



# Biotech Daily

Monday December 5, 2016

*Daily news on ASX-listed biotechnology companies*

- \* **ASX, BIOTECH DOWN: UNIVERSAL BIO UP 5%, IMPEDIMED DOWN 8%**
- \* **NHMRC \$483m FOR 601 GRANTS**
- \* **FEDERAL '\$200m, 10-YEAR CSIRO INNOVATION FUND'**
- \* **DIABETES AUSTRALIA PROVIDES \$3.2m FOR RESEARCH**
- \* **MELBOURNE UNI, CSL THERAPEUTIC DENTAL VACCINE WORKS IN MICE**
- \* **BIOMÉRIEUX CANADA TO DISTRIBUTE ITL SAFETY SUBCULTURE UNIT**
- \* **AUSCANN CANNABIS FOR ZELDA, TELETHON BRAIN CANCER TESTS**
- \* **ORTHOCELL REQUESTS CAPITAL RAISING TRADING HALT**

## MARKET REPORT

The Australian stock market fell 0.8 percent on Monday December 5, 2016 with the ASX200 down 43.6 points to 5,400.4 points.

Eight of the Biotech Daily Top 40 stocks were up, 21 fell, nine traded unchanged and two were untraded. All three Big Caps fell.

Universal Biosensors was the best, up 1.5 cents or 4.7 percent to 33.5 cents with 133,206 shares traded.

Actinogen climbed 3.3 percent; Starpharma and Viralytics rose more than two percent; Neuren was up 1.6 percent; with Compumedics, Medical Developments and Pro Medicus up by less than one percent.

Impedimed led the falls, down 9.5 cents or 8.2 percent to \$1.06 with 1.6 million shares traded.

Opthea lost 6.25 percent; Benitec, IDT, Living Cell and Nanosonics fell five percent or more; Avita, Oncosil and Psivida shed four percent or more; Cellmid and Sirtex were down more than three percent; CSL, Genetic Signatures and Nanosonics shed more than two percent; with Airxpanders, Bionomics, Clinuvel, Cochlear, Ellex, Osprey, Pharmaxis, Polynovo, Prana and Resmed down by less than one percent.

## NATIONAL HEALTH AND MEDICAL RESEARCH COUNCIL

The National Health and Medical Research Council says that it has provided \$483 million for 601 grants in the current round.

The Council said that more than 1,900 researchers sharing the grants including projects on “understanding brain plasticity, creating the world’s first molecular blueprint of exercise, assessing whether stressful life events are associated with Graves’ disease, developing new treatment approaches to chronic pain, identifying a new approach for protecting against stomach cancer by preventing inflammation, and improving the treatment of viral infections in transplant recipients.

An NHMRC media release said that cancer projects were the single largest grant category receiving \$123,447,943, followed by cardiovascular disease \$64,816,360, Mental Health \$35,546,702, dementia \$26,192,720, injury \$24,005,696, diabetes \$23,572,155, Aboriginal and Torres Strait Islander Health \$23,514,593, obesity \$14,853,890, and arthritis and osteoporosis \$7,993,255.

NHMRC chief executive officer Prof Anne Kelso said the grants would support “an extraordinary breadth of research around Australia”.

“They include 60 fellowships for our future research leaders, laboratory studies of the origins of disease and clinical trials of new therapies,” Prof Kelso said.

Details are at: <https://www.nhmrc.gov.au/grants-funding/outcomes-funding-rounds>.

## FEDERAL GOVERNMENT

The Federal Government says it will provide \$70 million for a \$200 million Commonwealth Scientific and Industrial Research Organisation Innovation Fund.

A media release from the Minister for Industry, Innovation and Science Greg Hunt said that fund would commercialize early stage innovations from the CSIRO, universities and other publicly-funded research bodies.

The Government said it would invest \$70 million over 10 years, with \$30 million of CSIRO revenue from CSIRO’s wireless local area network (WLAN) program, which delivered Wi-Fi to the world.

The media release said that the remaining \$100 million would be “sourced from wholesale private sector investment”.

The Government said that fund would help innovations become successful businesses, create jobs and boost Australia’s productivity and exports and would support co-investment in new spin-out and start-up companies, products and services created by Australian research institutions and their partners.

The media release said that the fund would “bridge the gap between science and industry. “It will allow our innovators to meet industry half-way by developing investable propositions, enabling our scientists to get their product to market more rapidly,” the media release said.

The media release said that next week marked “once [sic] year since the launch of the Turnbull Government’s \$1.1 billion National Innovation and Science Agenda, of which the CSIRO Innovation Fund is a key element”.

Mr Hunt’s media release said that the CSIRO Innovation Fund would be led by venture-capitalist Bill Bartee a co-founder and partner at Blackbird Ventures and a NAB Ventures investment committee member.

The Government said Mr Bartee co-founded Southern Cross Venture Partners after working in early stage investing at Macquarie Bank and was the chief executive officer of the start-up Mantara, which produced content-based message routing systems.

For more information go to: [www.csiro.au/innovationfund](http://www.csiro.au/innovationfund).

## DIABETES AUSTRALIA

Diabetes Australia says it has provided 50 grants totalling \$3.24 million through the Diabetes Australian Research Program.

A Diabetes Australia spokesman confirmed the provision of grants but said the formal announcement was yet to be published.

A media release from the Walter and Eliza Hall Institute said that a study led by Dr Esther Bandala Sanchez had received a \$60,000 grant to investigate how a sugar-coated protein protected the body against type 1 diabetes and whether the CD52 protein could underpin a standardized screening test and preventative medication for type 1 diabetes.

