

- **Fluid** – “The change in SV with PLR was the only haemodynamic index with significant predictive ability” 91% +ve predictive value. Critical Care 2009;13:R111
- **Inotropes/Vaso’s** – “USCOM was 6 to 8 times as sensitive to changes in CO induced by inotropes and vasoconstrictors as PAC.” Crit Care Res Prac 2012;doi:10.1155/2012/621496.
- **ICU/PAC** – “USCOM.. may safely replace PAC in many clinical situations that call for advanced hemodynamic monitoring.” Am J Surgery 2008;196(Dec);961-968
- **Pediatric Sepsis** – “Haemodynamic support directed to goals of cardiac index of 3.3-6.6l/min/m2” Crit Care Med 2009;37:666-688
- **Organ procurement** – 15% increase in organs for transplantation using USCOM guided optimisation compared to BP and CVP. Chest 2008; 134(Abst): s21003
- **Liver transplantation** – Editorial discussing the possible replacement of PAC by USCOM in Liver Transplantation. Liver Transpl 2008;14:917-918
- **Pacemakers** – “USCOM operated by a trained nurse can provide a simple, accurate, and fast non-invasive method for AVI optimization in CRT.” PACE 2007 30;1: 50–55
- **Ventilation** – ““..USCOM, as a non-invasive, easy to handle and reliable CW-Doppler-based ultrasound system, remains an important tool for diagnosis and monitoring of critically ill patients.” Acta Cardiology 2012; 67(2): 177-185

Recognition

- 2003 Global Entropolis Winner
 - Best application of technology to a strong business model.
- 2005 World Technology Awards (Time, Science, NYSE, CNN, Fortune)
 - Finalist in medical technology “most likely to change medical care world wide.”
- 2007 MedGadget Journal of Emerging Medical Technologies
 - “This technology from Australian company USCOM Ltd. is nothing short of miraculous“
- 2007 Emerging Medical Device Company of the Year
 - Frost and Sullivan Award for Excellence in Healthcare as the Emerging Medical Device Company of the Year
- 2010 Innovation and Technology Award – MedAssets
 - “Most likely product and or service to improve patient care, and add efficiency to the healthcare delivery process and fulfill a need in the delivery of healthcare” (USA). USCOM # 3
- 2010 BBC Baby Abbie documentary
 - *“To parents and doctors this machine, USCOM, is priceless.”*
 - *“This machine is thought to have saved Abbie’s life.*

A business with multiple opportunities...

Current markets

- Pediatric ICU and neonatal ICU, Adult ICU and ED, Anesthesia monitoring

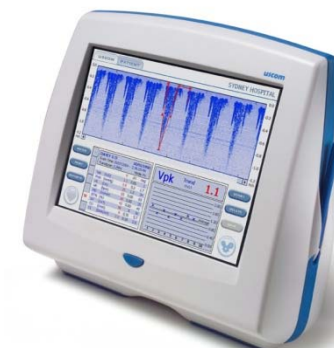
Un-partnered new markets

- Hypertension, Heart failure, Nurse led CO measurement, Dialysis, ED trauma resuscitation, Liver transplantation, Electrophysiology – pacemaker optimisation, Heart failure, Hypertension, Drug/Medical research, Nurse led home care monitoring, Organ procurement, Military, Retrieval, Maternal pre-eclampsia, Cytotoxic therapy, Sports med, Pulmonary hypertension, Stress testing, Neonatal/paed care

Technology Licensing

- Ultrasound devices – USCOMmod
- Monitoring suites – USCOMmod (fixed and mobile)
- Ventilation devices – USCOMresp
- Home care – Hypertension, heart failure, out of hospital supervision.....
- New products – Uscom has multiple patents and patentable concepts for development

