



2017 Half Year Results

Investor Presentation

Michael Kavanagh - CEO & President McGregor Grant – Chief Financial Officer

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Corporate Mission



We improve the safety of patients, clinics, their staff and the environment by transforming the way infection prevention practices are understood and conducted, and introducing innovative technologies that deliver improved standards of care.

Company overview

- Healthcare company specialised in the development and commericalisation of infection control solutions
- First product, trophon[®] EPR proprietary automated technology for low temperature, high level disinfection of ultrasound probes
- Approved for sale in most major markets including: US, Canada, ANZ, Europe, Singapore, HK, South Korea, Japan
- 162 Staff across Australia, US, Canada UK, Germany and France
- Sold through direct sales and distributors including leadings brands such as: GE Healthcare, Philips, Samsung, Siemens Toshiba and Miele Professional
- R&D investment in multi-generational trophon program and portfolio expansion through new infection prevention solutions

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Key Corporate Data

| Share price* | \$2.67 |
|-----------------------------|---|
| Shares on issue* | 297.7 million |
| Market capitalisation* | \$795 million |
| Liquidity* (30 day avg.) | 789,000 shares |
| Cash (31 Dec 16) | \$56.9 million |
| Share register breakdown | Founders/Related Parties 18% Institutions 51% Private 31% |
| * As at 22 February 2017 | |



trophon EPR

trophon is the safe, versatile and simple way to high level disinfect ultrasound probes. Anything else is a compromise.



- <u>Safe for Patient</u> most comprehensive portfolio of efficacy testing in probe high level disinfection.
- <u>Safe for user</u> no handling or exposure to toxic chemicals
- <u>Safe for environment</u> water and oxygen as by products

Versatile



- Compatible with over 1,000 probes including intracavity and surface probes
- Can be used at point of care
- Supports streamlined practice workflows

Simple



- Simple to use one button operation
- Fast 7 minute cycle



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Large market opportunity & attractive revenue model

Addressable installed base: ~120,000 trophon EPR units globally

- ~40,000 units in North America
- Equivalent sized markets in Europe and RoW



Corporate objectives

Customer Experience

Establish our offerings as new standards of care globally and provide customers a convenient, seamless and consistent experience with both product and brand.

Product Innovation

Create and bring to market a portfolio of innovative and quality products that address unmet customer needs providing higher standards of safety, efficiency and patient care.

Operational Excellence

Develop an agile operation with scalable, compliant and performance focussed processes, designed to deliver a positive experience for our customers.

People Engagement

Build an organisation that attracts and retains the best people and engages and empowers them to take appropriate initiative and be accountable for our core objectives.

Value Creation

Create sustainable shareholder value, delivering high growth and strong returns , while making a significant contribution to social good.

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2017 First Half Highlights

Customer Experience

- Installed base growth of over 2,000 units in North America
- New international guidelines supporting usage across all semi critical ultrasound probes
- UK market expansion and introduction of Managed Equipment Service (MES) model
- Progress in market expansion activities in Middle East and Japan. Canadian direct sales capability implemented
- Agreements in place with all major ultrasound OEMs in USA for provision of trophon capital equipment
- New North American Website launched trophon.com

Product Innovation

- R&D investment increase of 30% on pcp with solid progress on multi-generational trophon program plus research on novel new infection prevention solutions
- Customer research programs conducted to support new product development

Operational Excellence

- Canadian direct sales infrastructure established
- Expanded operations in UK (Sales, Service, Warehousing)
- Lean manufacturing program implemented
- Successful regulatory audits of corporate operations

People Engagement

- Increased workforce from 150 to 162 employees
- Mr. Steven Sargent and Ms. Marie McDonald appointed as Non-Executive Directors

Value Creation

- Sales \$36.1 million
- Operating profit \$10.6 million
- Free cash flow for the half year \$8.2 million
- Strong balance sheet with cash reserve of \$56.9 million to support growth strategy
- ASX 200 entry

2017 H1 Financial Results







- FY17 H1 sales of \$36.1 million, up 33% vs FY16 H2 (36% in constant currency) and up 132% vs FY16 H1 (142% in constant currency).
- Continuing strong adoption of trophon in North America.
- Increased consumables and service revenue from growing global installed base of over 12,300 units.
- Includes one-off impact of additional sales to GE Healthcare as it rebuilt inventory to meet its safety stock requirement.
- Profit after tax of \$22.0 million. Includes income tax benefit of \$11.7 million.
- Operating profit before tax of \$10.3 million, up 203% on prior half (\$3.4 million) and compares with an operating loss of \$3.2 million in prior corresponding period.
- Free cash flow for the half year of \$8.2 million, up 19% on prior half (\$6.9 million) and compares with negative free cash flow of \$5.0 million in the prior corresponding period.
- Cash reserve of \$56.9 million, maintains strong balance sheet to support growth strategy.

