



Biotech Daily

Thursday April 19, 2018

Daily news on ASX-listed biotechnology companies

- * **ASX, BIOTECH UP: ADMEDUS UP 9.5%; OSPREY DOWN 7.55%**
- * **PROTA, HANSEN PARTNER FOR PHASE III PEANUT IMMUNOTHERAPY**
- * **VICTORIA \$2m FOR MADDIE'S VISION BONE MARROW BIOLOGY CENTRE**
- * **ONCOSIL SHARE PLAN RAISES \$4m, TOTAL \$16.7m**
- * **IMPEDIMED INTERIM L-DEX LYMPHOEDEMA RESULTS 'PROMISING'**
- * **EURO PATENT FOR PROTEOMICS PROMARKERD KIDNEY TEST**
- * **ADMEDUS APPLIES FOR 3 US TAVR PATENTS**
- * **CANN SIGNS AURORA FOR 3rd MARIJUANA FACILITY**
- * **ATCOR REQUESTS 'CAPITAL RAISING' TRADING HALT**
- * **QUEENSLAND BAUXITE HEMP FOR COLES SUPERMARKETS**
- * **CSL APPOINTS FIONA MEAD COMPANY SECRETARY**
- * **COMPUMEDICS APPOINTS GORDON HAID MEG BUSINESS DIRECTOR**

MARKET REPORT

The Australian stock market was up 0.33 percent on Thursday April 19, 2018 with the ASX200 up 19.6 points to 5,881.0 points. Sixteen of the Biotech Daily Top 40 stocks were up, 14 fell, six traded unchanged and four were untraded. All three Big Caps fell.

Admedus was the best, up three cents or 9.5 percent to 34.5 cents with 2.4 million shares traded. Compumedics climbed 7.9 percent; Impedimed, Opthea and Psivida were up more than five percent; Actinogen and Prana improved more than four percent; LBT and Universal Biosensors were up more than three percent; Optiscan and Polynovo rose two percent or more; Clinuvel, Pharmaxis and Starpharma were up more than one percent; with Nanosonics and Volpara up by less than one percent.

Osprey led the falls, down two cents or 7.55 percent to 24.5 cents with 78,250 shares traded. Factor Therapeutics lost 6.7 percent; Uscom fell 4.55 percent; Airxpanders was down 3.7 percent; Acrux, Bionomics and Telix shed more than two percent; with Cochlear, CSL, Ellex, Medical Developments, Mesoblast, Neuren, Pro Medicus, Resmed, Sirtex and Viralytics down by less than one percent.

PROTA THERAPEUTICS

Prota says it has partnered with Chr (Christian) Hansen AS to develop oral immunotherapies to food allergies, including a phase III trial for peanut allergy. Prota said that the partnership would assess “the world’s best documented probiotic strain” Lactobacillus rhamnosus or LGG and the Copenhagen-based Hansen would manufacture and supply pharmaceutical quality LGG.

Last year, Prota said that four-year follow-up data of a 48-patient study of a probiotic and peanut immunotherapy treatment showed “long-lasting tolerance effects of treatment” (BD: Aug 17, 2017).

Prota said at that time that it licenced the use patent for a probiotic and peanut immunotherapy technology from Melbourne’s Murdoch Children’s Research Institute at the Royal Children’s Hospital.

The company said that in 2016 it received \$15 million in funding led by the Sydney-based Oneventures (BD: Sep 29, 2016).

Today, Prota said that about 220 million to 250 million people globally had food allergies, an increase of 350 percent over the past 20 years.

The company said that the economic impact in the US was estimated at \$US24.8 billion a year.

Prota said that peanut allergy was the most common cause of anaphylaxis, one of the most common causes of death from food allergy and more than three million Americans had peanut allergies resulting in a peanut allergy therapeutics market estimated to increase to more than \$US10 billion by 2025.

Today, Prota chief executive officer Dr Suzanne Lipe told Biotech Daily that the earlier trials had used a food grade Lactobacillus rhamnosus with its oral immunotherapy and Hansen would supply a good manufacturing practice standards Lactobacillus rhamnosus for the phase III trial.

The company said that the treatment was designed to reprogram the immune system’s response to peanuts and eventually develop tolerance.

Prota said it the phase III trial would be under a US investigational new drug application and the aim was to commercialize a medicinal product using new pharmaceutical grade therapeutic dosage forms for treating peanut allergy as the first indication, and to build on the relationship with Hansen to explore indications for treating other food allergies.

Dr Lipe said that an effective therapy to treat peanut allergies was “now a realistic target”.

“Hansen is the ideal partner for us, both as the owner of one of the key components in the therapeutic product LGG and as a leading expert in microbial [products],” Dr Lipe said.