Early global adoption



Approximately 500 units worldwide

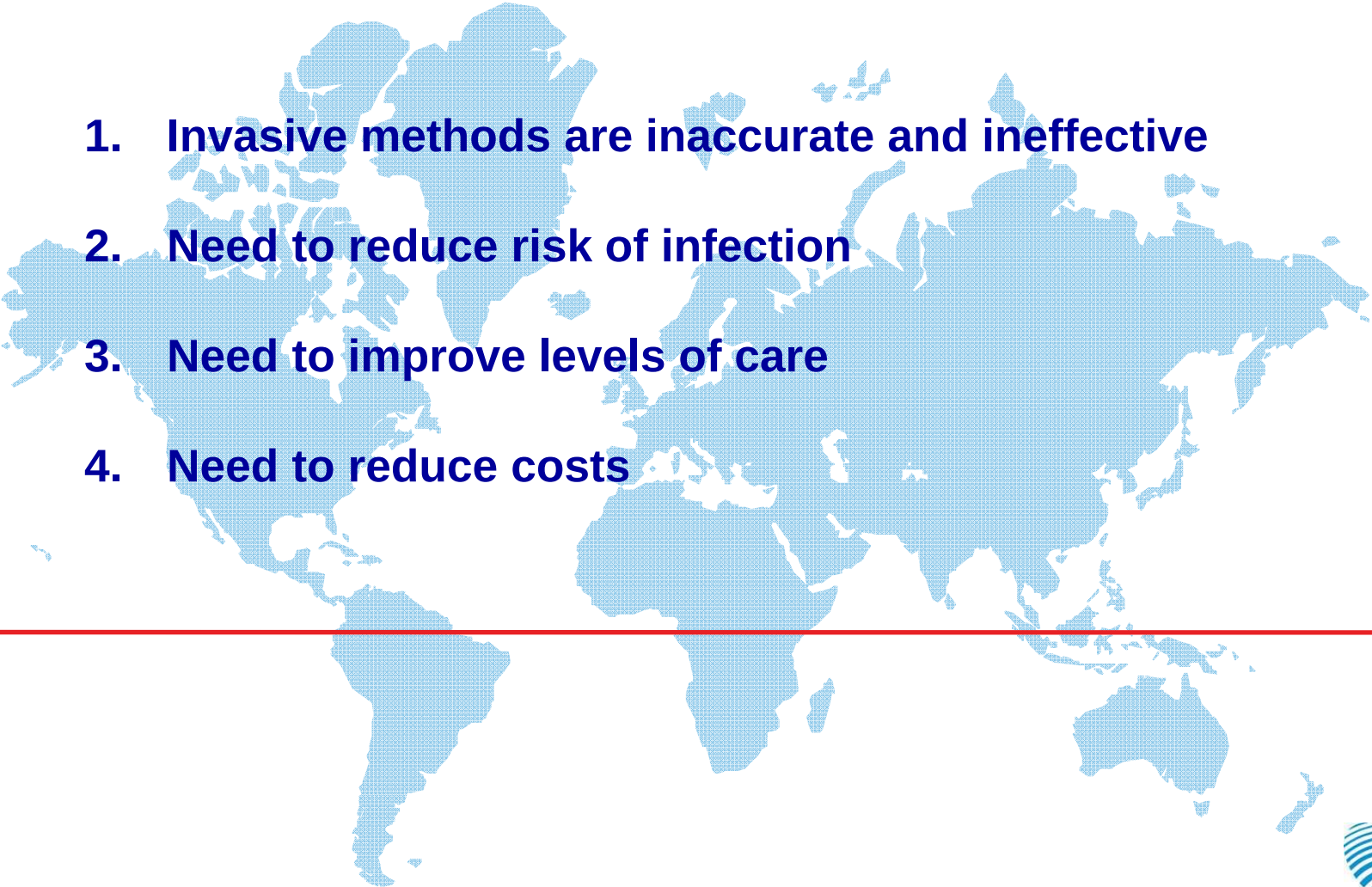
...with a clear competitive advantage

Method	Man.	Technology	Rel+Rep	Non-invasive	Simple	Cost	Portable	SV beat to beat
USCOM 1A	Uscom	Doppler	✓	✓	✓	✓	✓	✓
BioZ	Sonosite	BioImpedance	✗	✓	✓	✗	✓	✗
NiCOM	Cheetah	BioReactance	✗	✓	✓	✗	✓	✗
Nexfin	Bmeye	APP	✗	✓	✓	✓	✓	✗
CardioQ	Deltex	Doppler	✓	✗	✗	✗	✓	✓
LiDCO	LiDCO	LiCl dilution +APP	✓	✗	✗	✗	✗	✓
LiDCOrapid	LiDCO	APP	✗	✗	✓	✗	✗	✓
PiCCO (mod Tx + PP)	Pulsion	APP	✓	✗	✗	✗	✗	✓
FloTrac	Edwards	APP	✗	✗	✓	✗	✗	✓
PAC (Tx)	Many	Thermodilution	✗	✗	✗	✗	✗	✓

Progress – technology de-risked

- Spent \$20m
- Built the device
- Achieved global regulatory approval
- Validation – new gold standard cardiac monitor
- Global luminary support – excellent KOLs
- Endorsed standards of care for multiple clinical applications
- Global distribution
- Global seed adoption
- IP portfolio – supporting existing product and new products
- Annual revenues approximately \$1m

Global needs driving future demand

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- 1. Invasive methods are inaccurate and ineffective**
 - 2. Need to reduce risk of infection**
 - 3. Need to improve levels of care**
 - 4. Need to reduce costs**
-

