

# Biotech Daily

Tuesday March 10, 2020

# Daily news on ASX-listed biotechnology companies

- \* ASX, BIOTECH UP: LBT UP 24%; ALTERITY DOWN 14%
- \* CMRI COLLABORATION REPURPOSES STEMETIL FOR CANCER IN MICE
- \* BRANDON ET AL \$53m FOR GEORGE INSTITUTE FOR CHRONIC DISEASES
- \* REDHILL LAUNCHES TALICIA FOR HELICOBACTER PYLORI
- \* JAPAN ALLOWS CYNATA CYMERUS STEM CELL PATENT
- \* MESOBLAST TO EVALUATE STEM CELLS FOR COVID-19 CORONAVIRUS
- \* NEUREN: NNZ-2591 PHELAN-MCDERMID MOUSE TRIAL SIGNIFICANCE
- \* ADALTA: 'TARGETING CXCRA COULD BE EFFECTIVE IN FIBROSIS'
- \* MEDADVISOR: UK PHARMACY ASSOCIATION BACKS REMINDER SERVICE
- \* CRESO REQUESTS 'MERNOVA MANAGEMENT' TRADING HALT
- \* MEDADVISOR: SWINNERTON, WAVEY, KOJENT, ROMIDA SUBSTANTIALS
- \* ONE FUNDS MANAGEMENT TAKES 7% OF BLUECHIIP
- \* RACE APPOINTS PROF DIDIER BLAISE ADVISOR

#### MARKET REPORT

The Australian stock market recovered 3.11 percent on Tuesday March 10, 2020, with the ASX200 up 179.0 points to 5,939.6 points. Twenty of the Biotech Daily Top 40 stocks were up, 14 fell and six traded unchanged.

LBT was the best, up 2.5 cents or 23.8 percent to 13 cents with 1.7 million shares traded. Mesoblast climbed 19.7 percent; Proteomics rose 18.75 percent; Orthocell was up 8.9 percent; Cynata improved 7.45 percent; Genetic Signatures, Kazia, Neuren and Paradigm were up more than six percent; Volpara rose 5.3 percent; Clinuvel, CSL and Polynovo climbed more than four percent; Next Science, Resonance and Starpharma were up more than three percent; Actinogen and Resmed rose two percent or more; Pro Medicus was up 1.4 percent; with Ellex, Opthea and Telix up by less than one percent.

Alterity led the falls, down 0.2 cents or 14.3 percent to 1.2 cents, with 57,050 shares traded. Osprey lost 12.5 percent; Antisense fell 10.2 percent; Optiscan and Uscom were down more than eight percent; Patrys shed 6.25 percent; Cyclopharm and Impedimed fell more than five percent; Oncosil fell four percent; Immutep shed 2.9 percent; Amplia, Medical Developments and Pharmaxis were down more than one percent; with Cochlear and Nanosonics down by less than one percent.

#### CHILDREN'S MEDICAL RESEARCH INSTITUTE

The Children's Medical Research Institute says endocytosis inhibitors with immunooncology therapies increase the response to cancer drugs in mice and human tissue. The Institute said that, in a collaboration with the Universities of Queensland, Sydney and Newcastle, researchers found that the use of endocytosis inhibitors, and in particular, dynamin inhibitors, promoted drug-target availability on the surface of tumor cells. The CMRI said that University of Queensland researchers used prochlorperazine, marketed in Australia as the anti-nausea drug Stemetil, to show it improved immune cellmediated killing of tumor cells for three separate immunotherapies, cetuximab (anti-EGFR), trastuzumab (anti-HER2), and avelumab (anti-PD-L1).

The Institute said that the University of Queensland data showed that the combination therapy reversed resistance to the immune-oncology drug and induced resistance to rechallenge with new tumors, providing long-term protection, without further therapy. CMRI head of cell signalling Prof Phil Robinson said the data was "proof of principle that treatment of patients with a dynamin inhibitor can prevent internalization of receptors on tumors in patients".

"We now know that there are existing endocytosis inhibitor drugs whose off-target effects can be used and tested in future trials," Prof Robinson said. "Our focus is to develop the next generation of these drugs, which will be more specific, more potent, with fewer side-effects and which can reach more people".

Prof Robinson said safety had been shown for the mode of action of endocytosis inhibition and used in combination with immune-oncology therapies, could improve their success rate, including potentially in patients for whom immunotherapy has previously failed. "Now, we just need to prove its efficacy in rigorous phase II trials and get our new candidate dynamin inhibitor drugs into the clinical pipeline," Prof Robinson said. CMRI said that the researchers collaborated on the project which produced a report, titled 'Endocytosis Inhibition in Humans to Improve Responses to ADCC-Mediating Antibodies' which was published in the journal Cell and the full text is available at: https://www.cell.com/cell/fulltext/S0092-8674(20)30163-X.

CMRI said that immuno-oncology therapies worked by binding to specific receptors on the surface of cancer cells, activating the patient's immune response to recognize and selectively kill the tumor.

