



# Biotech Daily

Tuesday November 7, 2017

*Daily news on ASX-listed biotechnology companies*

- \* **ASX UP, BIOTECH EVEN: COMPUMEDICS UP 6%; NEUREN DOWN 8%**
- \* **BIOTECH DAILY 12<sup>th</sup> BIRTHDAY EDITORIAL**
- \* **AVITA RIGHTS ISSUE RAISES \$12.4m, TOTAL \$16.9m**
- \* **LIVING CELL US PERICYTE PATENT APPLICATION FOR NEUROLOGY**
- \* **CLINUVEL PLEADS SCHULTZ TO ASX 11% QUERY**
- \* **CRESO, WOLLONGONG UNI STUDY CANNABIS EFFECT ON CNS**

## MARKET REPORT

The Australian stock market climbed 1.02 percent on Melbourne Cup Day, Tuesday November 7, 2017 with the ASX200 up 60.5 points to 6,014.3 points, breaking the 6,000 barrier for the first time since January 2008.

Fifteen of the Biotech Daily Top 40 stocks were up, 14 fell, 10 traded unchanged and one was untraded. All three Big Caps were up.

Compumedics was the best, up two cents or 5.7 percent to 37 cents with 310,493 shares traded, followed by Living Cell up 5.1 percent to 20.5 cents with 2.3 million shares traded.

Prana and Reva climbed more than four percent; Genetic Signatures, Nanosonics and Oncosil were up more than three percent; Clinuvel, Dimerix, Osprey, Psivida and Sirtex rose more than two percent; Cochlear, CSL, Polynovo and Pro Medicus were up more than one percent; with Mesoblast and Resmed up by less than one percent.

Neuren led the falls, down one cent or eight percent to 11.5 cents with 1.6 million shares traded.

Avita and Viralytics lost more than five percent; Admedus, Cellmid and Opthea fell more than four percent; Ellex, LBT and Orthocell were down more than three percent; Medical Developments shed 2.7 percent; Actinogen, Bionomics and ITL were down more than one percent; with Starpharma down by 0.7 percent.

## [BIOTECH DAILY 12<sup>th</sup> BIRTHDAY EDITORIAL](#)

Today marks the 100<sup>th</sup> anniversary of the Russian Revolution, my late mother's birthday, Biotech Daily's 12<sup>th</sup> birthday and the Melbourne Cup, a State of Victoria public holiday (since 1873) for the three minute, 16 furlongs (two miles, 3.2km) race.

So what have we learned, as CSIRO's Clyde Garrow would say, in the last 12 years?

The number of ASX-listed biotechnology companies has increased from about 100 when we started to more than 130 today, with several making honorable exits - acquired for large sums as per most prospectii - while others have faded away following funding droughts, failed technologies or overtaken by competitors. Some have withered on the vine, surprising with a renewal by new board and/or management.

The dozen or so medical marijuana companies that jumped onto the hooch-wagon in the last two years all have differentiating points and are still confounding investors. Several are seriously developing drugs or delivery methods, at least two have little to show other than saying they have joined the cannabis club, and the majority are struggling for oxygen against Australian competitors and a wave of Israeli, American and European companies.

Why Israel? Because that's where tetrahydrocannabinol was first isolated by Prof Raphael Mechoulam and Dr Yehiel Gaoni in 1964 and where the foundation work was done.

While most cannabis companies are not backward at coming forward, the rest of the sector is making a mark on the global health care industry. In 2005, the Big Caps of Cochlear, CSL and Resmed were the only ones with consistent revenue. Sirtex earned \$22.6 million in 2005-'06 and declared a \$1.8 million profit. Biota, Cellestis, Genetic Technologies and Medical Developments had revenue, but few others did. Since 2009, the number of companies with revenue of more than \$1 million a year increased from 21 to 53 year, taking revenue from \$508 million to \$1.4 billion.

With more news than ever from public and private companies, research institutes and the universities, Biotech Daily is publishing more articles than ever. We have expanded to include the weekly Dr Boreham's Crucible and have several cadet journalists in training.

Biotech Daily was lucky to debut when many companies were moving from lab bench or phase I trials to pivotal trials and product in the market. While drug success has been elusive, device and diagnostic companies have done well, led by Sirtex, Nanosonics, Pro Medicus, Ellex, Probiotec, ITL, Cyclopharm, Uscom and Compumedics.

The sector has passed its infancy. While heading towards maturity, there is greater technological diversity than ever before, albeit not reflected in gender diversity. Hopefully, that will come sooner than later.

