

Uscom BP+ Detects New Evidence of Cardiovascular Disease

SYDNEY, Australia, Thursday 19th January 2017: Uscom Limited (ASX code: UCM) (the **Company** or **Uscom**) today notified the market the publication of a new multi-centre study using the Uscom BP+ suprasystollic oscillometric central blood pressure monitor in The Nature published Journal of Human Hypertension. The study was authored by experts from The Auckland University, The Imperial College, London, The University College, London, The Harvard Medical School, Mass General, Boston, The Austrian Institute of Technology, Vienna, and Auckland University of Technology.

The study of 4,798 subjects of differing ethnicity, is the first to demonstrate that changes in central arterial blood pressure waves measured by the Uscom BP+ predicts the differing prevalence of cardiovascular disease (CVD) among different ethnic groups, specifically European, Pacific, Maori, and South Asians. The study also identified significantly altered BP+ measured aortic pulse pressure waves in smokers, heavy drinkers, and the obese. Importantly the CVD predictive capacity of the Uscom BP+ aortic pulse pressure wave analysis was significantly more useful than that of conventional arm blood pressure (BP) measurements.

The study concluded "brachial BP cannot act as a surrogate for (central pressure waves) and ethnic differences... will be better monitored by quantifying these parameters (using monitors such as the BP+ device used in the current study)."

Executive Chairman of Uscom, Associate Professor Rob Phillips said "This is practice changing evidence confirming that the Uscom BP+ demonstrates new information on cardiovascular disease, not provided by conventional BP devices, and its use may improve CVD treatment methods, strategies and outcomes. The Uscom BP+ acquires pulse pressure waveforms at the heart non-invasively using patent protected suprasystolic oscillometry, measures which previously could only be acquired using a cardiac catheter inserted directly into the arteries and heart. The BP+ is now being referred to as "the non-invasive arterial line". Although this study was of 50 to 84 year olds, the Uscom BP+ has been previously validated in children as young as 1 year old in a study at the Great Ormond Hospital for Children. This research suggests the Uscom BP+ is poised to change the way we look at hypertension, heart failure and vascular health, across all ages, and we are looking forward to the imminent global release of the BP+ device and the accompanying BP+ Reporter software."

Uscom is the manufacturer of the USCOM 1A, the Uscom BP+, and the Uscom SpiroSonic digital ultrasonic spirometry technologies. These premium digital devices are sold into global medical markets, changing the way clinician diagnose and treat cardiovascular and pulmonary diseases, including hypertension, heart failure, asthma, COPD and sleep disorders. The products are integral for optimising management of sepsis, guidance of fluid, inotropes and vasoactive therapies in critical care monitoring, for advanced monitoring of hypertension and pre-eclampsia, and in clinical and home care asthma and COPD monitoring.

Key CVD facts:

- CVD (including stroke and heart attack) is the leading global cause of death
- CVD is responsible for 31% of all global deaths
- More than 80,000 people in the U.S. die each year, and 2,200 die each day, from CVD.
- 28% of all Americans have CVD (approximately 90 million)
- Direct and indirect costs of CVD > \$316.6 billion (health spend and productivity loss).
- Most CVDs can be reduced limit smoking and alcohol intake, reduce weight, and increase exercise
- Early detection and focused management of people with high risk CVD improves outcomes.



Reference: Sluyter JD, Hughes AD, Thom SA McG, Lowe A, Camargo CA, Hametner B, Wassertheurer S, Parker KH, Scragg RKR. Arterial waveform parameters in a large, population-based sample of adults: relationships with ethnicity and lifestyle factors. J Human Hypertension 2016 doi:10.1038/jhh.2016.78

American Heart Association - https://www.heart.org/idc/groups/ahamahpublic/@wcm/@sop/@smd/documents/downloadable/ucm_480086.pdf (accessed 15th January)



About Uscom

Uscom Limited (UCM) is an ASX listed innovative medical technology company specialising in development and marketing of premium non-invasive cardiovascular and pulmonary medical devices. Uscom has a mission to demonstrate leadership in science and create noninvasive devices that assist clinicians improve clinical outcomes. Uscom has three practice leading suites of devices in the field of cardiac, vascular and pulmonary monitoring; the USCOM 1A advanced haemodynamic monitor, Uscom BP+ central blood pressure monitor, and the Uscom SpiroSonic digital ultrasonic spirometers. Uscom devices are premium resolution, noninvasive devices which deploy innovative and practice leading technologies approved or submitted for FDA, CE, CFDA and TGA regulatory approval and marketing into global distribution networks.

The USCOM 1A is a simple to use, cost-effective and non-invasive advanced haemodynamic monitor that measures cardiovascular function, detects irregularities and is used to guide treatment. The USCOM 1A device has major applications in Paediatrics, Emergency, Intensive Care Medicine and Anaesthesia, and is the device of choice for management of adult and paediatric sepsis, hypertension, heart failure and for the guidance of fluid, inotropes and vasoactive cardiovascular therapy.

The Uscom BP+ is a supra-systolic oscillometric central blood pressure monitor which measures blood pressure and blood pressure waveforms at the heart, as well as in the arm, information only previously available using invasive cardiac catheterisation. The Uscom BP+ replaces conventional and more widespread sub-systolic blood pressure monitors, and is the emerging standard of care measurement in hypertension, heart failure and vascular health. The Uscom BP+ provides a highly accurate and repeatable measurement of central and brachial blood pressure and pulse pressure waveforms using a familiar upper arm cuff. The BP+ is simple to use and requires no complex training with applications in hypertension, heart failure, intensive care, general practice and home care.

Uscom SpiroSonic digital ultrasonic spirometers are high fidelity, digital, pulmonary function testing devices based on multi path ultrasound technology. They are simple and accurate to use and provide research quality pulmonary function testing in small hand held devices that can be used in research, clinical and home care environments. The devices can be coupled with mobile phone applications and proprietary SpiroSonic software platforms with wireless interfacing to provide remote tele-monitoring of pulmonary disease. The devices are specialised for assessment of COPD, sleep disordered breathing, asthma, industrial lung disease and monitoring of pulmonary therapeutic compliance.

For more information, please visit: www.uscom.com.au

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