

## Uscom Awarded Euro Grant for Lung Cancer Diagnostic

SYDNEY, Australia, Monday 28th October 2016: Uscom Limited (ASX code: UCM) (the Company or Uscom) today notified the market that Uscom was a member of a consortium awarded 2.2m Euro (AU\$3.1m) over 3 years to develop a new Exhaled Breath Condensate (EBC) device and system for early diagnosis of lung cancer. The grant was made by the Hungarian National Research, Development and Innovation Office to a consortium which included Uscom Europe, the Material Sciences Department of the Hungarian Academy of Sciences, and the Medical School of the Semmelweis University in Budapest, Hungary. The total value of the project is 2.7m Euro (AU\$3.8m) and Uscom will receive 300k Euro (AU\$427k) in the first stage of the project.

The project is titled "Material research and development for the implementation of extracellular vesicular based medical diagnostics", and Uscom's contribution involves the development of a novel EBC device, using advanced technology derived from experience in developing and manufacturing digital ultrasonic spirometers and respiratory monitoring devices. The EBC device is conceived to extract condensate from the exhaled breath from which exosomes can be isolated. The Exosomes, which contain RNA, lipids, proteins and metabolites which reflect the type of cell from which they originate, can then be analysed to identify a wide variety of diseases. The application of these exosomes as biomarkers has proven particularly promising for the early detection of lung and other cancers, and cystic fibrosis. The field is complex and rapidly evolving and an improved method of isolating exosomes for analysis has many potential diagnostic, therapeutic commercial opportunities.

The project also depends on the development of novel polymers for lining the EBC device so extraction of the samples from the expired breath can be made efficient. This will be researched by the Hungarian Academy of Science team, while the clinical testing of the device and methods will be overseen by the team from Semmelweis University Medical Faculty. This project will result in Uscom owned IP and a right of first refusal for any other IP developed in the project over the 3 years.

Executive Chairman of Uscom, Associate Professor Rob Phillips, a co-author of the project, said "Development of efficient methods for early and accurate detection of lung cancer and a wide range of viral, microbial, neoplastic (cancer) and genetic diseases from a simple breath test may lead to widespread population screening. Exosome study is a rapidly growing focus of medical science, and this grant from the Hungarian Government is recognition of the quality of science within Uscom, and its proven expertise in technology development. This research may also generate a new generation of medical devices with potentially life saving applications and global commercial application and may result in a pipeline of new devices for Uscom just as we bring our new BP+ and SpiroSonic devices to market. This collaboration also establishes a relationship between Uscom Europe and two of the most respected medical and science research centres in Europe."

Uscom is the manufacturer of the USCOM 1A, the Uscom BP+, and Uscom SpiroSonic digital ultrasonic spirometry technologies and distributes and sells these devices worldwide. These premium digital devices are 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.



## **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

## **Uscom Contacts**

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