In 2017, the Australian life sciences sector –supported by Federal and state governments, particularly Victoria – is among the world leaders for inventions and discoveries, if not yet reaping the benefits in revenue and profit.

Biotech Daily thanks all our subscribers who have allowed us to report faithfully without fear or favor. Without you, we would not be here.

**David Langsam, Editor**

## AVITA MEDICAL

Avita says its fully underwritten one-for-2.8 shares rights issue at 4.5 cents a share has raised \$12,442,628, taking the total raised to \$16.9 million.

In October, Avita said it had raised \$4.5 million a placement and said the funds would be used for its US Recell commercialization for burn injuries and to further evaluate new indications (BD: Oct 11, 2017).

The company said that shareholders applied for 154,745,176 shares with a shortfall of 121,757,677 shares, taken up by underwriter Bell Potter Securities.

Avita fell 0.3 cents or 5.4 percent to 5.3 cents with 2.7 million shares traded.

## LIVING CELL TECHNOLOGIES

Living Cell says it has filed a provisional US patent for pericyte protective agents resulting from its work with the University of Auckland Centre for Brain Research.

Living Cell said the patent application, entitled 'Pericyte protective agents for neurological disorders including neurodegenerative diseases, central nervous system diseases and others' was expected to provide intellectual property coverage until 2038.

Living Cell chief executive officer Dr Ken Taylor told Biotech Daily that pericytes were involved in the establishment and maintenance of the blood brain barrier.

The company said that the University of Auckland collaboration explored how its products could reverse human brain neuro-degenerative processes associated with pericytes, and other brain cells, which helped sustain the blood-brain barrier and other homeostatic and haemostatic functions in the brain.

Living Cell said the project had two primary goals to extend the pipeline for its NTCell by examining the effects of NTCell on cell cultures derived from human brains with Alzheimer's disease and Parkinson's disease.

The company said that the second aim was to identify neuro-active constituents of NTCell and their site of action.

Living Cell said the research was undertaken by the University's commercial research company Auckland Uniservices, using the drug testing and drug target validation platform Neurovalida developed by Prof Mike Dragunow and Prof Maurice Curtis.

Dr Taylor said the research and patent would enable his company "to build and extend its expertise on the efficacy of cell therapies which have the potential to treat neuro-degenerative disorders".

"Most important is the ability to generate data from human brain tissue cultures in-vitro to lead us to the identification of neuro-protective product candidates," Dr Taylor said.

Living Cell was up one cent or 5.1 percent to 20.5 cents with 2.3 million shares traded.

## CLINUVEL

Clinuvel 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 88 cents or 11.0 percent from a low of \$8.00 yesterday November 6, 2017 to an intra-day high of \$8.88, but did not note an increase in trading volume.

Today, Clinuvel was up a further 25 cents or 2.95 percent to \$8.73 with 95,393 shares traded.

## CRESO PHARMA

Creso says a research collaboration with the University of Wollongong will study the effects of cannabis-based products on the central nervous system.

Creso said the University would provide expertise for the validation and optimization of its drug delivery systems and clinical evidence generation.

The company said it was developing cannabis and hemp-derived therapeutic grade food additives and medicinal cannabis products for human and animal health.

Creso said that the University of Wollongong School of Medicine's Dr Katrina Green, would lead the studies, with an emphasis on investigating how cannabidiol "a non-intoxicating component of cannabis, influences learning, memory and attention".

The company said that research, including studies by Dr Green, indicated the potential for CBD for "a wide variety of conditions including schizophrenia ... not addressed by current treatments".

Dr Green said the partnership "allows us to use commercial drug delivery systems in a controlled laboratory environment to delve into the potential, but also the unknowns, of the cannabis plant and its interaction with the central nervous system".

Creso said that medicinal cannabis was under-researched and the collaboration would "help provide the clinical evidence needed to develop safe, pharma-grade products for use in therapeutic treatments".

The company said that the National Health and Medical Research Council had provided \$2.5 million to establish the Australian Centre for Cannabinoid Clinical and Research Excellence, led by the University of Newcastle and University of Wollongong, involving researchers and clinicians from more than 10 other Australian universities and research institutions.

Creso said that the Centre would undertake medical cannabinoid research, translate data into policy and link health outcomes from people currently accessing local and imported products to guide plant growing and product formulation into appropriate medicines.

Creso was up 4.5 cents or 8.1 percent to 60 cents.