A November 7, 2016 media release from Diabetes Victoria said that it had provided \$1.3 million of the \$3.24 million total and had funded 15 projects at the Baker IDI Heart and Diabetes Institute, Deakin University, Monash University, the Walter and Eliza Hall Institute of Medical Research and the University of Melbourne.

Diabetes Victoria said that since 1987, the Diabetes Australian Research Program had “supported and developed outstanding diabetes research in Australia” providing a range of grants across the full spectrum of diabetes research through a merit-based, competitive, peer review process, with projects that focussed on prevention, management of diabetes or the cure for diabetes.

## UNIVERSITY OF MELBOURNE

The University of Melbourne says its researchers have shown efficacy in mice, for a vaccine to eliminate or reduce surgery and antibiotics for severe gum disease.

A University media release said the vaccine was “a world first” and was developed by a team of dental scientists at the Oral Health co-operative research centre (CRC).

The article, entitled ‘A therapeutic Porphyromonas gingivalis gingipain vaccine induces neutralising IgG1 antibodies that protect against experimental periodontitis’ was published in Nature Partner Journals’ Vaccines and

The full article is at: <http://www.nature.com/articles/npjvaccines201622>.

The media release said the researchers had been working on a vaccine for chronic periodontitis for the past 15 years and clinical trials could begin in 2018.

The University said that moderate to severe periodontitis affected one in three adults and more than 50 percent of Australians over the age of 65 years and was associated with diabetes, heart disease, rheumatoid arthritis, dementia and certain cancers.

The media release said that periodontitis was a chronic disease that destroyed gum tissue and bone supporting teeth, leading to tooth loss.

The University said that the vaccine targeted enzymes produced by the bacterium Porphyromonas gingivalis, to trigger an immune response which produced antibodies that neutralized the pathogen’s destructive toxins.

The University said that Porphyromonas gingivalis was known as a keystone pathogen, which meant it had the potential to distort the balance of micro-organisms in dental plaque, causing disease.

Co-author and Oral Health CRC chief executive officer Prof Eric Reynolds, said it was hoped the vaccine would substantially reduce tissue destruction in patients with Porphyromonas. gingivalis.

“We currently treat periodontitis with professional cleaning sometimes involving surgery and antibiotic regimes,” Prof Reynolds said. “These methods are helpful, but in many cases the bacterium re-establishes in the dental plaque causing a microbiological imbalance so the disease continues.”

Prof Reynolds hoped the vaccine would improve the quality of life for millions of people.

## ITL

ITL says it has signed a five-year distribution agreement with possible renewals for its Safety Subculture Unit with Biomérieux Canada Inc.

ITL said that the Subculture Unit was used in laboratories to safely transfer samples that have tested positive for bacteria for further testing and its design incorporated “process efficiencies, safety in reducing potential for needle-stick injuries and reduced bio-hazard exposure to potential sprays and aerosols”.

The company said that the Subculture Unit was compatible with bacterial culture bottles, offering two methods for sample transfer, both a drip method onto a culture plate as well as a controlled measurement of sample volume into a syringe.

ITL said that between 700,000 to one million subculture procedures were performed in Canada each year.

The company said that Biomérieux provided diagnostic products including reagents, instruments and software, which determined the source of disease and contamination to improve patient health and ensure consumer safety.

ITL executive chairman Bill Mobbs said that the distribution contract with Biomérieux Canada was “yet another excellent achievement by ITL Bio-Medical this year”.

ITL was up half a cent or 1.9 percent to 27 cents.

## ZELDA THERAPEUTICS

Zelda says the Perth-based Telethon Kids Institute will undertake pre-clinical testing of its cannabis compounds, formulations and protocols for paediatric brain cancer.

Zelda said the collaboration would access the Institute’s validated cell and animal models for the studies to examine the potential for its compounds to act as anti-cancer agents, either alone or in combination with existing treatments, with initial studies expected in early 2017 and results expected later in the year.

The company said that the collaboration with the Telethon Kids Institute “demonstrates the company’s strong momentum towards conducting rigorous pre-clinical and clinical studies aimed at validating the anecdotal patient responses to medical cannabis observed to date, to produce industry-standard data packs and trial data”.

Zelda said it intended sourcing the cannabinoid research material through a supply agreement with Auscann Group Holdings which in turn had partnership with “the world’s largest medical cannabis cultivator and processor, Canadian group Canopy Growth Corp”. Zelda executive director Dr Stewart Washer is the son of Auscann chair Dr Mal Washer and the brother of Auscann chief executive officer Elaine Darby.

Zelda executive chairman Harry Karelis is an executive director of Auscann.

Auscann has attempted to back-door list on the ASX, through TW Holdings, but the listing has been delayed (BD: Nov 4, 2016).

Earlier this year, Deputy Prime Minister Barnaby Joyce said that no cannabis that could be grown in Australia would be allowed to be imported (BD: Apr 20, 2016).

Today, Zelda said that subject to Auscann securing import permits and Canopy securing an export permit, the material would be sourced from Canada and supplied to the Telethon Kids Institute.

Mr Karelis said that “Zelda was established to conduct a series of pre-clinical and clinical activities to determine whether positive anecdotal experiences observed in patients in California can be reproduced in a controlled laboratory and clinical setting”.

“Positive results from these studies have the potential to lay the foundations for improved treatment outcomes and quality of life for cancer patients,” Mr Karelis said.

Zelda was up 0.1 cents or 3.2 percent to 3.2 cents with 3.9 million shares traded.

## ORTHOCELL

Orthocell has requested a trading halt “pending the release of an announcement in relation to a capital raising”.

Trading will resume on December 7, 2016 or on an earlier announcement.

Orthocell last traded at 45.5 cents.