



Biotech Daily

Tuesday February 3, 2015

Daily news on ASX-listed biotechnology companies

- * **ASX UP, BIOTECH DOWN: OPTISCAN UP 11.5%, ADMEDUS DOWN 9%**
- * **MELBOURNE, MONASH, HARVARD FIND SKIN IMMUNE CELLS**
- * **IMMURON ENROLS FIRST PHASE II IMM-124E NASH PATIENTS**
- * **IMPEDIMED ADDS 2 US CLINICS TO L-DEX PILOT PROGRAM**
- * **PHYTOTECH CLAIMS CANNABIS PROGRAM STARTS, ROSS SMITH**
- * **ACRUX 10% RESISTANCE TO CEO MICHAEL KOTSANIS 4m OPTIONS**
- * **MELANIE LEYDIN REPLACES PRESCIENT CO SEC SEAN HENBURY**

MARKET REPORT

The Australian stock market was up 1.46 percent on Tuesday February 3, 2015 with the S&P ASX 200 up 82.1 points to 5,707.4 points.

Thirteen of the Biotech Daily Top 40 stocks were up, 16 fell, eight traded unchanged and three were untraded.

Optiscan was the best, up 0.7 cents or 11.5 percent to 6.8 cents with 7.6 million shares traded, followed by Circadian and Genetic Technologies, both up 10 percent to 16.5 cents and 2.2 cents, respectively, with 89,800 shares and 23.7 million shares traded, respectively.

Universal Biosensors climbed seven percent; Analytica was up four percent; Medical Developments and Nanosonics were up more than three percent; Alchemia, Atcor and Prana rose more than two percent; Ellex, Mesoblast and Resmed were up more than one percent; with Cochlear and Sirtex up less than one percent.

Admedus led the falls, down one cent or 8.7 percent to 10.5 cents with 4.1 million shares traded.

Avita fell seven percent; Oncosil lost 5.5 percent; Antisense fell 4.55 percent; Benitec, GI Dynamics, IDT, Living Cell and Viralytics were down more than three percent; Bionomics, Osprey and Prima shed two percent or more; Clinuvel and Starpharma were down more than one percent; with Acrux, CSL and Impedimed down by less than one percent.

THE UNIVERSITY OF MELBOURNE

The University of Melbourne says a new mechanism by which immune cells in the skin sense whether lipid or fat-like molecules might indicate the presence of foreign invaders. The University said that the discovery, by its researchers working with scientists from Monash University and Harvard University, was “a fundamental advance in understanding how the immune system functions, particularly within the skin” and could help against infections, allergies and auto-immune diseases.

The research, entitled ‘Alpha-Beta T-cell antigen receptor recognition of CD1a presenting self lipid ligands’ was published in Nature Immunology and an abstract is available at: <http://www.nature.com/ni/journal/vaop/ncurrent/full/ni.3098.html>.

The University of Melbourne said that human skin contained a network of immune cells that acted as a barrier to infection, but when the immune cells recognized the body’s cells or foods as foreign, they could cause inflammation and allergies.

The University said that CD1a was found on skin-based immune cells and played a role in the response by binding to and displaying foreign lipid molecules derived from bacteria and lipids from our own cells, for recognition by T-lymphocytes in our immune system.

The University said the CD1a molecule read the lipid molecules to identify which compounds belonged to the body or not.

The University said that CD1a was discovered more than 30 years ago, and was known to be involved in immunity to mycobacteria and inflammation following bee stings, but how the immune system interacted with CD1a molecules had been unknown.

The University said it was this interaction that was investigated by its Prof Dale Godfrey, Monash’s Prof Jamie Rossjohn and Harvard’s Prof Branch Moody.

“Lipids are potent stimulators of the immune response and they are produced by pathogens, allergens and our own cells,” Prof Godfrey said.

“This work shows that the means by which the immune system detects lipids is very different to the mechanism underlying recognition of proteins,” Prof Godfrey said.

The University said that Prof Rossjohn and Prof Godfrey, working with the Australian Synchrotron, provided detailed molecular insight into how the immune system engaged with complexes of CD1a and lipid molecules.

The University said Prof Rossjohn and Prof Godfrey defined a novel mechanism of immune cell recognition and provided insight into how that part of the immune system operated and how it might be manipulated as a means for enhancing immunity to infection or suppressing immunity associated with allergic reactions.

“By understanding how the human immune system can sense and respond to lipids, we can make them more or less potent by subtly altering their structure,” Prof Rossjohn said.

The University of Melbourne said that the research was supported by the National Health and Medical Research Council of Australia, the Australian Research Council, the US National Institutes of Health and the Dermatology Foundation.

