

# Biotech Daily

Tuesday March 3, 2015

Daily news on ASX-listed biotechnology companies

- \* ASX, BIOTECH DOWN: PATRYS UP 9%, CLINUVEL DOWN 9%
- \* WEHI FINDS MLC-1 PROTEIN KEY FOR MILK PRODUCTION
- \* PRO MEDICUS ROLLING OUT HIGH-SPEED 2-D, 3-D IMAGING
- \* BENITEC PREPARES FOR PATIENTS 4, 5 IN TT-034 HEPATITIS C TRIAL
- \* BENITEC RECEIVES \$2m FEDERAL R&D TAX REFUND
- \* GRAHAM DURBIN SUPERANNUATION TAKES 9% OF GENERA
- \* NANOSONICS REQUESTS 'MATERIAL FUNDRAISING' TRADING HALT
- \* PHYLOGICA PLEADS SCHULTZ TO ASX 31% FALL QUERY
- \* VICTORIA INNOVATION MINISTER TO OPEN BIO-MELBOURNE PROGRAM

#### MARKET REPORT

The Australian stock market fell 0.42 percent on Tuesday March 3, 2015 with the S&P ASX 200 down 25.0 points to 5,933.9 points.

Thirteen of the Biotech Daily Top 40 stocks were up, 19 fell, seven traded unchanged and one was untraded.

Patrys was the best, up 0.1 cents or 9.1 percent to 1.2 cents with 1.9 million shares traded.

Atcor climbed five percent; Acrux and Neuren rose more than four percent; Bionomics, Biotron and Medical Developments were up three percent or more; Genetic Technologies, Psivida, Uscom and Viralytics rose more than two percent; GI Dynamics was up 1.7 percent; with Benitec and Resmed up by less than one percent.

Clinuvel led the falls, down 30 cents or 8.8 percent to \$3.10 with 5,303 shares traded.

Compumedics lost eight percent; Optiscan fell 7.9 percent; Circadian was down 5.9 percent; Cellmid and Pharmaxis fell four percent or more; Admedus, IDT, Living Cell and Osprey lost more than three percent; Ellex, Mesoblast, Prima and Sirtex shed two percent or more; Alchemia, Anteo, Cochlear, Impedimed, Oncosil and Phosphagenics were down more than one percent; with CSL down 0.07 percent.

## THE WALTER AND ELIZA HALL INSTITUTE FOR MEDICAL RESEARCH

The Walter and Eliza Hall Institute says the protein MCL-1 is critical for keeping milk-producing cells alive and sustaining breast milk production, essential for mammalian survival.

The Institute said that Dr Nai Yang Fu, Prof Geoff Lindeman and Prof Jane Visvader led the research, which Prof Visvader said "unlocked one of the key survival factors in the mammary gland".

"MCL-1 is important for all stages of breast development, from puberty to pregnancy and lactation," Prof Visvader said.

"Based on this discovery, it is reasonable to believe that every mammal requires MCL-1 for milk production and, ultimately, the survival of their offspring," Prof Visvader said. The research, entitled 'EGF-mediated induction of Mcl-1 at the switch to lactation is essential for alveolar cell survival was published in Nature Cell Biology.

An abstract is at: <a href="http://www.nature.com/ncb/journal/vaop/ncurrent/full/ncb3117.html">http://www.nature.com/ncb/journal/vaop/ncurrent/full/ncb3117.html</a>. Dr Fu said MCL-1 levels increased dramatically in the breast within 12 hours of giving birth.

"We were able to use very sensitive technologies to determine that stem cells and luminal cells were the breast cells that most critically rely on MCL-1," Dr Fu said

"Luminal cells are the cells that line breast ducts and respond to hormones during puberty, pregnancy and lactation," Dr Fu said.

"It now seems clear that MCL-1 is integral to the survival of these cells," Dr Fu said. Prof Visvader said the discovery further underscored the importance of MCL-1 for cell survival.

"In addition to our discovery, a number of recent research studies at our institute have shown that MCL-1 is important for the survival of certain immune cells, and for the survival and growth of cancers including leukaemia and lymphoma," Prof Visvader said.

"Stem cells and luminal progenitor cells both require MCL-1 for their survival," Prof Visvader said.

"Our team has previously implicated both these cell types in some types of breast cancer, raising the question of whether MCL-1 is an important target for developing anti-cancer drugs," Prof Visvader said.

Prof Lindeman said the research also identified epidermal growth factor which worked in tandem with MCL-1 during lactation.

"[Epidermal growth factor] has emerged as a key inducer of MCL-1 at the switch to lactation," Prof Lindeman said.

"It will be important to determine whether this mechanism also operates in breast cancer, as this could reveal new ways of targeting the disease," Prof Lindeman said.

WEHI said that Prof Lindeman, Prof Visvader and their breast cancer research team had spent the past 15 years unravelling the secrets of normal breast development in a bid to improve the understanding and treatment of breast cancer.

"You cannot fully understand how breast cancers arise without understanding normal development in the breast," Prof Visvader said.

"This is an exciting time for our research team," Prof Visvader said.

"Some of the discoveries we have made on breast development and how it goes awry in cancer have helped to identify potential targets for therapy, leading to preclinical studies and clinical trials aimed at breast cancer treatment or prevention," Prof Visvader said. The work was carried out with Walter and Eliza Hall Institute bio-informaticians Aaron Lun, who is also a student at the University of Melbourne, Prof Gordon Smyth and Australian National University collaborators Rina Soetanto and Prof Thomas Preiss from the John Curtin School of Medical Research.