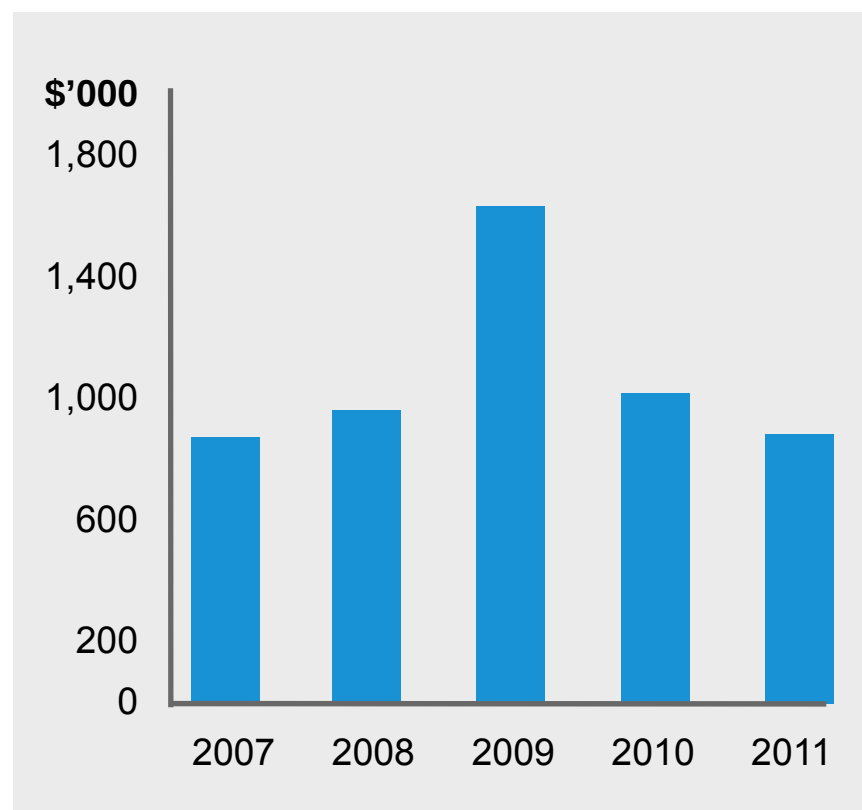
Selected financial snapshot 1H2012

- ASX code: UCM
- Listed: 2003
- Market cap: \$5 million
- Stock on issue: 52 million
- 52 week high/low: \$0.24-\$0.07
- 1H2012 product sales: \$0.5 million
- Cash @ 31 Dec '11: \$1.0 million
- Top 20 holders: 80%

Major holders:

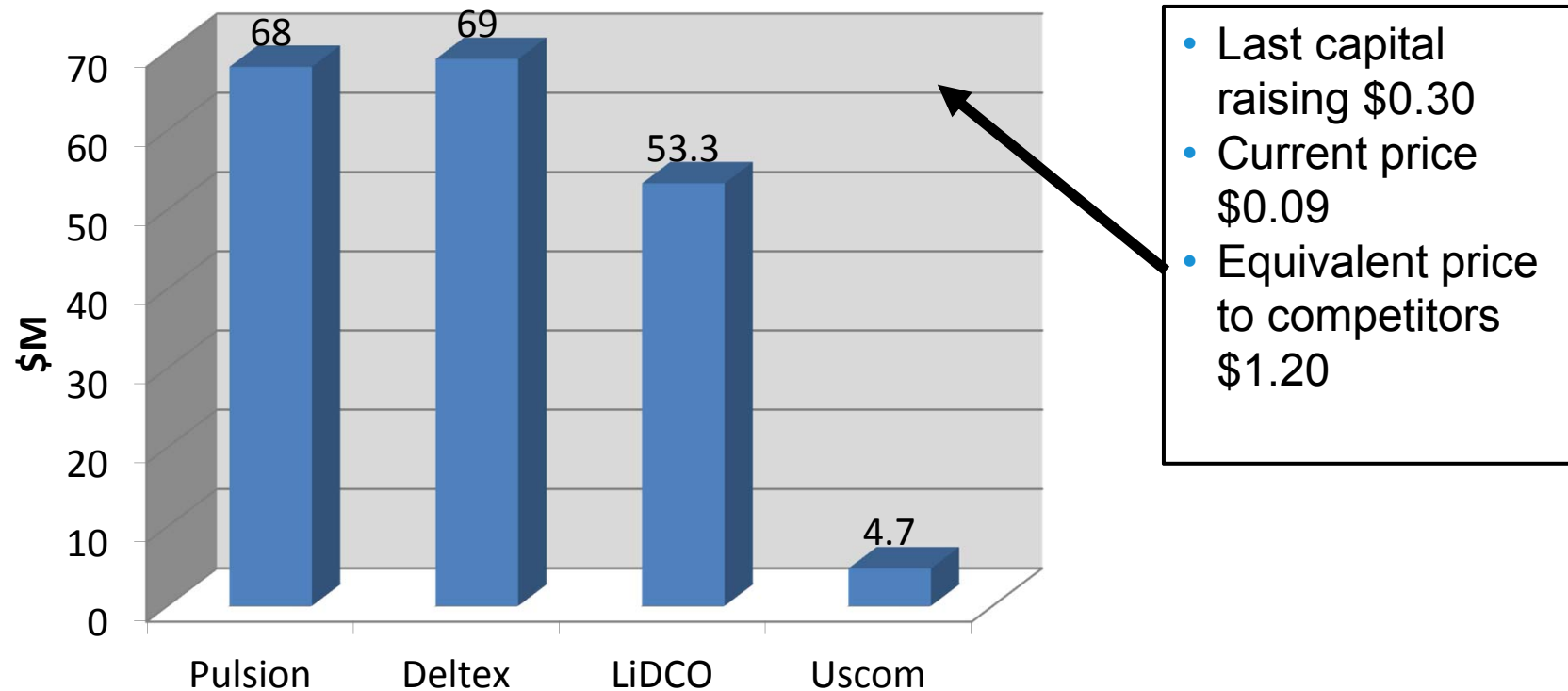
- Rob Phillips 32.6%
- Gary Davey 11.9%
- Colin Bell 4.1%
- JP Morgan Nom 3.8%
- OSI Systems 3.0%

