



Uscom

ASX MEDIA RELEASE

New US and European Patents for Revolutionary Uscom Cardiovascular Monitor

SYDNEY, Australia, Wednesday 17th July 2019: Uscom Limited (ASX code: UCM) (the **Company** or **Uscom**) today notified the market that it has received Notification of Allowance for its “Combined blood flow and pressure monitoring system and method” from the United States Patents and Trademarks Office and The European Patent Office. The novel technology provides unique non-invasive measures of the function of the heart and vessels only previously available using invasive catheters and transducers.

The Notification of Allowance followed acceptance of all claims by the United States Patents and Trademarks Office for the patent application numbered 14/760582 confirms that the patent has met the requirements for issuance. The patent has a filing and priority date of 13/7/2015 and protects the invention for a period of 20 years, and will be granted following payment of appropriate fees.

The Intention to Grant from the European Patents Office for EP number 14 783 050.5-1124 has a priority date of 14-01-2013 and was filed on 14-01-2014 and is also valid for 20 years from the filing date following payment of fees.

The patent was authored by Uscom founder Associate Professor Rob Phillips and covers the non-invasive assessment and integration of cardiac output blood flow, from the patent protected USCOM 1A, and blood pressure waveforms, from the Uscom BP+. The system and method combines these two outputs and generates novel signals and measures of flow and pressure within the heart and vessels. These signals vary during normal function, and with disease and therapy, and can be applied widely in clinical practice.

While volume and pressure relationships have been core to cardiology for many years, the methods have required cardiac catheterisation or surgically implanted transducers. Both methods have accompanying risks, including infection and arterial and cardiac damage, and so the methods are limited to only the most at risk patients, or during research. This new non-invasive system and method can be performed routinely in a clinician’s office on all patients and provide equivalent information noninvasively, painlessly and without risk.

Uscom CEO Associate Professor Rob Phillips said, *“This technology is an important step forward for clinical medicine. Cardiac volume and pressure loops are the “holy grail” in cardiovascular physiology, but have only previously been available using invasive cardiac catheters and transducers with all their complications. This new non-invasive technology combines the clinical strengths of our sector leading USCOM 1A and the Uscom BP+, and will provide us with accurate and universally applicable clinical cardiovascular measures. The new monitoring should be feasible in neonates, children, adults, and in the elderly and will improve patient care and outcomes in heart failure, hypertension and sepsis. Uscom was founded on a central mission to develop noninvasive and accurate technologies to replace invasive methods. This patent provides us with commercial protection as we develop new life saving products for Uscom and grow long term shareholder value.”*

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. These devices and technologies provide vital guidance for optimising management of sepsis and the administration of fluid, inotropes and vasoactive therapies in critical care monitoring. They can also be applied in clinical and home care diagnosis of asthma and COPD, and monitoring the effects of treatment.



Uscom

ASX MEDIA RELEASE

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

Uscom Contacts

Rob Phillips
Executive Chairman
rob@uscom.com.au

Brett Crowley
Company Secretary
secretary@uscom.com.au