"If the majority of target receptors for the cancer drug are internalized and are not located on the cell surface when the cancer treatment is administered, the therapy is either ineffective or patients respond poorly," the Institute said.

CMRI said that in pre-clinical models, the addition of an endocytosis inhibitor reduced or prevented internalization and increased the exposure of target receptors on the tumor cell surface for the immuno-oncology therapy to bind.

"Our drug development teams at CMRI and [the University of Newcastle] have been working for over a decade on a new class of endocytosis inhibitor drugs which will be much more potent and specific than the drug used in the current study, with the aim of producing fewer side effects while still having the same potential impact on the efficacy of the immuno-oncology therapy," Prof Robinson said.

"Now, we just need to prove its efficacy in rigorous phase II trials and get our new candidate dynamin inhibitor drugs into the clinical pipeline," Prof Robinson said. CMRI said that investment was being sought to advance programs of work on the existing drug prochlorperazine and candidate new chemical entities.

The Institute said that the immuno-oncology therapy market was \$US54 billion in 2018 and expected to reach \$US157 billion by 2027.

# BRANDON CAPITAL THE GEORGE INSTITUTE FOR GLOBAL HEALTH

Brandon Capital says Sydney's George Institute has received \$53 million to develop treatments for heart disease, high blood pressure, and diabetes.

Brandon said the investments came from its Medical Research Commercialisation Fund, the British United Provident Association (Bupa), and Federation Asset Management. The company said that the investments would "fast-track the growth of George Health Enterprises, the institute's commercial arm, and George Medicines, its late-stage drug development company".

Brandon said that George Health would receive \$33 million from Federation Asset Management and Bupa to accelerate the development of an innovative drug and technology pipeline from the George Institute's research program and \$20 million from its MRCF.

The media release said that the George Institute pipeline included an oral drug for high blood pressure, trialed by the institute, with a low-dose triple pill approach shown to outperform traditional high blood pressure treatments without additional side effects. Brandon said the MRCF \$20 million would be matched by \$20 million from George Health to develop and commercialize drug treatments for heart disease, high blood pressure and diabetes.

George Medicines director and Brandon Capital senior investment manager Dr Ingmar Wahlqvist said that George Medicines had the "potential to revolutionize the ease of use, accessibility and affordability of medicines for cardiovascular and metabolic disease, in both the developed and developing worlds".

# REDHILL BIOPHARMA

Redhill says it has launched its Talicia, formerly RHB-105 or Heliconda, delayed-release capsules, for helicobacter pylori infection

In 2010, Israel's Redhill bought Myoconda (RHB-104), Heliconda (RHB-105) and Picoconda (RHB-106) from Sydney's Giaconda (BD: Aug 17, 2010).

Redhill chief commercial officer Rick Scruggs said patients in its phase III trial had "90 percent efficacy while taking Talicia."

"We are in the process of finalizing agreements with national payers and have put in place patient support programs to ensure patients and physicians have access to Talicia," Mr Scruggs said.

Redhill said that helicobacter pylori infection affected about 35 percent of the US population and was the strongest known risk factor for gastric cancer.

On the Nasdaq, Redhill fell 49 US cents or 10.40 percent to \$US4.22 (\$A6.43) with 167,844 shares traded.

#### CYNATA THERAPEUTICS

Cynata says the Japanese Patent Office has allowed a patent application covering 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 cover the ability to manufacture mesenchymal stem cells from a single donation to create therapeutic stem cell products and provided commercial rights until March 12, 2034. The company said that the patent was owned by the University of Wisconsin–Madison's Wisconsin Alumni Research Foundation which it had licenced.

Cynata was up six cents or 7.45 percent to 86.5 cents.

### **MESOBLAST**

Mesoblast says it will evaluate its allogeneic mesenchymal stem cell product Remestemcel-L for acute respiratory distress syndrome caused by Covid-19.

Mesoblast said it would assess patients affected by Covid-19, or coronavirus, in the US, Australia, China and Europe, pending discussions with regulatory authorities, medical institutions and pharmaceutical companies.

Mesoblast said that "an investigator-initiated clinical study conducted in China … reported that allogeneic MSCs cured or significantly improved functional outcomes in all seven treated patients with severe COVID-19 pneumonia".

The company said analysis of a 60-patient study in chronic obstructive pulmonary disease showed that remestemcel-L infusions were "well-tolerated, significantly reduced inflammatory biomarkers, and significantly improved pulmonary function in those patients with elevated inflammatory biomarkers" also seen in COVID-19 cases.

Mesoblast was up 36 cents or 19.7 percent to \$2.19 with 9.3 million shares traded.

#### **NEUREN PHARMACEUTICALS**

Neuren has detailed the results released last week in its six-week dose escalation trial of NNZ-2591 for Phelan-McDermid syndrome in mice.

Last week, Neuren said the trail showed a dose response at four dose levels in mice, showed greater efficacy than a previous three-week trial, and identified an undisclosed optimum dose (BD: Mar 6, 2020).