Summary of 5-year annual revenues



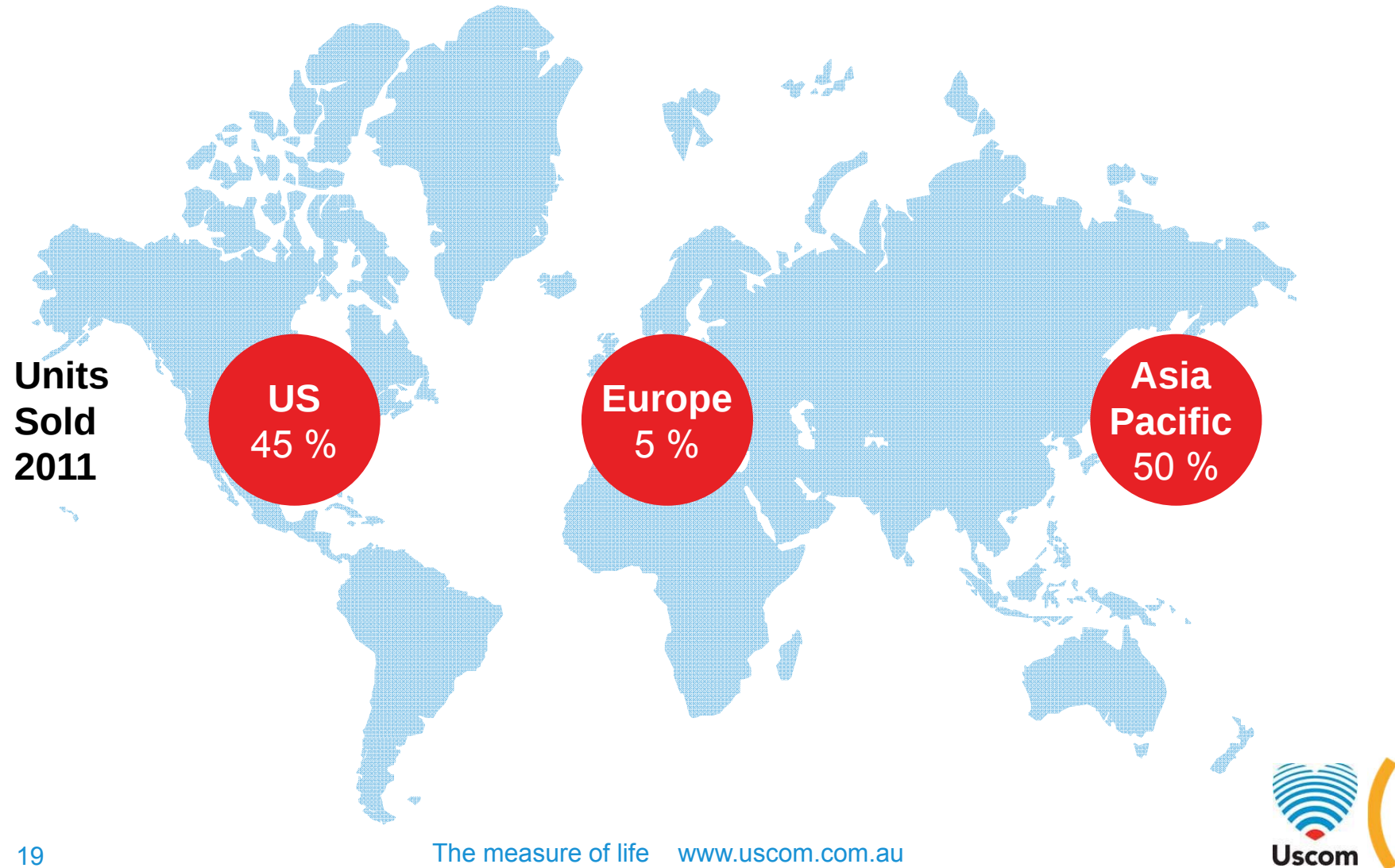
Cardiac monitoring market landscape

Capitalised value of USCOM and current competitors, \$ million



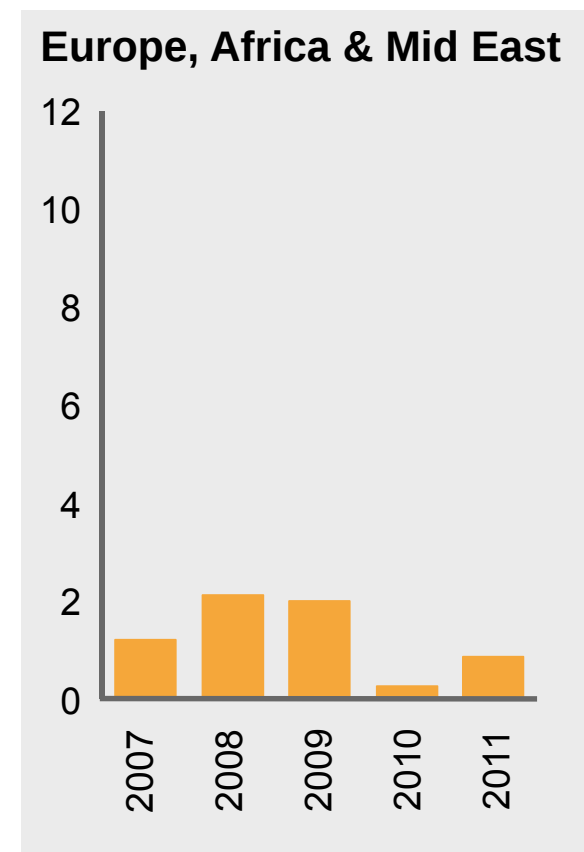
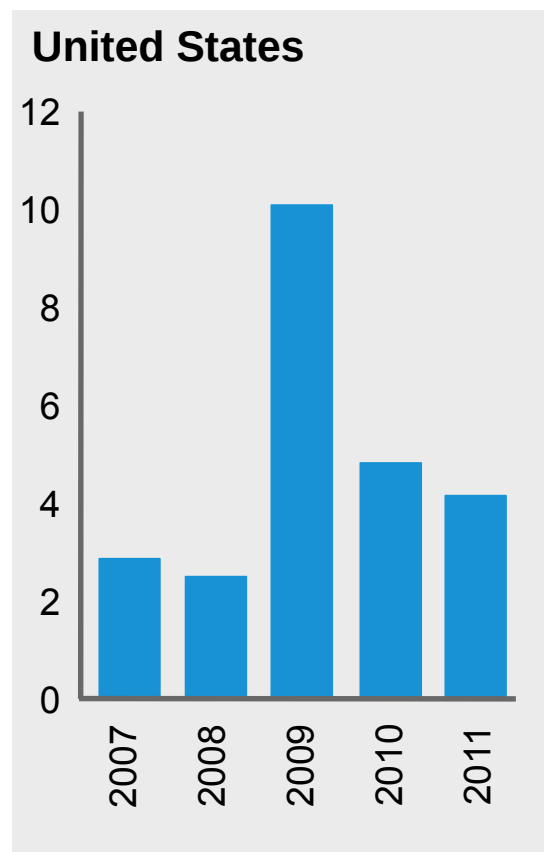
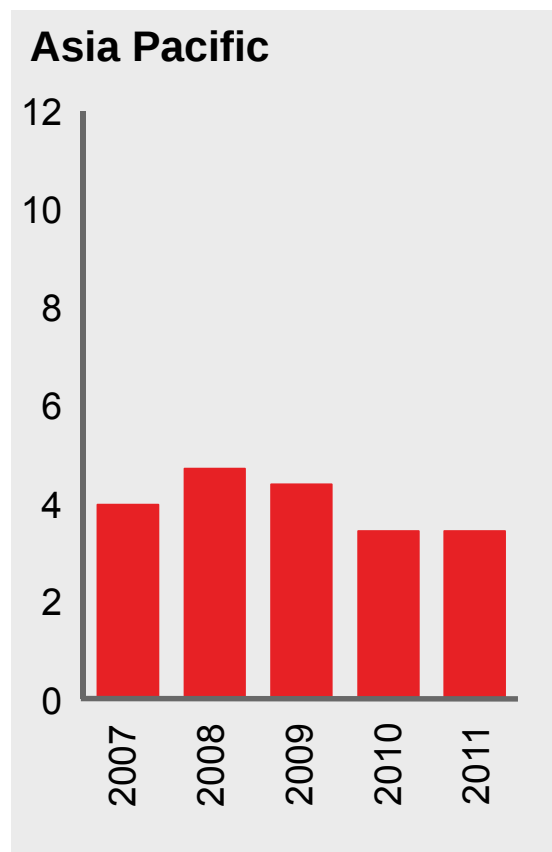
Regional product sales growth 1H2012

A total of 500 units currently in use worldwide



Regional sales revenues FY2011

x \$100,000



Growth – Opportunity

New clinical gold standard cardiac monitor based on platform technology which can immediately be licensed into multiple clinical applications to access the ultrasound, cardiac monitoring and ventilation markets.

