

USCOM 1A Evidence for Early Treatment of Preeclampsia

SYDNEY, Australia, Monday 20th July 2020: Uscom Limited (ASX code: UCM) (the **Company** or **Uscom**) today notified the market of publication of new research confirming the effectiveness of the USCOM 1A for early diagnosis and treatment of preeclampsia. The manuscript published in the Springer Nature publication Current Hypertension Reports was titled "Maternal Hypertension, Advanced Doppler Haemodynamics and Therapeutic Precision: Principles and Illustrative Cases."

The publication was the result of a collaboration between researchers from the University of Queensland Prof. Rob Phillips, and Drs Ma, Kong and Gao of the Department of Maternal Intensive Care Medicine Unit, Shandong Maternal and Child Health Hospital, Jinan, Shandong, China. The Shandong Maternal Care unit is a tertiary referral centre for the Shandong province, one of the most populous in China, and cares for more than 10,000 births per year.

The study demonstrated that the haemodynamic changes of preeclampsia can be accurately detected at 5-11 weeks using the USCOM 1A, and treatment started immediately rather than waiting for a routine 20-25 weeks BP test when the changes of hypertension may be more difficult to reverse.

Maternal hypertension causes complications which can be reversed with early detection and treatment, while if left inappropriately managed requires induction to preserve the wellbeing of the mother and child. There are approximately 130M births worldwide annually.

Executive Chairman of Uscom, Associate Professor Rob Phillips said "Hypertension in pregnancy occurs in approximately 10% of the worldwide 130M births per year, and the use of advanced haemodynamics is changing the way maternal hypertension is being treated. This study demonstrates that changes in USCOM 1A measured haemodynamics can predict outcomes for the mother and child, and can be performed in the 12th week of pregnancy to allow for early treatment and improved outcomes. This study supports the evidence published by Valensise and his team in Italy and Khalil and her team in London, and provides the bridge between these emerging new theories of preeclampsia provided by USCOM 1A and improved clinical practice."

Uscom manufactures and markets the **USCOM 1A**, the Uscom **BP+**, and the Uscom **SpiroSonic** digital ultrasonic spirometry technologies. These premium devices are changing the way we diagnose and treat cardiovascular and pulmonary diseases. The USCOM 1A provides vital guidance for optimising management of sepsis and the administration of fluid, inotropes and vasoactive therapies in critical care monitoring. The BP+ SpiroSonic devices improve diagnosis and management of hypertension, heart failure, asthma, COPD and sleep disorders in the clinical and home care environments. **VENTITEST** and **VENTITEST-S** are the new standard of digital ultrasonic ventilator calibration for optimising ventilator performance.



References: Phillips, R.A., Ma, Z., Kong, B. Gao, L. Maternal Hypertension, Advanced Doppler Haemodynamics and Therapeutic Precision: Principles and Illustrative Cases. *Curr Hypertens Rep* 2020; 22:49. https://doi.org/10.1007/s11906-020-01060-2 https://link.springer.com/article/10.1007/s11906-020-01060-2

About Uscom

Uscom Limited (UCM): 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: 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+: 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 and pre-eclampsia, heart failure, intensive care, general practice and home care. The Uscom BP+ is supported by the proprietary BP+ Reporter, an innovative stand alone software solution that provides a digital platform to archive patient examinations and images, trend measure progress over time, analyse pulse pressure waves and generate summary reports.

Uscom SpiroSonic digital multi-path ultrasonic spirometers: High fidelity, digital, pulmonary function testing devices based on multi path ultrasound technology. They require no calibration, are simple to disinfect, and are simple and accurate to use providing 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 app's and proprietary SpiroSonic software, SpiroReporter, 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. VENTITEST digital ultrasonic ventilator calibration solution is a new system for calibrating ventilators. All ventilators require calibration to maintain the accuracy with which they measure the pressure, flow and volume of air they deliver. VENTITEST and VENTITEST-S, based on advanced SpiroSonic technology provides a calibration solution that provides for simple and accurate calibration, archiving, analysis and reporting and optimal ventilation performance.

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

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