# Biotech Daily

Monday October 14, 2013

*Daily news on ASX-listed biotechnology companies*

*** ASX, BIOTECH DOWN: BENITEC UP 14.5%, CIRCADIAN DOWN 11%**

*** STARPHARMA DENDRIMER-OXALIPLATIN CUTS NEUROTOXICITY IN MICE**

*** ELLEX: 'STUDY BACKS 2RT FOR EARLY AMD'**

*** OSPREY REQUESTS CAPITAL RAISING TRADING HALT**

*** EUROPEAN PATENT FOR CONSEGNA'S BREATHEASSIST**

*** LIMBERG TAKES 6% OF REGENEUS**

*** INVION EXECUTIVE DR JAMES CAMPBELL RETURNS TO NON-EXECUTIVE**

## MARKET REPORT

The Australian stock market fell 0.44 percent on Monday October 14, 2013 with the S&P ASX 200 down 23.0 points to 5,207.9 points.

Eleven of the Biotech Daily Top 40 stocks were up, 17 fell, seven traded unchanged and five were untraded.

Benitec was the best, up six cents or 14.5 percent to 47.5 cents, with 980,124 shares traded.

Allied Health and IDT climbed more than eight percent; Medical Developments and Phosphagenics were up more than five percent; Avita and Pharmaxis were up more than four percent; Optiscan and Patrys were up more than three percent; Living Cell rose 2.6 percent; Mesoblast was up 1.4 percent; with Resmed up 0.2 percent.

Circadian led the falls, down three cents or 10.7 percent to 25 cents with 7,662 shares traded.

Prima lost 9.4 percent; Antisense fell 6.45 percent; QRX was down 5.1 percent; Bionomics fell 4.9 percent; Alchemia lost 3.9 percent; Impedimed, Prana and Viralytics shed more than two percent; Cochlear, Genetic Technologies, Nanosonics, Sirtex, Starpharma, Tissue Therapies and Universal Biosensors were down more than one percent; with Acrux and CSL down by less than one percent.

STARPHARMA HOLDINGS

Starpharma says that a mouse study has shown that its dendrimer-enhanced oxaliplatin significantly reduces the serious neurotoxicity commonly seen with oxaliplatin.

Starpharma said that oxaliplatin, marketed by the Paris, France-based Sanofi SA as Eloxatin, was primarily used to treat colon and colorectal cancer and had sales of about $US2 billion in 2012.

The company said that neurological adverse effects are the dose-limiting toxicity for Eloxatin with peripheral neuropathy occurring in up to 95 percent of patients.

Starpharma said that the neuropathy caused by the drug had two main forms, one which was often triggered by cold and was usually transient, and the other more serious form that resulted in chronic neuropathic pain and disturbances of nerve function which could lead to difficulties in fine motor tasks such as writing or using a computer keyboard.

The company said that in a blinded study at Baltimore's University of Maryland dendrimer-oxaliplatin showed significantly reduced neurotoxicity in validated animal models for both forms of neuropathies, even when dendrimer-oxaliplatin was used at twice the dose of oxaliplatin.

Starpharma said that last month a separate study showed that dendrimer-oxaliplatin also both improved anti-cancer efficacy and resulted in reduced bone marrow toxicity, when compared to Eloxatin in a mouse model of colon cancer (BD: Sep 11, 2013).

Starpharma chief executive officer Dr Jackie Fairley said that the oxaliplatin neuropathy was "a serious and debilitating condition for patients and often lasts for years".

"In the clinic typically the intensity and duration of symptoms of neuropathy increase as the cumulative dose of oxaliplatin increases and may lead to the need for dose reduction or even treatment cessation," Dr Fairly said.

"For this reason clinicians and patients agree that it would be of tremendous benefit if it were possible to reduce or prevent this most unpleasant side effect," Dr Fairley said.

Starpharma said the toxicity was known to cause short-term disordered nerve function such as cold sensitivity coinciding with cycles of treatment and longer-term nerve damage in the hands and feet, or peripheral neuropathy, which, for many patients, was life-long.

"What we've now shown here with our dendrimer version of oxaliplatin is that, in addition to earlier reported advantages in efficacy and reduced blood toxicity, we are also able to reduce the primary dose-limiting neurotoxic side-effect of Eloxatin, even at double the dose," Dr Fairly said. "This is very exciting news indeed."

"Just the reduction in neurotoxicity alone would represent a significant advantage for oxaliplatin but when considered alongside the earlier improvements in efficacy and reduced bone marrow toxicity, this finding demonstrates that our dendrimer technology can deliver a considerable overall enhancement to this blockbuster drug," Dr Fairley said.

"The beneficial characteristics of Starpharma's dendrimer technology have also been shown in other drugs including the chemotherapeutics docetaxel and doxorubicin," Dr Fairly said.

Starpharma said it was advancing dendrimer-oxaliplatin derivatives into development, based on the positive results of the earlier pre-clinical trials.

University of Maryland Center for Pain Studies director and lead researcher Prof Susan Dorsey said the findings were "very significant because this condition is a serious clinical problem and the dendrimer version of oxaliplatin clearly shows a reduced level of neurotoxicity".