This platform technology can then be developed for application into home care for the hypertension and heart failure market.

Growth – Plans

Short term

- Drive current US, Europe and Asian distribution – New evidence
- Develop new distribution opportunities – Govt guidelines, etc
- Initiate strategic partnership opportunities – Leverage dominant scientific position into Ultrasound, monitors and ventilators etc.

Mid term

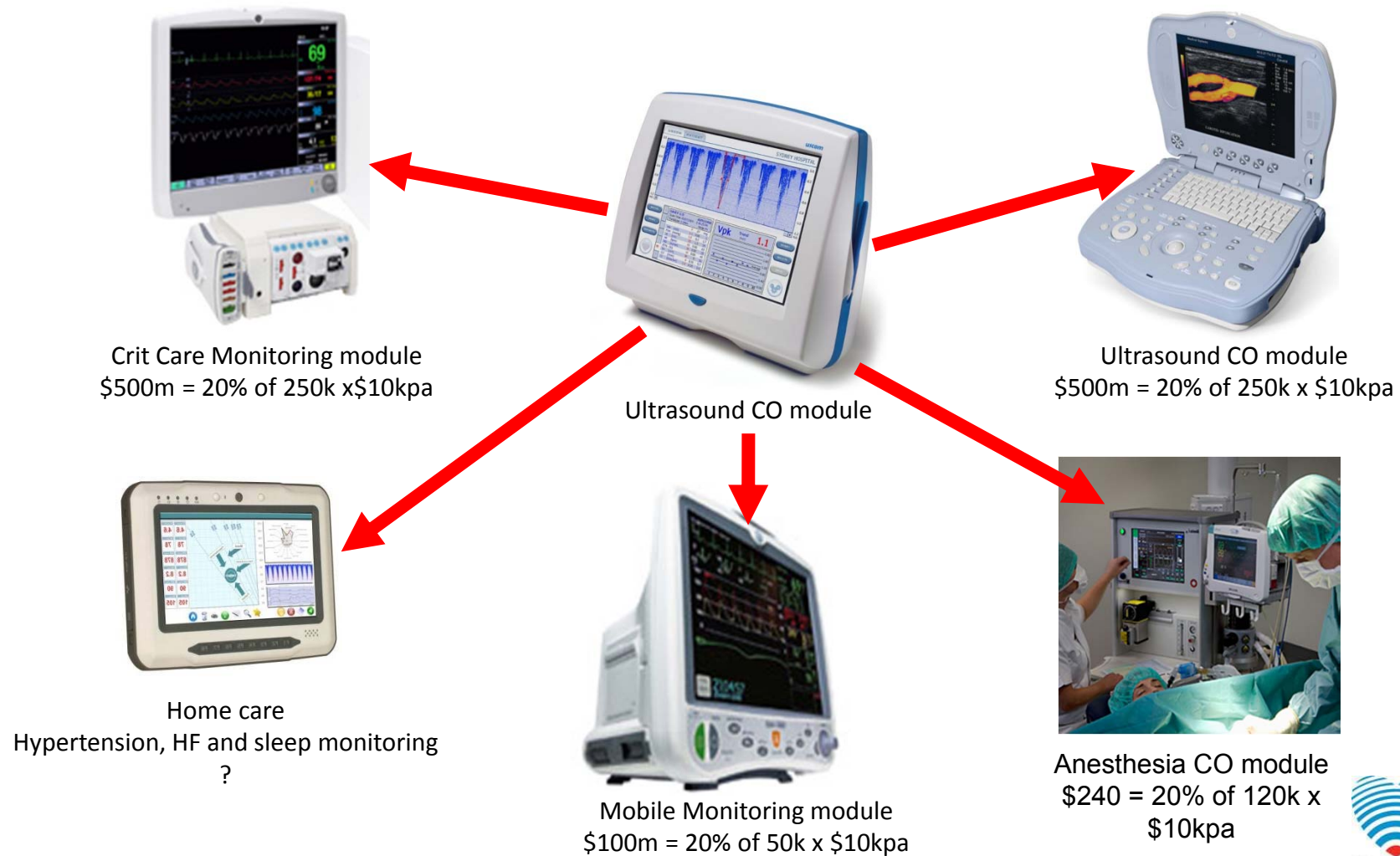
- Execute strategic partnership into one or multiple licensing opportunities - Ultrasound, monitoring, ventilators etc.
- Leverage patented, gold standard CO monitor platform status

