



Uscom Limited
ABN 35 091 028 090
Suite 1, Level 7, 10 Loftus Street
Sydney NSW 2000 Australia
T +612 9247 4144 F +612 9247 8157
www.uscom.com.au

MARKET ANNOUNCEMENT

Non-invasive BP+ equal to catheters for central blood pressure in children;

New study from the Great Ormond Street Hospital for Children

SYDNEY, Australia, Tuesday 19th January 2016: Uscom Limited (ASX code: UCM) (the **Company** or **Uscom**), a cardiovascular and pulmonary medical devices company, today announced to the market the publication of a new independent study from the Great Ormond Street Hospital for Children (GOSH) demonstrating equivalence of catheter based measures of central blood pressure (cBP) with non-invasive Uscom BP+ cBP measurements. The study was published in Critical Care Medicine and will be presented at the Annual Scientific Meeting of the Society of Critical Care Medicine (SCCM) in Orlando, February 20-24th, 2016.

The study found that in 1 to 18 year old children there was no significant difference in measures of cBP directly from aortic catheters and those from the Uscom BP+. Following these unique findings, in children the GOSH study states “we will be able to target arterial BP non-invasively for monitoring and treatment and we believe this is going to change practice.” The study also states that following these promising findings GOSH will undertake further research on the Uscom BP+ and its application in advanced haemodynamics and cBP monitoring.

The Uscom BP+ uses patent protected and novel supra systolic oscillometry to measure cBP non-invasively, and has previously been invasively validated in adults. The BP+ is currently on board the International Space Station for critical monitoring of brachial BP and cBP in astronauts.

This validation in children and adolescents further expands the potential clinical utility and market for the Uscom BP+, and comes at a time when the CPT Code for re-imburement of measurement of cBP comes into effect in the US.

Executive Chairman of Uscom, Associate Professor Rob Phillips said, *“This invasive validation of cBP in children and adolescents is unique, and represents a significant step forward for the science of BP monitoring, confirming that BP+ can be used as a “noninvasive art line” in adults and now children. cBP is an emerging and competitive field, but most devices use simple generalised transfer functions of variable accuracy, estimated from cuff-based, sub systolic oscillometric measurements and are not validated in children. The Uscom BP+ uses patent protected supra systolic oscillometry which has theoretical physiologic advantages to other methods and which are now being recognised in clinical research. This independent endorsement of Uscom cBP technology is further evidence of the excellence, precision and leadership of Uscom science and confirms the commercial opportunity of our BP+ as we finalise its preparation for market.”*

Uscom manufactures and markets the USCOM 1A, the Uscom BP+, and Uscom SpiroSonic digital ultrasonic spirometry technologies. These premium digital devices are changing the way we 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 and guidance of fluid, inotropes and vasoactive therapies in critical care monitoring, and in clinical and home care delivered asthma and COPD medications.

References:

- 1.Saikia B, Derrick G, Fordham T, Brierley J. Validation of Uscom BP+ in children and adolescents: A preliminary report. Critical Care Medicine: December 2015 - Volume 43 - Issue 12 - p 30–31 doi: 10.1097/01.ccm.0000473945.15805.ee
- 2.Lin ACW, Lowe A, Sidhu K, Harrison W, Ruygrok P, Stewart R. Evaluation of a novel sphygmomanometer, which estimates central aortic blood pressure from analysis of brachial artery suprasystolic pressure waves. J Hypertens 2012 30:000–000. DOI:10.1097/HJH.0b013e3283567b94
3. Climie RED, Picone DS, Keske MA, Sharman JE. Brachial-to-radial systolic blood pressure amplification in patients with type 2 diabetes mellitus. J Human Hypertension 2015;33(9):1876-1883
- 4.Costello BT, Schultz MG, Black JA, Sharman JE. Evaluation of a Brachial Cuff and Suprasystolic Waveform Algorithm Method to Noninvasively Derived Central Blood Pressure. Am J Hypertension 2015;28(4):480-486 doi:10.1093/ajh/hpu163.



Uscom Limited
ABN 35 091 028 090
Suite 1, Level 7, 10 Loftus Street
Sydney NSW 2000 Australia
T +612 9247 4144 F +612 9247 8157
www.uscom.com.au

MARKET ANNOUNCEMENT

About Uscom

Uscom Limited (UCM) is an ASX listed innovative medical technology company specialising in development and marketing of premium cardiovascular and pulmonary medical devices. Uscom has three practice leading suites of devices in the field of cardiac, vascular and pulmonary monitoring; the USCOM 1A, Uscom BP+ and the Uscom Thor Spirometers. All Uscom devices are premium quality, and deploy innovative and practice leading technologies with FDA, CE and TGA regulatory approval, and which are currently being marketed 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, inotrope and vasoactive cardiovascular therapy.

The Uscom BP+ is a supra systolic oscillometric Central Blood Pressure monitor which measures blood pressure and blood pressure waveforms only previously available using 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 Thor spirometers are high fidelity, digital, pulmonary function testing devices based on multi path ultrasound technology. They are simple and accurate to use and provide advanced pulmonary function testing in small hand held devices that can be used in research, clinical and home care environments. The devices are specialised for assessment of COPD, sleep disordered breathing, asthma and monitoring pulmonary therapeutic compliance.

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

Uscom Contacts

Associate Professor Rob Phillips
Executive Chairman
rob@uscom.com.au

Catherine Officer
Company Secretary
secretary@uscom.com.au