



# Biotech Daily

Monday June 4, 2018

*Daily news on ASX-listed biotechnology companies*

- \* **ASX, BIOTECH UP: OPTISCAN UP 14%; ADMEDUS DOWN 15%**
- \* **CLINICAL GENOMICS RAISES \$33m FOR COLORECTAL CANCER TEST**
- \* **WEHI 'SEES' SOCS1 SWITCH-OFF CELL SIGNALS FOR CANCER DRUGS**
- \* **GOODBYE VIRALYTICS**
- \* **US PATENT FOR REDHILL EBOLA DRUG**
- \* **ADMEDUS SHARE PLAN RAISES \$2.8m, TOTAL \$8.8m**
- \* **APPLICATIONS OPEN FOR FEDERAL GLOBAL CONNECTIONS GRANTS**
- \* **ITALCERT APPROVES NEUROTECH MENTE AUTISM UPGRADE**
- \* **AVITA REQUESTS 'CAPITAL RAISING' TRADING HALT**
- \* **PAINCHEK APPOINTS PROF JENNIFER ABBEY ADVISOR**

## MARKET REPORT

The Australian stock market was up 0.59 percent on Monday June 4, 2018 with the ASX200 up 35.1 points to 6025.5 points. Seventeen of the Biotech Daily Top 40 stocks were up, 14 fell, five traded unchanged and four were untraded.

Optiscan was the best, up 0.9 cents or 13.85 percent to 7.4 cents with 520,506 shares traded. Immutep climbed 7.9 percent; Cynata was up 6.4 percent; Factor rose 5.8 percent; Dimerix, LBT, Nanosonics and Opthea improved more than four percent; Airxpanders, Osprey, Prescient and Volpara were up more than three percent; Impedimed, Mesoblast, Pro Medicus and Starpharma rose two percent or more; CSL and Mesoblast were up more than one percent; with Resmed and Viralytics up less than one percent.

Admedus led the falls, down 4.5 cents or 14.5 percent to 26.5 cents with 3.6 million shares traded. Compumedics lost 7.6 percent; Prana shed 6.4 percent; Bionomics and Oncosil fell more than five percent; Benitec and Polynovo were down more than three percent; Orthocell and Universal Biosensors shed more than two percent; Cochlear, Ellex and Neuren lost more than one percent; with Clinuvel, Cyclopharm and Medical Developments down by less than one percent.

## CLINICAL GENOMICS TECHNOLOGIES

Clinical Genomics says it has raised \$33 million for its Colvera blood test for recurrent colorectal cancer and for its use in colorectal cancer screening.

Clinical Genomics said that new investors including Sydney's Moelis Australia Asset Management and Regal Funds joined existing shareholders Oneventures and the New Jersey-based Quest Diagnostics and in the funding round.

The company said that its blood test identified the "DNA of tumor cancer cells in circulating blood".

Clinical Genomics said that following the development of its faecal immunochemical test it had recently launched its US Food and Drug Administration-cleared Insure One with Quest (BD: Feb 5, 2018).

Quest oncology general-manager Kristie Dolan said that "Colvera, like Insure One, has potential to enhance the early detection of colorectal cancer, serving a major clinical need that could improve patient outcomes".

Clinical Genomics chief executive officer Dr Lawrence LaPointe said that "the reception we've had from clinicians and patients suggest terrific potential as we invest the capital raised to demonstrate the clinical and economic benefit of using liquid biopsy tests such as Colvera for both colorectal cancer monitoring and screening".

The company said that Moelis was its financial advisor.

Clinical Genomics is a private company.

## THE WALTER AND ELIZA HALL INSTITUTE OF MEDICAL RESEARCH

The Walter and Eliza Hall Institute says that visualizing the protein SOCS1 switching-off cell-signalling to dampen immune responses could lead to new anti-cancer drugs.

WEHI said that the atomic-level structure of SOCS1 binding to its partner protein JAK "could guide the development of drugs that alter disease-causing cell-signalling pathways, and may have applications for treating some blood cancers, including leukaemias".