“Hansen has demonstrated the capability to deliver a pharmaceutical quality product that can be regulated as a biological therapeutic product,” Dr Lipe said.

“Together with our proprietary peanut protein formulation, we aim to take this combination product through a phase III clinical trial to commercialization of a treatment for peanut allergies,” Dr Lipe said.

Prota said that numerous studies had “highlighted the therapeutic potential of specific bacteria in preventing and treating metabolic, gastrointestinal and other diseases, [and] investigating specific bacteria for the treatment of food allergies is an area that has recently gained momentum”.

Hansen head of health and nutrition Christian Barker said that the partnership with Prota was “part of our strategy to become the partner of choice for companies wanting to develop new generations of therapeutic microbes”.

Prota is a private company.

VICTORIA GOVERNMENT

The Victoria Government says it will provide \$2.1 million in the State Budget to establish the Centre for Research Excellence in Bone Marrow Biology.

A media release from Victoria Premier Daniel Andrews and Health Minister Jill Hennessy said the Parkville-based Centre would combine staff from the Royal Melbourne Hospital, the Victoria Cancer Centre and the University of Melbourne, among others.

The media release said the Centre was inspired by Maddie Riewoldt's family who, following her death in 2015, established Maddie Riewoldt's Dream "dedicated to finding a cure and saving lives".

The Government said that bone marrow failure syndrome mainly affected young people, aged 17 to 40, with about 160 young Australians diagnosed with the syndrome every year and more than half dying from the disease.

The media release said the Centre would develop a better understanding of bone marrow function to develop new and better treatments for patients with bone marrow failure syndromes such as aplastic anaemia and "hopefully one day find a cure".

The Government said it would provide \$305,000 to the Victorian Cancer Agency for a fellowship to study links between bone marrow failure syndromes and cancer biology.

The Government said that "only half of bone marrow failure syndrome patients respond to drugs" and while bone marrow transplants were the best treatment, saving up to nine of 10 people who had a matched sibling, only one in four had a matched sibling.

Mr Andrews said his Government was "helping transform Maddie's dream into a reality, finding a cure for bone marrow failure ... [and had] the potential to change and save lives".

IMPEDIMED

Impedimed says interim results from its 500-patient trial of L-Dex have indicated "promising results" in preventing lymphedema.

In 2014, Impedimed said it enrolled the first patient in its 1,100-patient post-approval clinical trial of L-Dex for the early detection of lymphoedema six months ahead of schedule (BD: Jun 26, 2014).

The company said at that time that the randomized, controlled trial was led by the Nashville Tennessee-based Vanderbilt University School of Nursing's Prof Sheila Ridner as principal investigator and would be completed in about two years and conducted in at least five sites in the US and Australia.

Today, Impedimed said the trial aimed to determine if the sub-clinical detection of increasing extracellular fluid with its bio-impedance spectroscopy L-Dex and subsequent early treatment resulted in a reduction in progression to chronic lymphoedema compared to the same intervention using traditional tape measurement.

The company said that as of January, 2018, 68 patients in the tape measure group had triggered intervention, of which 10 patients had lymphoedema progression, compared to 41 patients in the L-Dex group, of which two patients had lymphoedema progression.

Prof Ridner said the results suggested that "assessment by this device in post-surgical breast cancer patients can be successfully incorporated into clinical practice".

"We will begin educational seminars to encourage this incorporation into standard of care for cancer survivors," Dr Ridner said.

Impedimed chief executive officer Rick Carreon said the results showed the "technology's ability to detect very small fluid shifts in the human body that are medically meaningful".

"This provides clinicians the opportunity to intervene, resulting in improved outcomes and positively impacting the lives of patients," Mr Carreon said.

Impedimed was up 3.5 cents or 5.1 percent to 72.5 cents with 2.4 million shares traded.

ONCOSIL MEDICAL

Oncosil says its share purchase plan has raised \$4.0 million at 12 cents a share taking the total raised to \$16.7 million.

Last month, Oncosil said it raised \$12.7 million in a “heavily oversubscribed placement” to institutional and sophisticated investors, \$4.0 million of which was subject to shareholder approval on May 14, 2018 (BD: Mar 22, 2018, BD Apr 13, 2018).

The company said that the share plan was capped at \$4.0 million and was oversubscribed.

Oncosil was unchanged at 14 cents.

PROTEOMICS INTERNATIONAL LABORATORIES

Proteomics says it has been granted a European patent for its Promarkerd diagnostic and predictive test for diabetic kidney disease.

Proteomics said that the patent, titled ‘Biomarkers Associated with Diabetic Nephropathy’ covered Promarkerd until September 20, 2031.

