

# Euro Funding for Uscom Pulmonary Research "\$0.82M total funding for smart spacer pulmonary recovery training & drug compliance programme"

**SYDNEY, Australia, Tuesday 11<sup>th</sup> July 2017:** Uscom Limited (ASX code: UCM) (the **Company** or **Uscom**) announced the award of an additional European scientific research grant to Uscom Europe to fund research and development of new digital pulmonary disease management technologies. This second stage of the grant, for a further AU \$330k, takes the Uscom Europe grant total for this project to AU \$0.82M over the next 2 year (AU \$420k pa) to fund development of the new digital spirometry devices and software under the Eurostars programme and paid on achievement of development milestones. The total grant value to the consortium for the project is EU 2.07M (≈AU \$3.09M).

# **Key Points**

- Chronic respiratory diseases (asthma and COPD) are common and increasing worldwide
- Appropriate choice and delivery of medication can significantly improve outcomes and reduce cost of care
- "Spacers" improve efficiency and delivery of inhaled medication
- Governments around the world are actively seeking to control the costs of these diseases by developing improved methods and technologies to improve care and reduce costs
- Uscom SpiroSonic devices are world leading digital ultrasonic pulmonary monitors which can connect to proprietary cloud based software via simple phone apps to deliver research quality pulmonary assessment to clinics and homes limiting expensive acute hospital admissions
- Uscom Europe has been awarded a further AU\$330k Eurostar grant over 2 years as part of the E\*ISSPTD project to research and develop new devices to promote improved treatment, compliance and drug delivery to patients with asthma and COPD
- This, together with the stage one grant of AU \$492K (announced 3-4-17), takes to a total of \$0.82M the sum of Eurostar cash grants contracted over the next 2 years for Uscom Europe to develop new and improved asthma and COPD management devices and technologies
- All new IP developed in the programme will be owned by Uscom
- The Uscom Europe project is being lead by Uscom's head of New Product Development and Pulmonary Technologies Mr George Ferenczi
- Eurostars is a joint programme between EUREKA and the European Commission, co-funded from the national budgets of 36 Participating States and Partner Countries and by the European Union. In the 2014-2020 period it has a total public budget of €1.14 billion
- Eurostars supports the development of rapidly marketable innovative products, processes and services that help improve the daily lives of people around the world

The project is titled "Incentive based smart spacer to promote pulmonary recovery training & drug uptake" (NEMZ\_16-1-2017-0001) and focuses on the development of a new medical device that increases the efficiency of drug delivery from inhalation dispensers, supported by software to re-inforce the appropriate on going use of medication. Uscom's advanced digital multi-path ultrasonic technology is already being adopted in cloud based telemetric pulmonary monitoring projects in the USA, Spain and France. The sophisticated SpiroReporter archiving and analysis software which can be installed on smart phones, tablets, computers or the cloud provides opportunities to combine complex pulmonary function measurements with a remote digital monitoring platform adds clinical utility to these devices.

While many companies market simple inhaler trackers connected to an app or software, the SpiroSonic tSpiro solution provides research quality pulmonary function monitoring of patients in their own home, with full cloud based telemetric analysis, diagnosis and management which generates "big data" for



population disease profiling. Uscom's contribution to this project is its world leading experience in researching, developing and manufacturing digital ultrasonic spirometers and digital respiratory monitoring technologies.

Executive Chairman of Uscom, Associate Professor Rob Phillips said, "Hundreds of millions of people suffer from preventable chronic respiratory diseases, and this research funding supports development of innovative devices and technologies to address a clinical condition that kills hundreds of thousands worldwide per year. As air quality deteriorates and lung disease increases these initiatives become increasingly important for global health. Digital health is the world's largest health trend and these grants confirm that Uscom is a world leading digital health company; we are delivering into practice technology that others are still researching. This funding will result in new devices and digital solutions to improve asthma and COPD worldwide that will become the product pipeline of Uscom's future."

## **Background:**

- COPD effects more than 210m people (4-20% incidence in over 40s) and increasing
- In the US one patient dies from COPD every four minutes. It's the fourth leading cause of death, with 24 million people estimated to have the disease and 12 million of those undiagnosed
- Asthma effects 250-350million people worldwide, with prevalence varying from 1-18% (Aus 15%), with approximately 250,000 to 345,000 attributable deaths per year
- Sleep apnoea (a chronic respiratory disease) occurs in 10-24% of all adults with 2-4% being symptomatic, and is associated with a 4 times increased rate of mortality, and a 10 fold increased risk of motor vehicle and occupational accidents

The Eurostars programme is a joint programme by Eureka and the European Commission which is cofunded from the national budgets or 36 participating states and countries. The Hungarian National Research, Development and Innovation Office as part of the European Research Organisation administers the grant.

This project is a collaboration of Uscom Europe with a group of Dutch pulmonary specialists at Stichting Gelre Ziekenhuizen and SilverFit B.V. (The Dutch Foundation for the Elderly), and is planned to produce Uscom owned IP and products.

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 devices and technologies 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 diagnosis and medication monitoring.

## **References:**

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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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