The Institute said its researchers used structural biology to visualise how SOCS1 bound to JAK proteins "in never-before seen detail" and the detailed structure might guide the development of drugs to modify JAK activity, amplifying or dampening cell responses, with potential applications in cancer therapies.

WEHI said the research, titled 'The molecular basis of JAK/STAT inhibition by SOCS1' led by Dr Nick Liao, Dr Nadia Kershaw, Prof Jeff Babon and Prof Nick Nicola was published in Nature and was available at: <https://www.nature.com/articles/s41467-018-04013-1>.

Dr Liao said the structure of the protein pair showed how SOCS1 bound to JAK proteins to disable signalling.

"Using the Australian Synchrotron and the CSIRO Collaborative Crystallisation Centre, we produced an incredibly detailed view of how SOCS1 interacts with the JAK1 protein," Dr Liao said.

"With this image, we were able to explain for the first time why JAK proteins cannot signal when bound to SOCS1," Dr Liao said.

"This information could help to underpin the development of new medicine targeting this important cell signalling pathway," Dr Liao said.

Dr Kershaw said that both SOCS1 and JAK proteins had been implicated in driving diseases including cancer and inflammatory conditions.

"In particular, overactive JAK signalling is linked to the development of cancer-like conditions called myeloproliferative neoplasms, which include polycythemia vera, essential thrombocythemia and primary myelofibrosis, as well as certain acute childhood leukaemias," Dr Kershaw said.

## VIRALYTICS

Viralytics says its scheme of arrangement for Merck Inc to acquire the company for \$502 million has been approved and tomorrow will be its last trading day on the ASX.

Viralytics said the Federal Court of Australia had approved the scheme of arrangement for Merck Sharp & Dohme (Holdings) Pty Ltd to acquire all of its shares at a \$1.75 a share for its Cavatak oncolytic immunotherapy (BD: Feb 22, 2018).

The company said it expected to lodge a copy of the Court Orders with the Australian Securities and Investments Commission on June 5, 2018, at which time the scheme would become effective and it would apply for its shares to be suspended from trading.

Viralytics was up half a cent or 0.3 percent to \$1.745.

## REDHILL BIOPHARMA

Israel's Redhill says the US Patent and Trademark Office has issued a patent covering its experimental therapy for the treatment of Ebola virus disease until 2035.

Redhill did not disclose the title of the patent but the USPTO website said that Redhill chief executive officer Dror Ben-Asher, chief business officer Guy Goldberg and head of research and development Dr Reza Fathi were the authors of a patent titled 'Therapy for inhibition of single-stranded RNA virus replication'.

The USPTO site abstract said that it covered "pharmaceutical compositions showing the ability to inhibit or suppress replication of a filovirus in an individual are disclosed".

"The disclosed compositions are useful for treating, preventing, or reducing the spread of infections by filovirus," the USPTO said.

"A method includes administering at least one agent of the present disclosure to an individual infected with or exposed to a filovirus, wherein the step of administering is carried out for a suitable time period so that the individual is treated; and determining whether the individual has been treated, wherein the step of determining includes one of measuring an inhibition in viral replication, measuring a decrease in viral load, or reducing at least one symptom associated with the filovirus," the USPTO said.

Redhill said it had a research collaboration with the US National Institute of Allergy and Infectious Diseases and had "completed a proof-of-concept study to evaluate its proprietary experimental therapy for the treatment of Ebola virus disease".

"The study evaluated survival outcomes and assessed disease severity through the comparison of viral loads in active treatment arms and placebo... [and] demonstrated a statistically significant difference in survival outcomes of the active arm versus placebo arm," Redhill said.

The company said that Ebola was a severe and often fatal illness which could cause severe haemorrhagic fever in humans and had a mortality rate ranging from 25 percent to 90 percent and there were no FDA-approved treatments.

Redhill said it had applied for additional support from the US Biomedical Advanced Research and Development Authority (BARDA) to fund a second study to evaluate the potential efficacy of the therapy.