"We are unaware of any other examples of this effect reported for other oxaliplatin formulations in the literature," Prof Dorsey said.

Starpharma fell one cent or 1.1 percent to 89.5 cents with 1.8 million shares traded.

## ELLEX MEDICAL LASERS

Ellex says a 50-patient pilot study shows that its retinal rejuvenation therapy (2RT) for early age-related macular degeneration reduces drusen thereby improving eye health.
Ellex said that drusen were the accumulation of waste deposits in the macula of the eye and were a key risk factor to progression to end-stage, blinding age-related macular degeneration (AMD).
The company said that drusen were reduced in 44 percent of treated eyes and of the 11 patients at greatest risk of disease progression, seven improved sufficiently to be removed from the high-risk category.
Ellex said the '2RT for Early AMD' study was conducted at Melbourne's Centre for Eye Research Australia under its head of macular research Prof Robyn Guymer and the results, entitled 'Nanosecond-laser application in intermediate AMD - 12-month results of fundus appearance and macular function' was published in Clinical & Experimental Ophthalmology.
An abstract is at: http://onlinelibrary.wiley.com/doi/10.1111/ceo.12247/abstract.
The article concluded that "a single unilateral application of nanosecond laser to the macula produced bilateral improvements in macula appearance and function".
The authors said that the nanosecond 2RT laser warranted ongoing evaluation as an early intervention for age-related macular degeneration.
The abstract said that treatment was painless with no clinically visible lesions.
The authors said that no participant developed choroidal neovascularization, while two with thin central retinal thickness at baseline developed atrophy at 12-month follow-up.
The abstract said that the drusen area was reduced in 44 percent of treated eyes and 22 percent of untreated fellow eyes, with changes in drusen and function not being coincident.
Ellex chief executive officer Tom Spurling said the results were important because "currently, when a patient is diagnosed with early AMD they are told that nothing can be done until the disease reaches its late stages, by which time some patients have suffered irreversible vision loss."
"With 2RT, we aim to treat the cause of AMD before vision is lost," Mr Spurling said.
Ellex said that the publication was "an important part of the clinical evidence required for Conformité Européenne (CE) registration" which would allow it to progress a definitive commercialization program for 2RT for early age-related macular degeneration treatment in Europe and Australia.
"While this is an important step towards the market introduction of 2RT, we are accelerating and expanding the current ongoing multi-centre, double-blind, randomized controlled laser intervention in early age-related macular degeneration (Lead) clinical trial across a larger and more diverse patient sampling in order to validate these clinical findings," Mr Spurling said.
Ellex was unchanged at 30.5 cents.

## OSPREY MEDICAL

Osprey has requested a trading halt "pending an announcement … in relation to a proposed capital raising".
Trading will resume on October 16, 2013 or on an earlier announcement.
Osprey last traded at 70 cents.

## CONSEGNA GROUP

Consegna says the European Patent Office has granted a core patent entitled 'A nasal cavity dilator'.
Consegna said the granted claims covered the Breatheassist nasal dilation technology and the adjustability of the device, critical to comfort in each nostril.
The company said the patent granted claims for the delivery of medicated vapor, a core element of its plans for the technology.
Consegna said the delivery of medicated vapor was one element that would drive the expansion of the technology within the sport and exercise markets and the growing health and drug delivery markets.
Consegna said it would soon be renamed Rhinomed and chief executive officer Michael Johnson said that "having patents granted in Europe for our Breatheassist technology is a crucial commercial outcome for Rhinomed".
Mr Johnson said that the European patent completed a global patent family providing the company with a sound intellectual property position.
"The granting of this European patent is an important step in managing the existing patent portfolio," Mr Johnson said.
Consegna fell 0.2 cents or 5.6 percent to 3.4 cents with 1.2 million shares traded.

## REGENEUS

The Sydney-based Limberg Asset Management says it has become a substantial shareholder in Regeneus with the acquisition of 10,720,615 shares or 5.83 percent.
Limberg said that it acquired the shares on September 10, 2013 at 25 cents a share, the price of the company's shares in its recent initial public offer (BD: Sep 11, 19, 2103).
Regeneus was unchanged at 28 cents.

## INVION

Invion says that executive director Dr James Campbell will return to a non-executive director role, effective October 14, 2013.
Invion said that Dr Campbell was first appointed a non-executive director on February 26, 2012, Dr Campbell and executive director following the August 2012 acquisition of Inverseon (BD: Feb 27, Jul 2, 2012).
Dr Campbell was formerly Chemgenex Pharmaceuticals' chief operating officer and chief financial officer.
Former Chemgenex chief executive officer Dr Greg Collier was appointed Invion's managing director and chief executive officer in May (BD: May 6, 2013).
Invion said that Dr Campbell was recently appointed chief executive officer of the New Zealand-based Photonz Corp, a member of Deakin University's molecular and medical research advisory board and a member of the intellectual property and commercialization committee of the Cooperative Research Centre for Mental Health.
Invion was up 0.3 cents or 3.9 percent to eight cents.