



# Biotech Daily

Monday February 9, 2015

*Daily news on ASX-listed biotechnology companies*

- \* **ASX FLAT, BIOTECH UP: OPTISCAN UP 12%, GENETIC TECH DOWN 19%**
- \* **MELBOURNE UNI SEQUENCES ROUNDWORM GENETIC CODE**
- \* **PHARMAUST FINDS BIOMARKER CHANGES IN PPL-1 CANCER TRIAL**
- \* **PRESCIENT LICENCES P27 BIOMARKER FOR GGTI-2418, PTX-100**
- \* **ORTHOCELL TREATS FIRST ASIAN ORTHO-ATI TENDON PATIENTS**
- \* **SAFETY MEDICAL BECOMES 3D MEDICAL**
- \* **UBS AG BUYS, SELLS, BORROWS, RETURNS ACRUX SHARES TO 8%**
- \* **HUNTER HALL SELLS 3m ALCHEMIA SHARES TO 8%**

## MARKET REPORT

The Australian stock market slipped 0.09 percent on Monday February 9, 2015 with the S&P ASX 200 down 5.3 points to 5,814.9 points.

Twelve of the Biotech Daily Top 40 stocks were up, 10 fell, 15 traded unchanged and three were untraded. All three Big Caps were up.

Optiscan was the best, up 0.8 cents or 11.8 percent to 7.6 cents with 8.5 million shares traded.

Starpharma climbed eight percent; Benitec was up 7.45 percent; Sirtex was up 5.4 percent; Biotron and Psivida were up four percent or more; Pharmaxis was up 3.1 percent; Atcor rose 2.15 percent; Acrux, Alchemia, Clinuvel, Cochlear, CSL and Resmed up by more than one percent; with Mesoblast up 0.9 percent.

Genetic Technologies led the falls, down 0.7 cents or 18.9 percent to three cents with 20.9 million shares traded.

Admedus, GI Dynamics, Medical Developments and Oncosil fell more than four percent; IDT lost 3.45 percent; Tissue Therapies and Universal Biosensors shed more than two percent; Anteo was down 1.1 percent; with Nanosonics down 0.65 percent.

## THE UNIVERSITY OF MELBOURNE

The University of Melbourne says that sequencing the genetic code of the *Toxocara canis* roundworm paved the way for new drugs, vaccines and diagnostic tests.

The University said that the *Toxocara canis* parasite caused toxocariasis, a disease that mainly affected young children and was of worldwide socioeconomic importance as hundreds of millions of people are potentially exposed to the roundworm.

The University said that the roundworm could be fatal to puppies, especially if untreated, when hundreds of worms up to 15 centimeters in length could fill the entire small intestine.

The study, entitled 'Genetic blueprint of the zoonotic pathogen *Toxocara canis*' was published online in the Nature Communications, with an abstract available at:

<http://www.nature.com/ncomms/2015/150204/ncomms7145/full/ncomms7145.html>.

The University of Melbourne said the research was conducted with the Chinese Academy of Agricultural Sciences, BGI-Shenzhen, the California Institute of Technology and Monash University.

The University said that senior author, the Faculty of Veterinary and Agricultural Sciences' Prof Robin Gasser, said the parasite caused the condition toxocariasis when passed from infected dogs to humans through contact with faecal material.

"When an animal excretes the worms' eggs in faeces, the eggs can spread," Prof Gasser said.

"This pathogen causes widespread outbreaks, predominantly in underprivileged communities and developing countries, so the more we know about these parasites the better equipped we are to combat their deadly effects," Prof Gasser said.

The University said that the parasite was relatively well-studied from a clinical perspective, but this is the first in-depth investigation of its molecular biology and would provide a useful resource for future molecular studies for this and other related parasites.

"Although this study focused on [*Toxocara canis*], the findings and the technological approaches used should be readily applicable to a wide range of other ascaridoid nematodes [or roundworms] of major animal and human health importance," Prof Gasser said.

## PHARMAUST

Pharmaust says that preliminary analysis of the white blood cells from four patients on PPL-1 has shown a meaningful reduction of a key target expressed in the cancer.

Pharmaust said that the primary objective of its first-in-man dose-escalation trial at the Royal Adelaide Hospital was to demonstrate safety in a rising dose format.

The company said that the evaluation of white blood cells of patients who received PPL-1 for three consecutive days showed that the levels of p70S6K were reduced between eight and 65 percent, compared to its levels before treatment started.

St George Hospital surgeon and the inventor of the use of PPL-1 in cancer therapy Prof David Morris said the observation confirmed "the biological activity of PPL-1 in man by inhibiting a key cancer growth messenger, p70S6K".

"This finding supports our studies on p70S6K in cancer cells and in animal models," Prof Morris said.

The Royal Adelaide Hospital principal investigator Prof Michael Brown said result was "particularly interesting ... as we are still at the lowest dose of PPL-1 in the trial and we are seeing apparent reductions in the levels of the p70S6K pharmaco-dynamic marker".

Pharmaust said that p70S6K was a promising marker and indicator of the aggressive behavior and prognosis of carcinomas.

Pharmaust was up 0.3 cents or 50 percent to 0.9 cents with 29.7 million shares traded.

## PRESCIENT THERAPEUTICS (FORMERLY VIRAX HOLDINGS)

Prescient says acquired the intellectual property rights to the novel predictive cancer biomarker p27 from the Tampa, Florida-based Moffitt Cancer Center.

Last year, the then Virax agreed took an option on the p27 protein test, allowing selection of cancer patients likely to respond to its GGTI-2418, which blocked the cancer growth enzyme geranyl-geranyl transferase I (BD: Mar 17, May 5, 2014).