The company said that if successful, the study was intended to provide data for discussions with the US Food and Drug Administration for the potential use of the Animal Rule pathway for approval, in which approval could be pursued if human efficacy studies could not be conducted it was unethical or not feasible.

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

On the Nasdaq on Friday, Redhill was up 11 US cents or 1.54 percent to \$US7.25 (\$A9.515) with 68,390 shares traded.

## ADMEDUS

Admedus says its share plan at 30 cents a share has raised \$2,761,072 taking the total raised with its \$6 million placement to \$8,761,072 (BD: May 10, 2018).

In May, Admedus said it required shareholder approval for 2,333,333 shares subscribed by the company's directors.

Today, the company said that the funds would be used "to facilitate further expansion and acceleration of its new product pipeline".

Admedus fell 4.5 cents or 14.5 percent to 26.5 cents with 3.6 million shares traded.

## FEDERAL GOVERNMENT

The Federal Government says that Australian researchers and businesses have 10 days to register for grants of up to \$50,000 to expand their work overseas.

A media release from the Federal Minister for Jobs and Innovation Senator Michaelia Cash said the third round of the Global Connections Fund Bridging Grants had opened for applications for between \$25,000 and \$50,000 "to help viable Australian projects to grow in scope and scale, and to test commercialization".

Senator Cash's media release said that the Bridging Grants helped researchers "build strong relationships with international partners, leading to the translation of knowledge and intellectual property into market-ready products and services ... [and] help existing small-to-medium Australian businesses work with researchers overseas, leveraging their academic expertise to help them compete internationally".

"Through initiatives such as the Global Connections Fund, the Turnbull Government is helping Australian businesses and researchers collaborate with global partners on projects that build our economy and create job opportunities," Senator Cash said.

"The Government's Bridging Grants give our top innovators the support they need to grow their great ideas into viable businesses," Senator Cash said.

The media release said that applications for eligibility testing would close on June 14, with final applications closing on June 28, 2018.

For more information go to: <https://globalconnectionsfund.org.au/bridge-grants/>.

## NEUROTECH INTERNATIONAL

The Malta-based Neurotech says that its Conformité Européenne (CE) mark recognised body Italcert has approved improvements to its Mente Autism device.

Neurotech said that the Milan, Italy-based Italcert approval meant it could progress the production process of the next batch of Mente Autism electro-encephalogram (EEG) training systems for autism, expected this month and then release the product in Europe.

The company said that the upgrade included "improvements to wi-fi connectivity, synchronization and usability linked to the firmware and the Mente Autism application".

Neurotech chief executive officer Wolfgang Storf said the approval was "another important milestone for the company".

Neurotech was up half a cent or 3.3 percent to 15.5 cents.

## AVITA MEDICAL

Avita has requested a trading halt pending an announcement regarding "a potential capital raising".

Trading will resume on June 6, 2018 or on an earlier announcement.

Avita last traded at 5.2 cents.

## PAINCHEK

Painchek says it has appointed the author of the Abbey pain scale, Prof Jennifer Abbey, as an advisor effective from June 1, 2018.

Paincheck said that the Abbey pain scale was “most widely used in Australian residential care facilities to assess pain for people with dementia who are unable to verbalise their needs in a meaningful way”.

The company said that Prof Abbey was a foundation director of one of the three National Dementia Collaborative Research Centres established under the Federal Government's National Dementia Initiative and was Queensland's first professor of aged care) nursing at the Queensland University of Technology and the Prince Charles Hospital.

Painchek said that Prof Abbey would provide “support in expanding clinical indications including dementia care, palliative care, delirium and other cognitive impairment conditions liable to hamper pain identification and assessment”.

The company said that Prof Abbey qualified as a Registered Nurse in the UK and held a Bachelor of Education in nursing from the Armadale, New South Wales University of New England, as well as a Doctor of Philosophy from Geelong's Deakin University

Painchek was up 0.4 cents or 7.3 percent to 5.9 cents.