2017 H1 Financial Results

| ¢ million | FY16 | | | FY17 |
|--|--------|--------|--------|--------|
| \$ million | H1 | H2 | Total | H1 |
| Sale of goods and services | 15.6 | 27.2 | 42.8 | 36.1 |
| Gross profit | 12.6 | 19.6 | 32.2 | 26.3 |
| % | 81% | 72% | 75% | 73% |
| Selling, general and administration expenses | (13.1) | (12.3) | (25.4) | (12.9) |
| Research and development expenses | (3.3) | (4.0) | (7.3) | (4.3) |
| Other income | 0.3 | (0.2) | 0.1 | 0.8 |
| Finance income (net) | 0.2 | 0.3 | 0.5 | 0.4 |
| Operating income/(loss) before income tax | (3.3) | 3.4 | 0.1 | 10.3 |
| Income tax benefit | - | - | - | 11.7 |
| Profit/(loss) attributable to members | (3.3) | 3.4 | 0.1 | 22.0 |
| Cash Balance | | | 48.8 | 56.9 |

Sales of \$36.1 million, up 33% vs FY16 H2 and 132% vs FY16 H1

Gross profit of \$26.3 million, or 73% of sales

Total operating expenses of \$17.2 million

- Net of increase in recovery of indirect production overheads of \$1.3 million
- Growth in FY17 H2 operating expenses will come from increased investment in sales & marketing, geographical expansion and R&D

Other income \$0.8 million, up \$0.5 million vs FY16 H1 mainly due to FX gains

Income tax benefit of \$11.7 million primarily related to recognition of benefit associated with losses carried forward

Cash balance of \$56.9 million



HPV – A major driver for new guidelines and adoption

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American Journal of Obstetrics and Gynaecology

A proposal to reduce the risk of transmission of human papilloma virus via transvaginal ultrasound.

- References the findings of Prof Meyers first and second HPV papers
- Recommends use of trophon as the only system proven to kill HPV
- Suggests FDA consider adding neutralization of HPV to its standards for high-level disinfectants

Journal of Obstetrics and Gynaecology Research

Possible non-sexual modes of transmission of human papilloma virus

- Draws attention to semi-critical ultrasound probes as a source of nonsexual HPV transmission and discusses the evidence.
- Highlights CDC recommendation to high level disinfect semi-critical ultrasound probes and also states 'sonicated hydrogen peroxide' is highly effective against HPV16 and HPV18.



New guidelines reinforce broader requirements for High Level Disinfection





World Federation for Ultrasound in Medicine and Biology

Guidelines for cleaning transvaginal ultrasound transducers between patients

- Defines semi critical devices as those that pose a higher risk because of contact with non-intact skin or mucous membranes
- Recommends HLD for all semi critical probes
- States trophon as a HLD system is very efficient, rapid (approximately 7 min), environmentally friendly and quality-ensured and disinfects the transducer handle

Australasian Society for Ultrasound in Medicine / Australasian College for Infection Prevention and Control Joint Guidance

Advancing infection control in Australasian medical ultrasound practice

- Emphasis on applying HLD not just to intracavity probes, but also to all surface probes used in semi-critical procedures.
- They state that "If the transducer comes in direct contact with non-intact skin, blood or mucous membranes transducers should be cleaned [and undergo] HLD".