IMMURON

Immuron says it has recruited the first two patients in its phase II trial of IMM-124E for non-alcoholic steato-hepatitis and expected recruitment in the US and Australia to follow. The company said that the trial would enroll 120 patients in the double-blind, placebo-controlled multi-centre and dose ranging study to demonstrate that IMM-124E improved clinical indicators of non-alcoholic steato-hepatitis.

Immuron said that non-alcoholic steato-hepatitis or NASH was a chronic inflammatory disorder of the liver which affected more than five percent of the US population.

Immuron was unchanged at 20 cents.

IMPEDIMED

Impedimed says it has launched additional lymphoedema L-Dex pilot programs with two unnamed US community oncology groups.

Impedimed said that in the US, community oncology practices provided outpatient cancer treatment, outside a hospital setting.

The company said that the L-Dex commercialization pilot programs were with two practices which provided outpatient care for thousands of new cancer patients each year. Impedimed said that the pilot program activities included integrating a prospective surveillance model for the early detection of cancer related lymphoedema using L-Dex, capturing L-Dex scores in the electronic medical records, providing education and training for staff, patients and referring physicians.

The company said that program participants would provide an opportunity to gain insight into community oncology through feedback regarding implementation, integration and patient use aspects of the L-Dex system to optimize its utility and benefits.

Impedimed chief executive officer Richard Carreon said the lessons learned from the pilot programs would be important to the company's commercialization plans.

"This is yet another important step in the company's mission to improve the quality of life for cancer patients and to become the accepted standard of care in the early detection and early intervention for lymphoedema," Mr Carreon said.

Impedimed fell half a cent or 0.5 percent to 93.5 cents.

PHYTOTECH MEDICAL

Phytotech says its research and development program for delivery systems for medical grade cannabis has begun.

Phytotech said that its technology licenced from Israel's Yissum Research Development Co would be able to overcome the effects of "first pass metabolism" which markedly decreased the oral absorbance of current oral cannabinoid-commercial products.

The company said it intended to test the technology in clinical trials against GW Pharmaceuticals Sativex, an oral spray cannabinoid for the treatment of spasticity due to multiple sclerosis.

Phytotech said it expected its oral capsule to be easier to administer, while not causing side effects such as mouth ulcerations and pain, and having no adverse taste, both associated with Sativex.

The company said it expected the oral product to be low cost, with long room temperature shelf life.

Phytotech said that the buccal product under development had a flexible, muco-adhesive patch and would potentially provide continuous delivery of tetrahydrocannabinol and cannabidiol for four to six hours.

The company said that the product was expected to allow for better dose control, easy application, no adverse taste and cost effectiveness.

Phytotech managing director Boaz Wachtel said that Israel was "a world leader in medical cannabis research and we are excited to partner with researchers from the prestigious Hebrew University of Jerusalem to help us achieve our goal of commercializing medical cannabis delivery systems."

A spokesman for Phytotech said the company was not commenting on any link between the resignation yesterday of founder and director Ross Smith and his interaction with a share speculation website and posting on social media (BD: Feb 2, 2015).

The spokesman said that Mr Smith would continue to consult for the company.

Phytotech fell 6.5 cents or 15.5 percent to 35.5 cents with 6.5 million shares traded.

ACRUX

The Acrux extraordinary general meeting to award chief executive officer Michael Kotsanis faced 9.6 percent opposition to the issue of 4,000,000 options.

Acrux said that Mr Kotsanis was on a base salary of \$400,000 and was entitled to a bonus of up to 25 percent of the salary.

The company proposed to award Mr Kotsanis the 4,000,000 options in three tranches with the first tranche of 2,000,000 options exercisable at \$1.32 per share, the second tranche of 1,000,000 options exercisable at the higher of \$2.00 or a 25 percent premium to the five-day volume weighted average price to July 22, 2015 and the third tranche of 1,000,000 options exercisable at the higher of \$2.50 or a 25 percent premium to the five-day volume weighted average price to July 22, 2016

Acrux said that 50,640,194 votes (90.4%) supported the option issue with 5,357,242 votes (9.6%) against.

The company's 2014 annual report said that Acrux had 166,521,711 shares on issue, meaning that the votes against Mr Kotsanis options amounted to 3.2 percent of the company, not sufficient to requisition extraordinary general meetings.

Acrux fell half a cent or 0.3 percent to \$1.445 with 810,349 shares traded.

PRESCIENT THERAPEUTICS (FORMERLY VIRAX HOLDINGS)

Prescient says it has appointed Melanie Leydin as company secretary replacing Sean Henbury, effective from today.

Prescient said that Ms Leyden was a chartered accountant with 20 years experience and had worked with ASX-listed companies.

The company said that Ms Leydin was the principal of Leydin Freyer Corp which provided company secretarial and accounting services to the biotechnology and resources sectors. Prescient was untraded at 11 cents.