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ASX MEDIA RELEASE

New USCOM Evidence for Pre-eclampsia

New evidence supports USCOM 1A screening and improved outcomes during pregnancy

SYDNEY, Australia, Thursday 30th March 2017: Uscom Limited (ASX code: UCM) (the **Company** or **Uscom**) announced the publication of two new peer reviewed papers confirming the effectiveness of USCOM 1A for diagnosing pre-eclampsia and guiding hypertensive therapy in pregnancy. The publications were in the prestigious Ultrasound in Obstetrics and Gynaecology and authored by obstetrics and gynaecology specialists and researchers from the University of Rome, Rome, the Policlinico, Rome, and the St George's Hospital, London.

Key Points

- Pre-eclampsia, or high blood pressure in pregnancy, is a common complication which increases mortality and morbidity for pregnant mothers and their unborn babies
- An estimated 10million pregnant women develop pre-eclampsia every year, and early detection and appropriate treatment improves outcomes for mothers and babies
- Pre-eclampsia is responsible for approximately 76,000 maternal and 500,000 foetal and neonatal deaths each year (more than 200 and 1300 per day respectively) – (World Health Organization)
- The 1st study demonstrates that USCOM 1A measured abnormal maternal circulation is associated with an 8-10 fold increase in risk of complications at delivery
- The 2nd study demonstrates that intrauterine foetal growth restriction (IUGR) and its maternal and foetal complications can be improved by USCOM 1A guided treatment of maternal circulation

Professor Valensise and his team from the Department of Obstetrics and Gynaecology at the University of Rome Tor Vergata and Professor Khalil and her group at St George's Hospital London have been using and researching the USCOM 1A in pregnancy for pre-eclampsia for over 3 years.

Executive Chairman of Uscom, Associate Professor Rob Phillips said, *"Science is value for Uscom shareholders and this science provides us with a new revenue platform as our business continues rapid growth of the back of important scientific achievement. These data demonstrate that the use of USCOM in pregnancy can improve maternal and foetal outcomes in pregnancy, and support USCOM 1A use as a routine screening monitor of maternal hemodynamics, from the initial examination up to, and during, delivery and should be considered as a standard of care for monitoring pregnancy."*

Maternal health is an emerging USCOM 1A application with a number of leading centres globally researching pre-eclampsia using the USCOM 1A. These publications will support USCOM 1A adoption in this field and contribute to further growth of USCOM 1A revenues.

Study details

The first study, *"Maternal cardiac output in early labour: a possible link with obstetrics risks?"*, demonstrates that USCOM 1A measured changes in maternal circulation are associated with an 8-10 fold increased risk of maternal and foetal distress and maternal complications in otherwise low risk pregnant women. The study concluded that *"(USCOM measures) can be used not only as a screening tool in the early identification of patients at high risk of hypertensive complications, but also in the evaluation of pregnancy at term in the absence of known risk factors,"*

In the second study, *"Nitric oxide (NO) donors and haemodynamic changes in fetal growth restriction",* 26 pregnant females with diagnosis of intrauterine growth restriction (IUGR) with 30 week gestational age foetuses, were enrolled. Their hemodynamics were monitored with USCOM 1A during treatment with transdermal nitric oxide donors (glycerine trinitrate). Nitric oxide acts on the placental to dilate the placental vessels and ensure adequate perfusion and oxygen supply to the growing foetus to ensure optimal development. The hemodynamics from these patients were then compared to an untreated, case matched, 26 patient cohort. The mothers with IUGR and NO donor treatment had significantly improved USCOM measured maternal hemodynamics, and had babies with significantly increased birth weight. The study concluded *"……our results might open new perspectives in the treatment of fetal growth restriction, focusing on main maternal cardiovascular anomalies."*

References

Valensise H, Tiralongo GM, Pisani D, Farsetti D, LoPresti D, Gagliardi G, Basile RM, Novelii GP, Vasapollo B. Maternal cardiac output in early labour: a possible link with obstetrics risks? Ultrasound Obstet Gynecol 2017 Mar 10. doi: 10.1002/uog.17447

Tiralongo, G., Pisani, I., Vasapollo, B., Khalil, A., Thilaganathan, B. and Valensise, H. Nitric oxide (NO) donors and haemodynamic changes in fetal growth restriction. Ultrasound Obstet Gynecol 2017 doi:10.1002/uog.17454

Uscom manufactures and markets the USCOM 1A, the Uscom BP+, and the 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.

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About Uscom

Uscom Limited (UCM): An ASX listed innovative medical technology company specializing 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 hemodynamic 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 hemodynamic monitor that measures cardiovascular function, detects irregularities and is used to guide treatment. The USCOM 1A device has major applications in Pediatrics, Emergency, Intensive Care Medicine and Anesthesia, and is the device of choice for management of adult and pediatric 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 catheterization. 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, analyze pulse pressure waves and generate a summary report.

Uscom SpiroSonic digital multi-path ultrasonic spirometers: 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 specialized for assessment of COPD, sleep disordered breathing, asthma, industrial lung disease and monitoring of pulmonary therapeutic compliance. The SpiroSonic devices are supported by the proprietary SpiroReporter, an innovative stand-alone software solution that provides a digital platform to archive patient examinations and images, trend measure progress over time, analyze spirometry outputs and generate a summary report.

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

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