Health Service Executive Ireland

Guidance for Decontamination of Semi-critical Ultrasound Probes; Semiinvasive and Non-invasive Ultrasound Probes

- Maintains the same classification for semi-critical as per the Health Facilities
 Scotland
- The new guidance recommends an automated validated process for decontaminating reusable invasive medical devices.
- It also states that high level disinfection using a manual multi-wipe system is the least preferred option



North America - trophon becoming Standard of Care









- trophon installed base grew over 2,000 units in half with total IB now >10,700 units
- Canadian direct sales operations established and commence sales in FY17 Q3
- Engagement with all leading ultrasound OEMs
- Numerous educational activities conducted and ongoing to increase awareness
- Fundamentals for adoption strengthening with new publications and calls to action
- Expanding North American sales and marketing efforts plus warehouse and service operations in FY17 H2



North America - Drivers for ongoing adoption



Addressable installed base of 40,000 units in North America

Drivers for ongoing adoption:

- Usage at point of care in all relevant departments across > 5,000 hospitals
- Private physician office in particular Women's Healthcare
- Infection prevention community
 awareness of all semi-critical probe
 usage
- Regulatory & Joint Commission requirements
- Demand generation through:
 - Nanosonics direct sales and marketing
 - GE Healthcare and broader
 Ultrasound OEM recommendation and
 sales
- Ongoing education and awareness
 generation



North America – Expert infection prevention panel recognise need for broader education and use of HLD for semi-critical probes



Ultrasound Probe Infection Risk A Call to Action

By Kathy Warve

RT 1 Marth 201

ity in the U.S. Multiple studies show that there bial transmission from improperly reprocessed sent of new types of ultrasound procedures fety and compliance with reprocessing standards of care. ncem around ultrasound probes, is new evidence that in common, high volume procedures (Box 2) only used to reprocess transvaginal probes are not man papillomavirus (HPV). An expert roundtable w ently convened to discuss the implications of these developments for tion professionals

aging technology is currently used for more clinic cations than any other imaging modality in the U.S. with procedures is from radiology and cardiology to endocrinology and women's time results, safety, portability and cost-effectiveness cont p drive development of new procedures and expansion into medical rvices that have not traditionally relied on ultrasound for diagnostic

asound Imaging Tech

Utrasound imaging rechnology Utrasound is an imaging technology that uses high-frequency sound waves to view with tissues and internal organs. Considered both safe and cost effective, ultrasound is used to examine many of the body's internal organ, diagnose a host of conditions and all in visualization during ures such as biopsies and placement of central lines. Ultrasour in also be used to treat soft-tissue injuries, break up kidney stones and ound exam, a transducer (probe) is m

non-intact skin or inside a body cavity. A thin layer of gel is applied to the skin so that the ultrasound waves are transmitted from the probe ough the gel into the body. While imaging-related HAIs have received little attention in the pas

nultiple studies show that there is risk of microbial transmission during ultrasound procedures from both the probe and the conductive gel This risk in ases with the use of probes in body cavities where blood and body fluids are en

The importance of proper cleaning and disinfection of reusab idical devices has been increasingly recognized as vital in preventin rismission of pathogens, including those that are multi-drug resistan With the growing number of outbreaks associated with improper sessed medical instrumentation, the Centers for Disease Control evention (CDC), the Food and Drug Administration (FDA), the Joint on (TIC) and the Centers for Medicare and Medicaid Service nator emphasis on standards of cam for the cla sable equipment including ultrasound probes oper reprocessing of reusable medical equipr ent also ranked among ion's top five non-compla half of 2016.º From January through June, 49 percent of ambulatory facilities and 59 percent of hospitals were cited during routine survey the with IC 02 02 01 which outline

monitoring and managing the safety and compliance of ultrasound probe ing challenge. To o requirements, a survey was commissioned by Nanosonics, Ltd. o Sydney, Australia. More than 100 infection preventionists responsibl for ultrasound probe disinfection participated in the online surve ion to sites across the continuum of care nessent conducted in October 2016. The survey sought to evaluate the curre level of awareness and knowledge with regard to ultrasc infection risk and the requirements for the reprocessing of probes

2 Spotlight on Ultrasound Probe Reprocessing Use all reusable medical devices, ultrasound probes are group

based on intended use under the Spaulding Classification into critica or non-intact skinj and non-critical (contact with intact skin only According to the CDC, probes u to undergo sterilization. If this is not possible, use of a sterile sheath and high level disinfection is recommended. Probes used in semi-critica procedures should be minimally high-level disinfected. Use of a sheat does not reduce the requirement for high level disinfection as sheaths and condoms have been shown to leak * Probes used in non-critica he Association for the Advar