Long term

- Niche markets
- New products – Home use heart failure and hypertension
- Exploit strong IP position

Immediate growth – strategic partnerships

License Gold Standard CO monitoring



Potential value of product pipeline

	Current	Sales at 4yrs	USCOM 20%	USCOM 50%	Profit
USCOM – sales	1m	400 (\$15k)	\$6m	\$6m	\$3m
USCOM – new	0	400 (\$15k)	\$6m	\$6m	\$3m
USCOM – monitors	0	250,000 (\$10k)	\$50m	\$25m	\$20m
USCOM – ultrasound	0	250,000 (\$10k)	\$50m	\$25m	\$20m
USCOM – ventilators	0	120,000 (\$10k)	\$24m	\$12m	\$10m
USCOM – home	0	100,000 (\$10k)	\$20m	\$10m	\$7m
Total	1m		\$156m	\$78m	\$63m

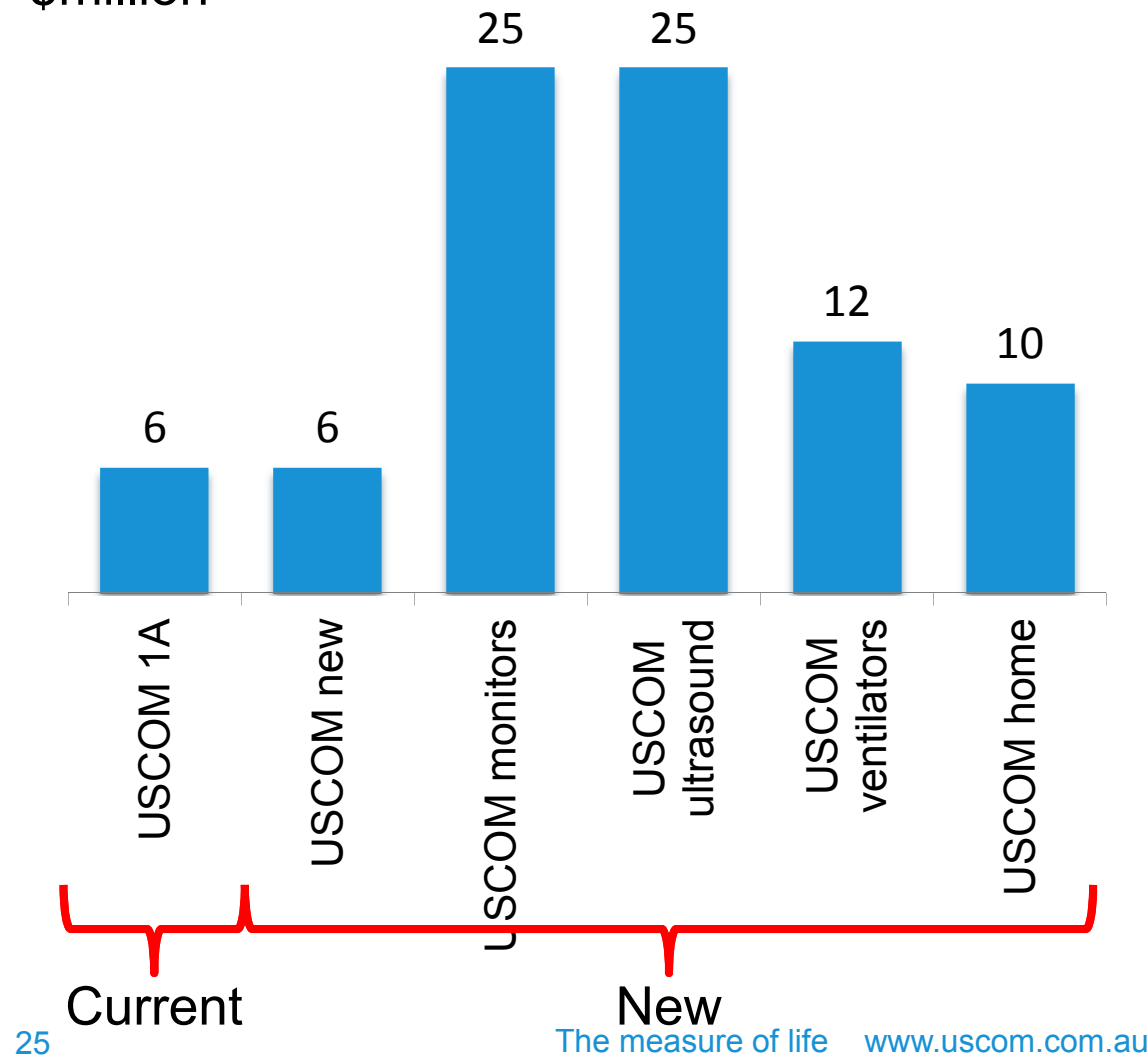
Assumptions

- 10k rrp with 50:50 profit split
- 20% new ultrasound, monitoring and ventilator penetration, 10% retro instal