Today, Prescient said that it planned to use the p27 biomarker as a companion diagnostic for its renin-angiotensin system (RAS) inhibitor candidate PTX-100, formerly known as GGTI-2418, and would pay an upfront cash payment and annual payments to Moffitt, as well as undisclosed lump sum payments on clinical and commercial milestones.

The company said that licencing the predictive cancer biomarker had the potential to identify those patients most likely to benefit from PTX-100, with patients with low levels of p27 more likely to respond to PTX-100.

Prescient said that having completed a phase I safety study, PTX-100 was moving to phase Ib/II clinical trials as a potential therapy for breast cancer and multiple myeloma.

The company said that PTX-100 held promise as a chemotherapy drug for other cancers such as prostate and pancreatic cancer.

Prescient managing director Dr Robert Crombie said the acquisition "substantially bolsters our clinical and commercial agenda, with the p27 biomarker enabling the potential for improved cancer treatments that are tailored to individual patients".

"The most valuable biomarkers are those that can reliably indicate treatment response," Dr Crombie said.

"These are predictive markers and all data to date strongly suggests that p27 falls into this category," Dr Crombie said.

"In the long term, we hope this biomarker will be the companion diagnostic used by clinicians to pre-select patients who will best respond to our novel PTX-100 drug therapy," Dr Crombie said.

"Companion diagnostics have the ability to predict which patients will respond to a certain therapy, allowing patient selection during enrollment and thus increasing the probability of clinical success," he said.

"Accordingly, companion diagnostics are central to the rapidly growing field of personalized medicine," Dr Crombie said.

"Many of the world's top selling cancer drugs are accompanied by their own companion diagnostics," Dr Crombie said.

"Medical experts globally now acknowledge that the successful development and use of cancer drugs very much depends on matching the right patient to the appropriate drug," Dr Crombie said.

"As far as we are aware, Prescient is now the only oncology company on the ASX developing a companion diagnostic to accompany its cancer drug," Dr Crombie said.

Prescient said that in many cancer types, including breast cancer, p27 was expressed at very low levels with the lower the p27 level, the worse a patient's prognosis.

The company said that PTX-100 inhibited the RAS pathway that promoted cancer growth by blocking the geranyl geranyl transferase I which in turn inhibited the Rho proteing.

Prescient said that in cancer cells, overactive Rho was thought to lower the levels of p27, which in normal cells acted as a brake on the cell cycle.

The company said that in cancer cells PTX-100 could inactivate Rho and restore levels of p27 in the nucleus, which in turn could reapply the brake on the cell cycle, halting the growth of the cancer cell.

Prescient was up 1.5 cents or 15.0 percent to 11.5 cents.

## ORTHOCELL

Orthocell says the first two patients in Asia have been treated with its Ortho-ATI autologous tenocyte implantation tendon repair therapy in Hong Kong.

Orthocell said that the two patients underwent the treatment last week, performed by Hong Kong orthopaedic surgeon Jason Brockwell.

The company said that the patients were receiving the treatment for degenerate hamstring tendons that had been resistant to conservative treatment options such as corticosteroid injections and exercise regimes.

Orthocell managing director Paul Anderson said the treatment of Hong Kong patients was “an important step forward in the expansion of the Ortho-ATI treatment into Asia and comes on the back of solid clinical data that has been published and presented over the past year”.

Orthocell said that the Ortho-ATI treatment took tendon cells from a patient, expanded them in a laboratory and then injecting them into the patient’s damaged tendon to address the underlying pathology and regenerate the damaged tissue.

The company said that Asia was a key growth region for Orthocell and its regenerative therapies.

Orthocell was up one cent or 2.6 percent to 39 cents.

## SAFETY MEDICAL PRODUCTS

Safety Medical says it has completed the acquisition of 3D Medical will change its name to 3D Medical and be reinstated under the ASX code 3DM.

Safety Medical was untraded at five cents.

## ACRUX

The Singapore-based UBS AG and related bodies corporate have increased their holding in Acrux from 11,584,958 shares (6.96%) to 13,647,140 shares (8.20%).

UBS AG said that between January 6 and January 16, 2015 it primarily bought, but also sold, borrowed and returned shares for institutions, including Citibank, Citigroup, JP Morgan Chase Bank, Macquarie Bank, Morgan Stanley, the Northern Trust Company, Brown Brothers Harriman, BMO Capital Markets Corp and State Street Bank & Trust Co.

UBS AG has previously said that the shares were held for Warbont Nominees and various custodians and were held with the “power to control disposal over shares pursuant to stock borrowing and lending activities” (BD: Dec 19, 2012; Nov 21, 2013).

Acrux has been reported as one of the most heavily ‘short-sold’ stocks in the Australian biotechnology sector.

Acrux climbed 2.5 cents or 1.75 percent to \$1.455.

## ALCHEMIA

Hunter Hall Investment Management has reduced its substantial holding in Alchemia from 29,239,945 shares (9.01%) to 25,896,569 shares (7.97%).

Hunter Hall said it sold shares between January 9 and February 5, 2015, with the largest sale on January 30, of 1,881,051 shares for \$136,342 or 7.25 cents a share.

Alchemia was up 0.1 cents or 1.4 percent to 7.2 cents.

**Biotech Daily can be contacted at: PO Box 5000, Carlton, Victoria, Australia, 3053  
email: [editor@biotechdaily.com.au](mailto:editor@biotechdaily.com.au); [www.biotechdaily.com.au](http://www.biotechdaily.com.au); twitter: @biotech\_daily**