#### PRO MEDICUS

Pro Medicus co-founder and chief executive officer Dr Sam Hupert says the company's first half performance is just the beginning of its medical imaging business.

Dr Hupert said that the \$8.64 million revenue resulting in a net profit after tax of \$1.61 million for the six months to December 31, 2014 did not reflect expected payments from contracts already signed for its two and three dimensional imaging technology.

Dr Hupert said that the company was originally founded with Anthony Hall to provide information technology services, primarily in billing, to the health care sector, but in 2009 at the height of the Global Financial Crisis, Pro Medicus acquired the Berlin-based Visage Imaging from the US-based Mercury Computer Systems for \$US3.5 million.

Dr Hupert told Biotech Daily that the Visage Imaging software enabled "faster, more efficient, multi-plane views" of any form of imaging.

He said that streaming the data overcame the problems of having to download multigigabyte files and allowed physicians and clinicians to see any view of the computed tomography or positron emission tomography scans.

Dr Hupert said that the software had "speed, functionality and scalability" and had been sold to five US healthcare operators in deals ranging from \$5 million to \$20 million. Dr Hupert said that Pro Medicus had won a contract with an unnamed "very large US health system, employing 15,000 health professionals" to provide all their imaging services.

He said that the York, Pennsylvania-based Wellspan Health had acquired the Visage technology for primary diagnoses and clinical distribution of medical images in a seven-year contract with a base value of \$8 million.

Dr Hupert said that the company charged fees for the provision of the software package as well as a fee for each imaging use.

He said that the company employed 40 research and development staff in Berlin, 15 support and sales staff in the US, with 25 employees at the Melbourne head office. Dr Hupert said that for the first time the medical imaging business had overtaken the foundation information technology business.

Dr Hupert said that while the company was focused on marketing the high-speed imaging software in the US, it was already provided to two imaging services in Australia and had sales in Europe.

In its Half-Year report released to the ASX two weeks ago Pro Medicus said it would pay a one cent per share unfranked interim dividend and had cash reserves of \$14.6 million at December 31, 2014.

Pro Medicus was unchanged at \$1.45.

# **BENITEC BIOPHARMA**

Benitec says there have been no drug related adverse events in its trial of TT-034 for hepatitis C and the next two patients are expected to be dosed in the next two weeks. Benitec said the data safety monitoring board recommended that the trial continue. The company said that the next two patients in cohort 2 had completed extensive screening and were being prepared for dosing at Duke University's Medical School. Benitec said the two patients would receive a dose of 1.25 x 10<sup>11</sup> vector genome particle per kilogram (vg/kg), of the DNA-directed RNA-interference TT-034, a concentration that was a half log higher than the 4.0 x 10<sup>10</sup> vg/kg administered in the first cohort. The company said that the current dose was below that expected to inhibit viral replication and data from the second dosing cohort was primarily a further safety assessment. Benitec was up half a cent or 0.6 percent to 87 cents.

#### **BENITEC BIOPHARMA**

Benitec says it has received \$2,317,533 from the Australian Tax Office under the Federal Government Research and Development Tax Incentive program.

Benitec said the funds would be used for its therapeutic programs in gene silencing.

## **GENERA BIOSYSTEMS**

The Hunters Hill, Sydney-based Durbin Superannuation has increased its holding in Genera from 6,046,380 shares (7.28%) to 9,250,000 shares (9.44%).

The notice, signed by director Graham Durbin, did not disclose the cost of the shares. Genera was unchanged at 21.5 cents.

## **NANOSONICS**

Nanosonics has requested a trading halt "pending an announcement to the market concerning a material fundraising".

Trading will resume on March 5, 2015 or on an earlier announcement.

Nanosonics last traded at \$1.78.

## **PHYLOGICA**

Phylogica has told the ASX that it is not aware of any information it has not announced which, if known, could explain recent trading in its securities.

The ASX said the company's share price fell 0.8 cents, from 2.6 cents on February 23, to 1.8 cents on March 2, 2015 a 30.8 percent fall, and noted an increase in trading volume. Phylogica climbed 0.3 cents or 17.7 percent to two cents.

## THE BIO-MELBOURNE NETWORK

The Bio-Melbourne Network says Victoria's Minister for Small Business, Innovation and Trade Adem Somyurek will open its March 12 'Devices and Diagnostics Lab'.

The Network said that the full-day program, sponsored by the State Government would showcase organizations that were "delivering precise and personalized medicine" to patients and consumers.

The Network said that the sessions would explore the business case for product development and address some of the issues and barriers that the sector faces.

The Bio-Melbourne Network chief executive officer Dr Krystal Evans said that

"Melbourne's rapidly expanding [medical technologies] sector is actively engaged in the personalized healthcare space".

"The diversity of speakers reflects the breadth of expertise and experience that exists in Melbourne and the convergence of technologies required for personalized healthcare product development," Dr Evans said.

The Bio-Melbourne Network said that the March 12, 2015 Devices & Diagnostics Lab would be held at the Spring Street Conference Centre, 1 Spring Street, Melbourne, with registration from 8:30am and presentations from 9am to 5.30pm to be followed by networking drinks.

For more information and to register go to: http://www.biomelbourne.org/events/view/352.

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