- Instal base; Monitors – 1,500,000, Ultrasounds – 500,000, Ventilators – 500,000
- The above represents a hypothetical estimation not a projection



Potential value of product pipeline

Uscom sales potential and goals
\$million



- Partnership with instant take up of technology
- 4 new markets
- 20% Penetration
- No Upgrades
- USCOM gross \$84m pa
- Cap val = 12xPE = \$1,008m
- 100m shares @ \$18

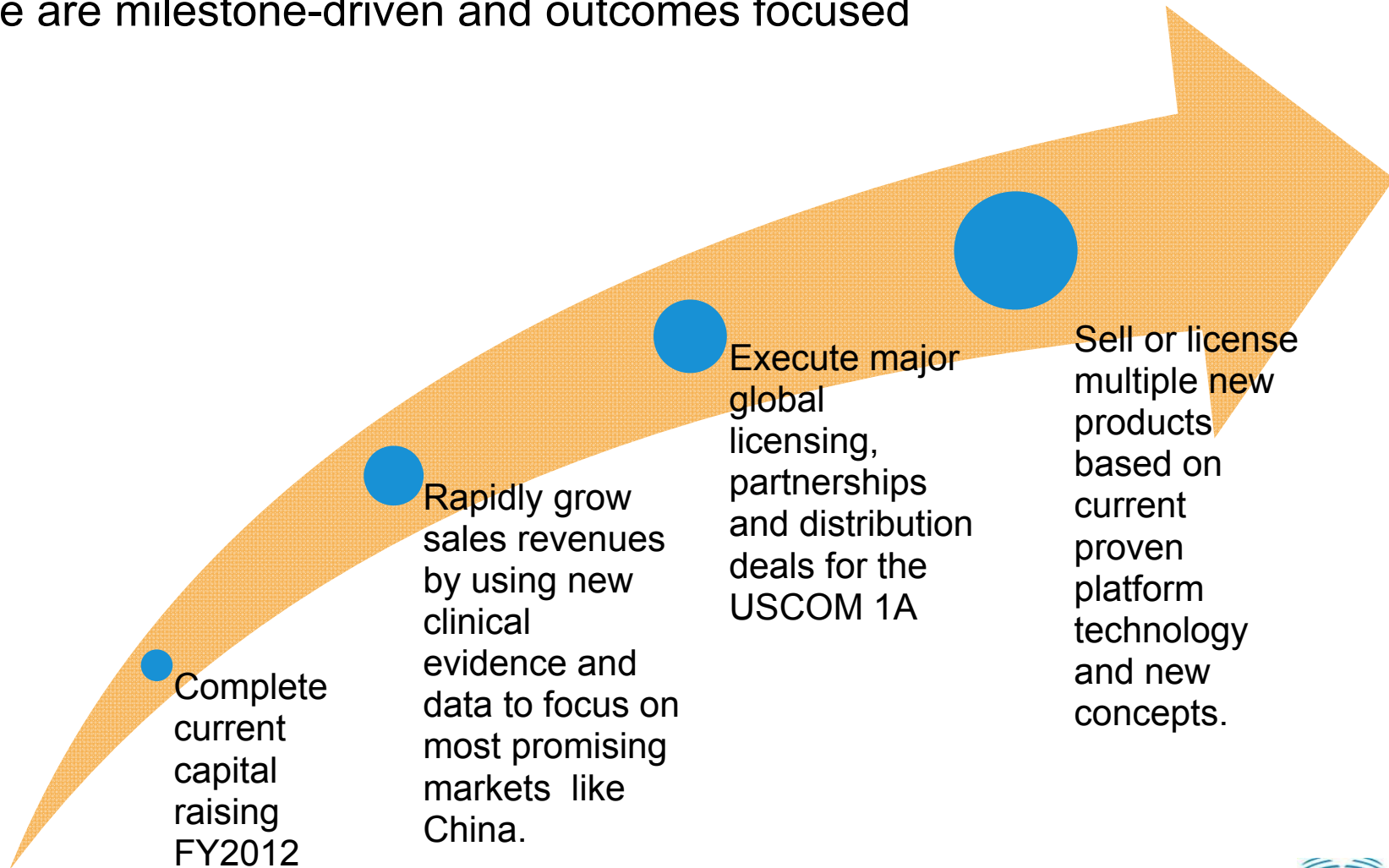


Growth – new products and partnerships

- New clinical gold standard cardiac monitor
- Platform technology
- Organic growth and incremental growth from licensing
- New products:
 1. Miniaturised and continuous monitoring – PulseCom
 2. Hypertension and heart failure devices – PressureCom
 3. New therapy guidance software – CareCom
- Consolidate lead global position in non-invasive cardiac monitoring

