

# **Biotech Daily**

# Thursday February 6, 2020

# Daily news on ASX-listed biotechnology companies

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# MARKET REPORT

The Australian stock market was up 1.05 percent on Thursday February 6, 2020, with the ASX200 up 73.1 points to 7,049.2 points. Sixteen of the Biotech Daily Top 40 stocks were up, 15 fell, eight traded unchanged and one was untraded. All three Big Caps were up.

Antisense was the best, up 0.8 cents or 13.3 percent to 6.8 cents with 4.8 million shares traded. Neuren climbed 7.9 percent; Actinogen was up 6.1 percent; Cynata improved 4.9 percent; Imugene, Nanosonics and Optiscan were up more than three percent; Avita, Pro Medicus and Resonance rose more than two percent; CSL and Immutep were up more than one percent; with Cochlear, Compumedics, Genetic Signatures, Next Science, Opthea, Resmed and Starpharma up by less than one percent.

This week's best, Uscom, led the falls, retreating three cents or 11.1 percent to 24 cents with 2.55 million shares traded. Osprey lost 8.3 percent; LBT was down 6.25 percent; Alterity fell five percent; Impedimed and Telix were down more than four percent; Proteomics was down 3.6 percent; Ellex and Oncosil shed more than two percent; with Clinuvel, Paradigm, Prescient and Volpara down more than one percent.

# BIOTECH DAILY EDITORIAL: 2019-NCOV CORONAVIRUS

Biotech Daily has been following the 2019-nCoV coronavirus news as closely as everyone else, but has been cautious on joining the bandwagon.

While impressed with the news from the Peter Doherty Institute that it had grown the virus, we have been aware that many major players have been working on tests, vaccines and drugs since the infection was first announced.

Uscom has seen a price surge, which executive chairman Prof Rob Phillips attributes to public knowledge that the company's Ultra-Sonic Cardiac Output Monitor (Uscom-1A) was used in China to measure patient cardiovascular health in the previous sudden acute respiratory syndrome (SARS) outbreak (see below).

Last week, the Salt Lake City, Utah-based Co-Diagnostics announced "the successful initial verification of its screening test designed to identify the presence of the novel coronavirus ... [which] will soon be ready for validation in, and subsequent distribution to, any appropriate venue across the globe".

Vaxart, the company formerly known as Melbourne's Biota, which developed and comarketed the Prof Peter Colman-invented Relenza, claimed it had "a program to develop a coronavirus vaccine candidate based on its proprietary oral vaccine platform, Vaast". The news helped pushed the company from a market capitalization of \$16 million to \$77 million.

Prof Colman, now with the Walter and Eliza Hall Institute of Medical Research, told Biotech Daily that "scientists, academics and laboratories in China are as advanced, and possibly better funded, than their Australian, European and US counterparts". According to Lodge Partners' analyst Marc Sinatra: "Every large pharma with antivirals, that actually work, is testing them against the virus or making them available to the Chinese for the virus".

"There are also a number of majors working on vaccines," Mr Sinatra said.

#### David Langsam Editor

#### **BIOTRON**

Biotron says it is "in the process of evaluating several promising compounds for activity against coronavirus, including the new novel strain known as 2019-nCoV".

In 2016, Biotron jumped 44.9 percent to 7.1 cents on news that it was investigating its compounds for efficacy against the Zika virus (BD: Feb 16, May 23, Aug 22, 2016). Sementis, Bharat and the University of South Australia and Eliminate Dengue said they were working on the Zika virus, Starpharma said its Vivagel condoms were active against Zika and Anteo said it had a test for Zika (BD: Feb 4, May 5, Aug 3, 2016).

Today, Biotron said its small molecule library had more than 30 compounds that showed activity against a range of coronaviruses, including those that caused the severe acute respiratory syndrome (SARS) coronavirus responsible for the 2003 outbreak.

The company said these compounds could reduce coronavirus levels by between 90 and 100 percent in infected cell cultures.

Biotron said it would test a set of compounds that showed broad-spectrum activity against the new 2019-nCoV strain, in response to the coronavirus outbreak in China.

The company said work would be done under contract in specialist laboratories with access to the new virus, isolated and made available in recent days.

Biotron said it was the first to identify and publish data showing that the E protein of the coronavirus was a virus-encoded protein called viroporin, a good target for antiviral drugs, and it had expertise in the design and development of drugs targeting viroporins. Biotron was up 1.8 cents or 21.95 percent to 10 cents with 91.5 million shares traded.

# <u>USCOM</u>

Uscom 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 rose 58.8 percent from 17.0 cents to 27.0 cents on February 5, 2020 and noted a significant increase in trading volumes.