Today, the company said it tested 100 mice in 10 groups to compare wild type mice, or normal mice, receiving placebo, against knockout mice, with the SHANK3 gene deleted to simulate Phelan-McDermid syndrome, receiving placebo or four dose levels of NNZ-2591. Neuren said the knockout mice receiving the two higher doses "were not statistically different" when compared to the wild type mice receiving placebo across eight separate behavioral tests (p > 0.05).

The company said this indicated that the treated knockout mice in the two higher dose groups "were indistinguishable from the normal mice".

Neuren said that the knockout mice receiving placebo or the two lower doses of NNZ-2591 "were statistically significantly different" when compared with the wild type plus vehicle group (p < 0.05).

The company did not provide the dose levels, but said the results would be used to inform dose selection for its planned clinical trials.

Neuren was up 11 cents or 6.6 percent to \$1.77.

# **ADALTA**

Adalta says that targeting C-X-C motif chemokine receptor 4 (CXCR4) "could be an effective therapeutic strategy in fibrotic disease".

Adalta said that CXCR4 was the G-protein coupled receptor targeted by Adalta's lead product candidate, AD-214.

The company said Adalta chief scientific officer Prof Michael Foley wrote a book chapter titled 'Emerging role of CXCR4 in fibrosis' which discussed how CXCR4 could be used for fibrotic disease and focussed on the role of CXCR4 in fibrosis of the lung, kidney and eye. Adalta said that the chapter was included in a book titled 'Antifibrotic Drug Discovery', published by the Royal Society of Chemistry, with an abstract available at: <a href="https://pubs.rsc.org/en/content/chapter/bk9781788015103-00211/978-1-78801-510-3">https://pubs.rsc.org/en/content/chapter/bk9781788015103-00211/978-1-78801-510-3</a>.

Adalta was up 0.9 cents or 12.9 percent to 7.9 cents.

#### **MEDADVISOR**

Medadvisor says the UK National Pharmacy Association has endorsed its prescription reminder service as the recommended supplier for pharmacy digital applications. Medadvisor said the National Pharmacy Association represented 80 percent of independent UK pharmacy members.

The company said it would provide its pharmacy medication reminder software Plusone and the Medadvisor smartphone application to the member pharmacies.

Medadvisor chief executive officer Robert Read said that "the UK market is a highly attractive market given the size and similarities to the Australian market".

"The NPA membership base on its own is larger than the Australian pharmacy market and therefore creates a significant opportunity for the business," Mr Read said.

Medadvisor was up 15 cents or 51.7 percent to 44 cents.

# **CRESO PHARMA**

Creso has requested a trading halt "pending an announcement regarding a change in management of the company's subsidiary, Mernova Medical".

In 2018, Creso said it had completed the acquisition of the Nova Scotia, Canada-based medical marijuana producer Mernova Medical (BD: Feb 19, 2018).

Trading will resume on March 12, 2020 or on an earlier announcement.

Creso last traded at seven cents.

#### **MEDADVISOR**

Medadvisor says it has filed a series of substantial shareholder notices for founding shareholders who "inadvertently failed to provide required information".

Medadvisor said the estate of the late Viv Swinnerton was increased and diluted from 15,262,500 (15.6%) to 25,008,943 (13.3%).

Substantial shareholder notices signed by the executor of Ms Swinnerton's estate, Medadvisor executive director, and Wavey Industries director Joshua Swinnerton said that the shares were transferred to the Melbourne-based Wavey, then diluted from 13.3 percent to 10.2 percent.

In a substantial shareholder notice signed by Medadvisor and Kojent Pty Ltd director, Jim Xenos, Kojent said it had increased but been diluted in Medadvisor from 12,535,714 shares (12.8%) to 20,540,866 shares (8.4%).

A substantial shareholder notice for Melbourne's Romida Enterprises Pty Ltd signed by Roxanne da Gama, said it had increased and been diluted in Medadvisor from 8,357,143 shares (8.5%) to 13,693,911 shares (5.6%).

## **BLUECHIIP**

Sydney's One Funds Management says it has increased substantial shareholding in Bluechiip from 34,000,000 shares (5.73%) to 40,000,000 shares (6.74%).

One Funds Management said it bought shares between February 12 and March 9, 2020 with the single largest purchase on February 20, 2020 of 2,142,846 shares on for \$236,232 or 11 cents a share.

Bluechiip was up 0.4 cents or 5.2 percent to 8.1 cents.

### RACE ONCOLOGY

Race says it has appointed haematology oncologist Prof Didier Blaise to its clinical advisory board.

Race said Prof Blaise would "play a critical role" in the company's implementation of its 5-Path clinical strategy to conduct US and Australian clinical trials of Bisantrene for acute myeloid leukaemia.

The company said Prof Didier was a professor of medicine at the Marseille, France-based Aix-Marseille University, the chairman of the Marseille University Haematology Department, and had conducted numerous haematopoietic stem cell transplantation and oncology clinical trials.

Race fell one cent or 2.7 percent to 36 cents.