Results focused strategy to create value

We are milestone-driven and outcomes focused



2012 capital raising

- Uscom is currently preparing for a capital raising in 2012
- Capital raised will be prudently used to:
 - Grow sales team and revenues with focus on key markets
 - Expedite business development - global partnering and licensing negotiations underway
 - Develop new medical markets (hypertension and HF)
 - Develop new products and software pipeline for the clinic

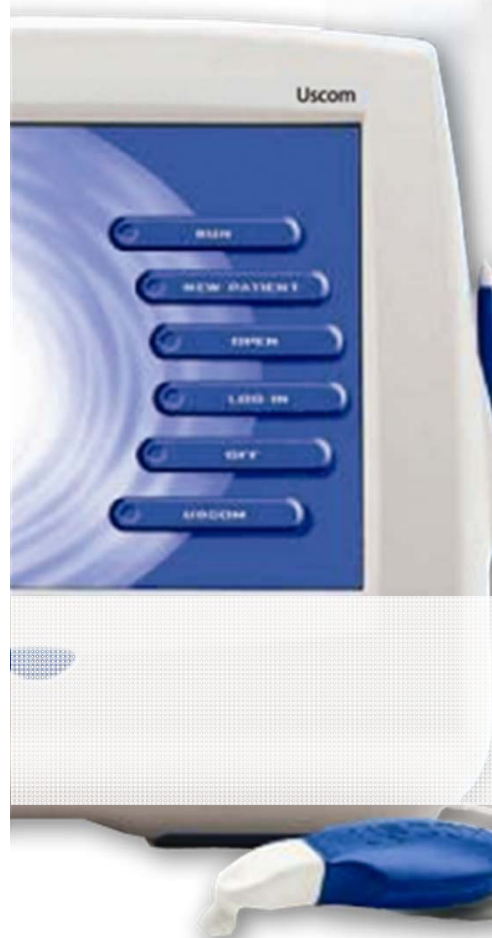
Summary

- Commercially focused Sydney-based ASX-listed medical device company focused on non-invasive cardiac monitoring technology
- Revenue generating global business (\$1million in 2011 and growing)
- World-leading, 'practice changing' platform technology poised to transform current medical practice and dominate monitoring markets
- Very strong competitive position backed by solid IP protection
- Potential to create the next world-class Australian medical device business
- Foundations for significant long term growth are all positioned

The future?

“USCOM may just be the next big Australian medical device success story; the blocks are all in place.”

USCOM



Thank you

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Appendices

Product pipeline adds potential value

Current product line

- Patent protected USCOM technology – 2021+
- USCOM 1A – Advanced haemodynamics
- OXYCOM – Real time Oxygen Delivery (DO₂)
- USCOMt – Haemodynamics transducer
- CARECOM – Physiology mapping and treatment guide
- EDUCOM – Online education package
- Validation – ‘Gold standard’ cardiac output monitor

New products

- USCOM 2 – small general haemodynamics
- PULSECOM – USCOM continuous CV monitor
- USCOMmod v1 and v2 – modular USCOM for licensing
- USCOMhaemo v1 and v2 – USCOM software for licensing

Who says there is a need for Uscom?

“Non-invasive hemodynamic monitoring is the number one unmet need...”

*Survey of 700 physicians and nurses worldwide, by
GE Medical Systems*



GE Medical Systems

The emerging gold standard of clinical care



Home of Jeremy Swan and William Ganz and the PAC!

Question: Is there still a place for the Pulmonary Artery Catheter in the ICU Practice?

ANSWER: *“USCOM may safely replace the PAC in many clinical applications”*

Source: Jain S, Allins A, Salim A, Vafa A, Wilson MT, Margulies DR. Non-invasive Doppler Ultrasonography for assessing cardiac function: Can it replace the Swan-Ganz catheter? Am J Surgery 2008 Dec

Potential value of product pipeline

Department	Total beds* (USA)	Worldwide market estimate (\$15k,1/10beds)	Cap value at 25% penetration, 50% profit and x20PE
Neonatal ICU	17,000	\$51m	\$128m
Paediatric ICU	4,000	\$12m	\$30m
Cardiac Surgery	10,000	\$30m	\$75m
Adult ICU	50,000	\$150m	\$375m
Total	80,000	\$243m	\$607m

Assumptions

- Global market = US market x 2
- \$15k, 1/10 beds sale, 25% market, 50% profit, 20P:E
- ICU markets only, not ED, Anaesth, Hypertension, HF, EP etc not considered
- Hypothetical estimation not a projection

Extensive intellectual property estate

USCOM has significant value in its core patent

- *Ultrasound is the emerging diagnostic modality –
The USCOM patent is all Doppler Ultrasound
cardiac output monitoring.*



Extensive intellectual property estate

USCOM has significant value in its extensive IP estate

- *23 granted patents*
- *13 different applications*
- *2 registered trade marks*



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

“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 many cardiovascular diseases including sepsis, heart failure and hypertension.”

Professor Malcolm West, Cardiologist, Mayne Professor of Medicine at The University of Queensland School of Medicine, Brisbane, Australia.

“We have used USCOM for over 5 years now on our very sick children, and we use it to guide our 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.