According to ASX and Commsec data, Uscom closed at 11.5 cents on three days last week and was up 134.8 percent to 27.0 cents.

Uscom said there was speculation in online investment forums about the applicability of its Uscom 1A device, widely adopted for the management and monitoring of infectious diseases in intensive care units in China, to monitor coronavirus patients.

The company said it could not provide further information about the direct impact of the coronavirus on sales of its Uscom 1A device, but it had a long-established presence in China and was well positioned for use of the device in Chinese hospitals.

Uscom led the falls, retreating three cents or 11.1 percent to 24 cents with 2.55 million shares traded.

# CHILDREN'S MEDICAL RESEARCH INSTITUTE

The Children's Medical Research Institute says it will develop affinity ligands for the purification of adeno-associated viral vectors for gene therapies with GE Healthcare. The Sydney-based CMRI said that the collaboration would boost the efficiency of adeno-associated viral (AAV) purification, leading to increased access to the viral vectors needed to manufacture gene therapies.

The Institute said that the focus of the collaboration was "to bring to market specific ligands for multiple AAV types, enhancing the chromatographic separation of AAV-based vectors".

"This will improve the manufacturing efficiency and scalability of gene therapies, enabling the availability of viral vectors on a global scale," CMRI said.

The Institute said that with more than 800 gene therapies in clinical trials, there was an increasing demand for the raw materials needed in the manufacturing process of viral vectors.

CMRI said that AAVs were viral vectors used in more than 70 percent of the in-vivo gene therapy clinical trials, with the in-vivo therapeutic market expected to reach \$US32 billion with an estimated compound annual growth rate of 105 percent between 2019 and 2025. The Institute said the collaboration combined the expertise from the latest available research on AAVs with application testing, advancing a comprehensive understanding of the clinical functionality and the commercial opportunities of AAV-based gene therapies. The Children's Medical Research Institute said it would share with GE Healthcare Life Sciences AAV capsid variants targeting different tissues and GE would design and test ligand prototypes, which Children's Medical Research Institute would assess.

The Institute said that based on the results, GE Healthcare would manufacture and commercialize novel improved AAV affinity ligands.

CMRI lead gene therapy scientist Dr Leszek Lisowski said that "bringing the fruits of our work to the patients requires a joint effort between academia and the industry".

"The collaboration with GE Healthcare Life Sciences will allow us to expedite the development of novel clinical options at a lower cost," Dr Lisowski said

The Institute said that the AAV affinity ligands resulting from the collaboration would be compatible with GE Healthcare's resin-based chromatography portfolio used in the purification of most US FDA-approved biopharmaceuticals.

# ANTISENSE THERAPEUTICS

Antisense says that the positive results from its phase II trial of ATL1102 for Duchenne muscular dystrophy has opened the way for other inflammation-related indications. Last year, Antisense jumped 46.3 percent to 12 cents when the nine-patient Duchenne muscular dystrophy trial showed safety, tolerability and efficacy (BD: Dec 17, 2019). Today, the company said that ATL1102 was an antisense inhibitor of CD49d, a subunit of very late antigen-4 (VLA-4) and that CD49d expression had shown activity in animal models of inflammatory disease, including asthma, arthritis and multiple sclerosis. In 2008, Antisense licenced ATL1102 to Israel's Teva, which subsequently reported statistically significant phase II trial results for multiple sclerosis, but Teva returned the drug in 2010 (BD: Jun 30, 2008; Mar 24, 2010).

Today, Antisense said ATL1102 had potential for other neuroinflammatory and muscular dystrophy disorders and it was consulting with clinical experts on next steps for ATL1102 for multiple sclerosis, was re-engaging with pharmaceutical companies to discuss partnering opportunities for multiple sclerosis, and was investigating sources of nondilutive grant funding for a phase IIb trial of ATL1102 for the disease.

The company said it had filed further patents for ATL1102 in relation to multiple sclerosis as well as new applications for muscular dystrophies other than Duchenne's.

Antisense was up 0.8 cents or 13.3 percent to 6.8 cents with 4.8 million shares traded.

#### **INVITROCUE**

Invitrocue says it has completed a Germany patient validation study, has an agreement with Xylonix for its Himice service and is developing a new testing platform.

Invitrocue said it had completed phase I or cohort one of its patient validation study with the Technical University of Munich (TUM) Rechts der Isar and was able to generate patient cancer tumor organoids for drug testing with an 82 percent report generation success rate (BD: Sep 25, 2019).

The company said this provided the pathway for clinical use and allowed for the commencement of its final phase of cohort two cancer patients.

