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UBI's Cancer Biosensor work gets published by American Chemical Society Journal "ACS Sensors" and is selected as "Front Cover"

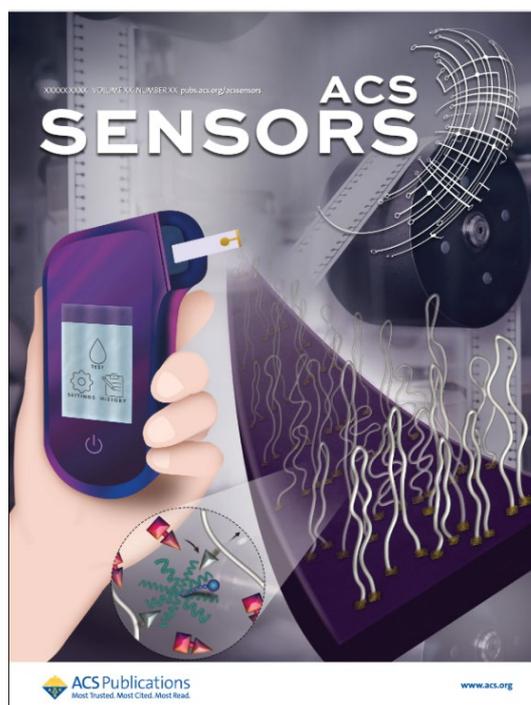
Universal Biosensors, Inc. (ASX:UBI) is pleased to announce that work done on its Tn Antigen cancer biosensor has been published in the American Chemical Society Journal "ACS Sensors" and has been selected as the "Front Cover" for the publication (<https://doi.org/10.1021/acssensors.2c01460>).

The American Chemical Society Journal "ACS Sensors" is widely recognized as the world's leading academic journal in the field and specializes in new and innovative breakthroughs at the forefront of sensor and diagnostic technologies. The publication follows a rigorous international scientific peer-reviewed process on this work.

In the new journal article titled "A Rapid Point-of-Care Electrochemical Sensor for the Detection of Cancer Tn Antigen Carbohydrate in Whole Unprocessed Blood," researchers from Swinburne University of Technology and Deakin University working with Universal Biosensors scientists report the results of the first Development Clinical Study of UBI's Tn Antigen biosensor. This trial was performed on whole blood and retrospective blood plasma samples collected from healthy and real patients with prostate (18 patients), colorectal (15 patients), and breast cancers (six patients). This Development Clinical Study was conducted in collaboration with the Peter MacCallum Cancer Centre (initially announced 19th of April 2022).

The article provides important details on the science and innovation behind UBI's Tn Antigen biosensor which is built upon a novel anti-fouling technology based on lubricin, a biological lubricant and anti-adhesive protein that naturally occurs in the body. Lubricin significantly improves the electrochemical signals and detection limits in electrochemical sensors in highly fouling biological fluids such as blood and saliva.

Associate Professor Wren Greene, one of the corresponding authors from Deakin University, said; "The Tn Antigen sensor represents the culmination of more than five years of research and development and we are excited and encouraged by the results of our first Development Clinical Study using cancer patient samples. The ability to detect Tn Antigen using a low-cost test strip in a point-of-care format could allow for regular at-home testing and has potential to be transformative and deliver better outcomes for patients during treatment and in remission."



John Sharman, CEO of UBI said; “The publication of this work in such an esteemed scientific peer reviewed journal is a significant endorsement for the technology. Our ambition is to create a biosensor capable of mapping and measuring changes to a cancer patients’ tumour in a point-of-care setting.”

Mr Sharman continued; “UBI’s recent focus has been on the manufacturing process for the Tn Antigen cancer biosensors with the aim to create a reliable and reproducible biosensor which can be manufactured in high volumes. We continue to develop the biosensor test strip and our next series of development studies (including the Victoria Cancer Biobank trial) will commence once the next generation of biosensor test strips are complete. Our Tn Antigen cancer biosensor project remains broadly on track and within our projected timelines and budgets.”

Enquiries:

John Sharman
Chief Executive Officer

Announcement authorised by the Board of Directors of Universal Biosensors, Inc.

About Universal Biosensors

Universal Biosensors, founded in 2001, specialises in the design and development of electrochemical cells (strips) used in conjunction with point-of-use devices that are used in various industries such as healthcare (point-of-care), wine, food, and agriculture. UBI’s ambition is to build a multi-product stable of biosensors in large markets which generate ongoing revenue streams. For additional information regarding Universal Biosensors, Inc., refer to: <http://www.universalbiosensors.com>.

About Tn Antigen

UBI is developing a handheld portable Tn Antigen cancer biosensor using a “finger prick” blood test to accurately measure changes to a cancer patient’s tumor status (monitoring of remission and reoccurrence) delivering easier, cheaper, and more frequent tests. The Tn Antigen cancer biosensor test could be used by oncologists and cancer patients in clinics, hospitals, GP clinics or at home. Tn Antigen is almost exclusively associated with the development and progression of cancer (carcinoma’s). Tn Antigen is an O-glycan that is very rarely expressed in healthy blood cells or peripheral tissues.

About American Chemical Society & ACS Sensors

Founded in 1876 and chartered by the U.S. Congress, the American Chemical Society (ACS) are one of the world’s largest scientific organizations with membership of over 151,000 in 140 countries. ACS mission is to advance the broader chemistry enterprise and its practitioners for the benefit of Earth and its people. Their vision is to improve people’s lives through the transforming power of chemistry. ACS Sensors is widely recognized as the world’s leading academic journal in sensor science and specializes in new and innovative breakthroughs at the forefront of sensor and diagnostic technologies.

About Peter MacCallum Cancer Centre

Peter MacCallum Cancer Centre (Peter Mac) is a world leading cancer research, education and treatment centre and Australia’s only public health service solely dedicated to caring for people affected by cancer. They have 3,300 staff, including more than 750 laboratory and clinical researchers, all focused on providing better treatments, better care and potential cures for cancer.

About Development Clinical Study Results

The Peter Mac Development Clinical Study Results are reproduced here. They illustrate that UBI’s Tn Antigen cancer biosensor has the potential to deliver comparable or better performance than existing cancer biomarkers for colorectal and prostate cancer.

Colorectal Cancer

C (n=16), H (n=10)*	Sensitivity (%)	Specificity (%)
2 Electrode	100.0	60.0
3 Electrode	100.0	90.0

*C = Cancer (48 samples tested), H = Healthy (30 samples tested). Each patient sample tested in triplicate

	Sensitivity (%)	Specificity (%)
CEA	55.2	83.6

Prostate Cancer

C (n=44), H (n=10)*	Sensitivity (%)	Specificity (%)
2 Electrode	92.9	60.0
3 Electrode	72.7	90.0

*C = Cancer (132 samples tested), H = Healthy (30 samples tested). Each patient sample tested in triplicate

	Sensitivity (%)	Specificity (%)
PSA	85.4	30.3

Forward-Looking Statements

The statements contained in this release that are not purely historical are forward-looking statements within the meaning of the US Securities Exchange Act of 1934. Forward-looking statements in this release include statements regarding our expectations, beliefs, hopes, intentions or strategies. All forward-looking statements included in this release are based upon information available to us as of the date hereof, and we assume no obligation to update any such forward-looking statement as a result of new information, future events or otherwise. Our actual results could differ materially from our current expectations. We cannot assure you when, if at all, the proposals outlined in this release will occur, and the terms of any such proposal are subject to change. Factors that could cause or contribute to such differences include, but are not limited to, factors and risks disclosed from time to time in reports filed with the SEC.