The company said the European patent complemented patents already granted in the US, Australia, Singapore, Russia, China and Japan and that patents were pending in “other major global jurisdictions for both diabetic and other forms of kidney disease”.

Proteomics said it was engaged with potential partners to bring Promarkerd to market in the US, Mexico, Japan, Australia, China and Europe.

Last month, Proteomics said it had formally launched Promarkerd (BD: Mar 7, 2018).

Proteomics was up half a cent or 2.4 percent to 21 cents.

ADMEDUS

Admedus says it has submitted three US patent applications for its transcatheter aortic valve replacement (TAVR) device.

Admedus said the provisional patent applications related to the engineering of components in its TAVR device that were designed to improve ‘French size’(as compared to US sizes), valve placement and positioning and to reduce the incidence of para-valvular leakage.

The company said that the three components were designed to “complement its single piece moulded valve and to address significant unmet need in the areas of access site vascular injury, valve positioning and placement”.

Admedus said that transcatheter aortic valve replacement was “the best alternative treatment for patients unable to undergo surgical aortic valve replacement”.

Last year, Admedus said it had submitted two US patent applications for its Adapt process three-dimensional replacement heart valve to change the way TAVR products were assembled and distributed (BD: Oct 24, 2017).

Admedus chief executive officer Wayne Paterson said the patent applications were “another significant step forward for Admedus as these patent applications take the company into new territory ... developing our engineering expertise as we build on the success of our clinically-superior Adapt tissue technology”.

“These new innovations are above and beyond our tissue science and are based on feedback from the leading physicians who form our permanent TAVR advisory board,” Mr Paterson said.

Admedus was up three cents or 9.5 percent to 34.5 cents with 2.4 million shares traded.

CANN GROUP

Cann says it has signed a design and consulting services agreement with Aurora Cannabis subsidiary Aurora Larssen Projects for its third Melbourne facility. In its most recent substantial shareholder notice Aurora Cannabis said it held 22.9 percent of Cann and Cann said the agreement was executed on arm's-length terms. The company said the third facility, following the location-undisclosed Southern and Northern facilities, was a greenfield development, including good manufacturing practice manufacturing, of about 23,500 square metre (2.35 hectares or 5.8 acres). Cann said site selection was imminent, with applications for the required planning permits and regulatory approvals in train and the facility expected to be operational by July 2019. The company said that Aurora Larssen would provide design and procurement services, construction services including project management and three years' post-construction services including commissioning, maintenance and crop support. Cann said that Aurora Larssen was a greenhouse engineering specializing in high-technology, automated and environmentally-controlled greenhouses including the building, expansion and renovation of facilities for a variety of crops, including cannabis. Cann chief executive officer Peter Crock told Biotech Daily the facility would be "a high-tech glasshouse facility with supplemental lighting" using direct sunlight when possible. Mr Crock said the facility would have "cutting-edge automation features and advanced, energy-efficient materials and technologies that will, in turn generate exceptional yields for Cann Group". "We have funding in place for this ... step which allows us to scale-up substantially and puts [us] in a position to compete on the global medicinal cannabis stage," Mr Crock said. Cann was up three cents or 1.1 percent to \$2.87.

ATCOR MEDICAL

Atcor has requested a trading halt "pending a material announcement regarding the company's capital raising activity". Trading will resume on April 23, 2018 or on an earlier announcement. Atcor last traded at 2.2 cents.

QUEENSLAND BAUXITE, MEDICAL CANNABIS

Queensland Bauxite says 55 percent subsidiary Medical Cannabis will supply hemp ingredients for "products and oil blends" available at Coles stores in Australia. Queensland Bauxite said the Melbourne-based Red Tractor had "supplied hundreds of Coles stores around Australia" with products and oil blends that had its hemp ingredients. Queensland Bauxite was up 1.1 cents or 25.6 percent to 5.4 cents with 155.9 million shares traded.

CSL

CSL says it has appointed Fiona Mead as its company secretary and head of group governance, effective from June 4, 2018. CSL said Ms Mead was previously company secretary and a member of the executive leadership team at Tabcorp and prior to that was company secretary at Asciano and assistant company secretary at Telstra Corp, and held a Bachelor of Law and a Bachelor of Commerce from the University of Melbourne. CSL fell 36 cents or 0.2 percent to \$159.80 with one million shares traded.

COMPUMEDICS

Compumedics says it has appointed Gordon Haid as business director for its new magneto-encephalography (MEG) functional brain image scanning division.

Compumedics said that Mr Haid was previously responsible for the MEG in North America for the Stockholm, Sweden-based Elekta Instrument AB and head of international sales for York, England-based York Instruments.

Compumedics was up three cents or 7.9 percent to 41 cents.