Invitrocue said its agreement with immunotherapy development company Xylonix Pte Ltd to use its Himice service for immunotherapy drug development would not guarantee sales, but it hoped the agreement could lead to significant orders.

The company said its new oncology testing platform would integrate its oncology patientderived organoids (Onco-PDOs) and Himice technologies and allow immunotherapy drugs to be tested in addition to, or concurrently with, chemotherapy drugs.

Invitrocue said Onco-PDOs would be able to be expanded and transplanted into Himice with a functional human immune system, to provide an assessment and response of immunotherapy drugs on patient cancer cells, and it would begin a validation study for both clinical and pharmacological applications.

Invitrocue was in a suspension and last traded at six cents.

# CYNATA THERAPEUTICS

Cynata says the Israel Patent Office has allowed a patent for its Cymerus mesenchymal stem cell technology.

Cynata said the patent, titled 'Methods and materials for haemato-endothelial differentiation of human pluripotent stem cells under defined conditions' would protect its intellectual property until March 12, 2034.

Cynata was up 5.5 cents or 4.9 percent to \$1.185.

## SIENNA CANCER DIAGNOSTICS

Sienna says that Stockholm's Addlife AB subsidiary Immuno Diagnostic Oy will distribute its human telomerase reverse transcriptase (hTERT) test in Finland.

Sienna said that the Hämeenlinna, Finland-based Immuno Diagnostic Oy would sell the hTERT test to Finnish pathology laboratories to assist pathologists in the diagnosis of bladder cancer.

The company said about 40,000 urine cytology tests were performed in Finland each year. Sienna said that Immuno Diagnostic Oy was its fourth distributor appointment in Europe. Sienna fell 0.3 cents or seven percent to four cents.

## **G MEDICAL INNOVATIONS HOLDINGS**

G Medical says it has a 12-month distribution agreement with Milan's Meditel srl to promote, sell and distribute its Prizma device and extended Holter in Italy.

G Medical said Meditel was a European telemedicine provider with access to more than 500 pharmacies across Italy.

The company said that both companies would explore ways to implement its devices and monitoring capabilities into Meditel's existing telemedicine products.

G Medical said Meditel had engaged three third-party providers to progress

implementation and promotional services and registration approval from Italy's Ministry of Health was progressing.

G Medical was up 1.5 cents or 13.6 percent to 12.5 cents with 4.3 million shares traded.

## CRESO PHARMA

Creso says it has developed oil-free, water-based, plant-based gum arabicum marijuana lozenges.

Creso said "the technological breakthrough" would extend its Cannaqix product line. The company said that the new products used natural hemp plant and provided an "entourage effect", in which various compounds worked together to strengthen the key benefits, including to manage stress and improve well-being.

Creso said it planned to distribute the new products with different commercial partners in several countries, and should be ready for launch by October 2020.

Creso chief executive officer Dr Miri Halperin Wernli said the company was "proud of having successfully developed this innovative oil-free hemp plant-based technology".

"The new products contain hemp compounds which are already approved for use in consumer products," Dr Wernli said.

"Importantly, this means that we have an additional path to market for our hemp-based food supplements without the need for regulatory approval," Dr Wernli said.

Creso was up 1.5 cents or 10 percent to 16.5 cents with two million shares traded.

# SIENNA CANCER DIAGNOSTICS

Sienna says it has appointed chief financial officer and company secretary Tony Di Pietro as an executive director.

Sienna said Mr Di Pietro was an accountant, with more than 20 years' experience in accounting and finance, including 15 years in the biotechnology industry.

The company told Biotech Daily that Mr Di Pietro held a Bachelor of Business from Melbourne's Swinburne University.

## AMPLIA THERAPEUTICS

Amplia says Dr Christian Behrenbruch, Simon Wilkinson and Andrew Cooke have resigned as directors with chief executive officer Dr John Lambert appointed a director. Amplia said that Dr Lambert had been appointed managing-director and Mr Cooke would remain as company secretary.

The company told Biotech Daily that the board would be chair Dr Warwick Tong, with Dr Christ Burns, Dr Robert Peach and Dr Lambert as directors.

Dr Tong said that following the Amplia back-door listing into Innate and the recent capital raise "we feel it is an ideal time to streamline the board".

"The reduced size of the Amplia board also opens the opportunity for the near-term hiring of an additional non-executive director to ... begin to address the company's lack of diversity in the boardroom," Dr Tong said.

Amplia was unchanged at 7.2 cents.

#### G MEDICAL INNOVATIONS HOLDINGS

G Medical says Brett Tucker has replaced Steven Wood as company secretary, effective immediately.

G Medical said Mr Tucker was an accountant and had technology industry experience with several ASX-listed companies.