(AAMI) sets for standards for all medical devices required to under chemical sterilization or high level disinfection.⁹ The American ins Ultrasound in Medicine (AIUM) has also issued gui reprocessing of ultrasound probes." Response from the 2016 survey of infection previ

that greater awareness of relevant guidance is ne yound guided biopsy procedures. 40 percent of respondents indicated that low-level disinfection or cleaning without disinfection was appropriate. Only 61 percent indicated that use of sterile cel was required. Similar n with wound scans where 47% of re e-level disinfection and only 51 percent indicated use of sterile ge

over findings indicated that many infectio nay not have adequate knowledge to ensure safety and compliance with ultrasound probe reprocessing requirements (Box 2). For example

- 'Call to Action' on infection risk from ultrasound ٠ probes published in Infection Control Today (ICT) in Feb 2017
- HLD required for all semi-critical procedures ٠ (intracavity and procedures with broken skin).
- Many infection preventionists not well versed in ٠ requirements for semi-critical probes:
 - > 40-66% either incorrect or uncertain of HI D requirements for biopsies, nerve blocks and punctures/drainages
- Semi-critical procedures performed widely across ٠ most hospital departments
- Need for education and training to fill knowledge gap



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UK & Ireland: Momentum building in trophon adoption





- Six of the fourteen Scottish Health boards have commenced adoption of trophon post release of Scottish guidelines
- All Welsh Health boards have adopted trophon with nine of the fourteen major hospitals in Wales adding to their initial installations
- English guidelines still pending a number of the largest English NHS trusts commenced adoption and pipeline building in anticipation of guidelines
- Managed Equipment Service (MES) business model gaining traction delivering a win-win for customer and Nanosonics
- Expanded sales and service operations in the UK in first half
- New Irish guidelines released and Irish distributor Wassenburg appoint dedicated trophon sales support



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Germany: Fundamentals for adoption strengthening



Vereinbarung

von Qualitätssicherungsmaßnahmen nach § 135 Abs. 2 SGB V

zur Ultraschalldiagnostik

(Ultraschall-Vereinbarung)

vom 31.10.2008

in der ab dem 01.10.2016 geltenden Fassu



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German hospital hygiene society (DGKH)

- The first official statement by DGKH (German Hospital Hygiene Society) on ultrasound reprocessing in December 2016
- Reinforces the guidelines of the commission for hospital hygiene and infection prevention at the Robert-Koch-Institute (RKI) and the Federal Institute for Drugs and Medical Devices (BfArM)
- Ultrasound Probe OEMs must prove efficacy of their recommended decontamination process by expert report and that if multiple procedures are available then the safest one, usually automated, should be chosen

Health insurance funds and the National Association of Statutory Health Insurance Physicians

- Revised agreement put in place
- Members must decontaminate ultrasound probes in accordance with the guidance provided by the ultrasound probe OEMs
- Chosen process must be validated and documented

Trophon efficacy / validation published in peer reviewed publication of the DGKH

- Virucidal efficacy proven
- Trophon validated according to required European and German requirements



France: Fundamentals for adoption strengthening

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Ministry of Health (MOH)

- Issued a new statement whereby strict compliance with the stringent visual inspection requirements of the probe after use
- More strict hygiene processes are now required and will be regularly audited
- Commissioned an audit of current practices

GREPHH: Survey of Intracavity Ultrasound Reprocessing Practices in France

• Confirms low compliance with the current required reprocessing practices.

High Council of Public Health Report

- An HLD solution should be permanently available in every facility performing intracavity ultrasound examinations
- The HLD solution should be effective against native HPV

Australia / New Zealand



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| Faculty of Dentistry & Health Sciences, Duales Start University, Sydney, New South Wales, Australia Australiasian Society for Uthrassand in Mudicine (ASUM), Sydney, New South Wales, Australia | | The Australasian Society for Ultransated in Medicine (ASUM) is the leading multidisciplicary medical altrainand asciety | 1.1 Scape and target autonce The Guidelines for Reprocessing Ultrassend Transdocen presside tecommendations for the cleaning and districtive | | |
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- Adoption of trophon continues off an already high installed base
- Good demonstration of the ability of trophon to become standard of care when relevant guidelines are in place
- New guidelines released jointly by Australian Society of Ultrasound in Medicine (ASUM) and Australasian College for Infection Prevention and Control (ACIPC)



2017 Half Year Results | 19

Preparations for geographical expansion underway

Japan



- Japanese commercialisation strategy
 progressing positively
- trophon technology demonstrated at the annual meeting of the Japanese Society of Infection Prevention and Control (JSIPC) in Kobe in February and to be demonstrated at the Japanese Society of Obstetrics and Gynaecology (JSOG) in April

Middle East



- Registrations now in place for Saudi Arabia, Kuwait, Qatar and United Arab Emirates
- Trophon recently presented at Arab Health and demonstrated in hospitals across a number of the Middle East countries
- Distribution strategies for market entry developing with progress expected in second half



Focussed ramp up in R&D program



- Large unmet needs exist in infection
- Increased investment in R&D by 30% to \$4.3 million

prevention

- Methodical approach to market needs identification and latest "Design thinking" in place
- Solid progress made on multigenerational trophon plan plus novel new solutions to meet a number of core opportunities in infection prevention





Business Outlook

Positioned for ongoing growth

- Excellent market opportunity continues in North
 America
- Fundamentals for adoption strengthening in more markets around the world
- Expansion into new geographical territories planned
- R&D activities in multigenerational trophon program and novel new infection prevention solutions
- Growing global Installed base supporting increasing annuity revenue generation
- Increasing investment to drive strategic growth agenda



Thank you!



Appendix

2017 H1 Financial Results: Income tax

\$ million

| Income tax benefit | | | |
|--|-------|---------|-------|
| Recognition of deferred tax asset | 13.6 | | |
| Equity component of SBP (current and deferred) | (1.9) | | |
| | 11.7 | | |
| Components of deferred tax asset | | | |
| Tax losses | 6.1 | | |
| R&D tax credits | 4.4 | | |
| All other timing differences | 3.1 | | |
| Total | 13.6 | | |
| Value of losses/R&D credits | Gross | Benefit | |
| Losses recognised | 14.7 | 4.4 | 30.0% |
| R&D credit recognised | 15.4 | 6.1 | 39.6% |
| | 30.1 | 10.5 | |
| Losses not recognised | 17.0 | 6.2 | 36.7% |
| Total | 47.1 | 16.7 | |

Key points:

- Deferred tax asset recognised following assessment of operations of the Group
- Income tax benefit recognised relates to Australian entities
- Tax losses/R&D credit component of deferred tax asset represents a one-off, non-cash benefit
- Assessment of probability of recovery (and therefore recognition of related benefit) of non-Australian losses to be reviewed on an on-going basis



The requirement for disinfection in Ultrasound

- Ultrasound transducers must be reprocessed between patients to prevent cross-infection
- Any transducer that contacts broken skin, mucous membranes or sterile body cavities should be high level disinfected or sterilised¹
- Heat sensitive transducer construction materials mean that sterilisation is generally not practical; high level disinfection (HLD) is carried out instead
- Despite this knowledge, problems in ultrasound disinfection persist with manual reprocessing

1. Rutala W., Weber DJ., 2008, Centers of Disease Control and Prevention





Traditional High Level Disinfection (HLD) Methods

Disinfection processes unchanged in **20+ years**

The traditional methods: soak, spray or wipe

- Chemical spills and vapour control present OH&S risks
- Probes often must be transported to a central sterilisation facility
- Pathogens may remain increased risk of cross contamination
- Wipes and sprays not approved by the FDA for HLD
- Toxic chemicals must be disposed of as chemical waste











trophon's patented disinfection technology



Step 1: Ultrasonic vibrations generate soundwave energy to create micro-sized droplets.

Step 2: The droplets are converted into an ultrafine mist that enters the disinfection chamber.

Step 3: The mist covers the entire surface of the probe and handle, and is a supercharged mixture of free radicals. These kill bacteria, viruses, and fungi by reacting with their cell membranes and molecular structures.

Step 4: The mist is then broken down by the 'catalytic converter' into water and oxygen.

trophon is covered by 14 patent families - most are active through to 2025



trophon – breaking new ground in reprocessing





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