



# Biotech Daily

Tuesday June 26, 2012

*Daily news on ASX-listed biotechnology companies*

- \* **ASX, BIOTECH DOWN: ALLIED HEALTH UP 6%, CIRCADIAN DOWN 12.5%**
- \* **ACRUX EARNS \$1m FOR FDA DOG FENTANYL APPROVAL**
- \* **US PATENT FOR BIONOMICS KV1.3 PROGRAM**
- \* **BIODIEM LICENCES CANBERRA UNI HEPATITIS VACCINE TECHNOLOGY**
- \* **AUSTRALIAN LEADERS TAKES 10% OF ATCOR**
- \* **ANDREW GOODALL INCREASES, DILUTED TO 18% OF NUSEP**
- \* **STUDY BACKS USCOM FOR ANAESTHESIA**
- \* **CELLMID HOSTS MIDKINE CONFERENCE IN ISTANBUL**
- \* **AUSTRALIAN PATENT FOR BPH, MOLECULAR DISCOVERY HLS5**

## MARKET REPORT

The Australian stock market closed down 0.36 percent on Tuesday June 26, 2012 with the S&P ASX 200 down 14.5 points to 4,013.3 points.

Nine of the Biotech Daily Top 40 stocks were up, 18 fell, eight traded unchanged and five were untraded.

Allied Health was the best, up 0.1 cents or 5.9 percent to 1.8 cents with 214,969 shares traded.

Genetic Technologies climbed four percent; Bionomics was up 3.7 percent; Alchemia and Phylogica rose more than two percent; CSL and Uscom were up more than one percent; with Acrux, Clinuvel and Universal Biosensors up by less than one percent.

Circadian led the falls, down five cents or 12.5 percent to 35 cents with 114,324 shares traded.

Anteo lost eight percent; Prima and Viralytics were down more than seven percent; Tissue Therapies fell six percent; Benitec was down 5.9 percent; Patrys fell 4.8 percent; Ellex, Impedimed and Starpharma were down more than three percent; Nanosonics, Pharmaxis and Resmed shed two percent or more; Biota, Living Cell and Mesoblast were down more than one percent; with Cochlear, Heartware, Reva and Sirtex down by less than one percent.

## ACRUX

Acrux says Eli Lilly will pay a \$1 million milestone for the US Food and Drug Administration approval of its Recuvyra fentanyl transdermal pain relief for dogs.

Acrux said Recuvyra was approved for the control of post-operative pain associated with surgical procedures in dogs and a single 2.7ml/kg dose applied to the skin prior to surgery controlled pain for at least four days.

Acrux said the product was developed using a transdermal drug delivery technology licensed from Acrux by Eli Lilly division Elanco and Elanco's companion animal business would commercialize Recuvyra.

The company said the approval was the first US approval of Acrux's transdermal technology in animal health.

Acrux said that along with the \$1 million milestone payment it expected to begin earning royalties on net sales of Recuvyra in the US and Europe during the 2012-'13 financial year.

Acrux chief executive officer Dr Richard Treagus said the company was "delighted with the news of this first US animal drug approval that utilizes Acrux's transdermal technology".

"We are looking forward to Recuvyra being launched in the US, as well as additional animal drug approvals utilizing our technology," Dr Treagus said.

Acrux was up three cents or 0.7 percent to \$4.20 with 640,950 shares traded.

## BIONOMICS

Bionomics says the US Patent and Trademark Office has granted a new patent critical to its Kv1.3 program, focused on developing treatments for autoimmune disorders.

Bionomics said the patent, entitled 'Aryl potassium channel blockers and uses thereof ' related to compounds useful in the modulation of potassium channel activity in cells, particularly the activity of Kv1.3 channels found in T cells.

The patent abstract said the invention "also related to the use of these compounds in the treatment or prevention of autoimmune and inflammatory diseases, including multiple sclerosis, pharmaceutical compositions containing these compounds and methods for their preparation".

Bionomics said the patent was valid until October 2028.

Bionomics chief executive officer Dr Deborah Rathjen said this patent was "key within a broader Kv1.3 patent portfolio covering extensive intellectual property surrounding ion channel drug development, including structural elements for selectivity and modes of channel block".

"This latest patent provides further opportunity to maximize commercial benefit for the program," Dr Rathjen said.

The company said it owned other patents and patent applications that covered the Kv1.3 drug candidates, which all derived from published international application WO2009043117 with a priority date of October 4, 2007 and had entered the national phase in all major markets including the granted US patent.

Bionomics said it "recently regained full ownership and control of the Kv1.3 program" from its former partner Merck Serono and was accelerating the program to include immune-related conditions in addition to multiple sclerosis such as rheumatoid arthritis and psoriasis (BD: Jun 15, 2012).

The company said that the global immuno-modulators market was estimated at \$US46.8 billion in 2010.

Bionomics was up one cent or 3.7 percent to 28 cents.

## BIODIEM

Biodiem says it will licence a hepatitis vaccine technology from the University of Canberra, expanding the potential disease targets in its portfolio.

Biodiem said that research supported the technology's use in the development of vaccines for hepatitis including hepatitis B and D, which had no curative treatment and was a significant global health issue, affecting hundreds of millions of people worldwide.

Biodiem said hepatitis was largely caused by viral infection leading to liver inflammation, loss of appetite, jaundice, fatigue, nausea and in severe cases liver failure and death.

The company said that in the US alone there were up to 1.4 million people with chronic hepatitis B infection and 38,000 people were newly infected with the disease each year.

Biodiem said that hepatitis D was a less common disease and infected only those already infected with hepatitis B, but had a 20 percent mortality rate.

The company said that in developed countries patient costs were significant, antiviral drugs were not curative and treatment could be ongoing and in severe disease, expensive and complicated liver transplantation could be the only option.

Biodiem said it had an exclusive licence to a novel vaccine technology, in development for hepatitis, but could have applicability in a range of other diseases.

The company said the terms were "in keeping with industry standards" and Biodiem had established a collaborative research program with the University of Canberra.

Biodiem said the acquisition complemented its broad product portfolio of vaccine and antimicrobial technologies and the strategy to provide treatments for infectious diseases with attractive market potential.

Biodiem chief executive officer Julie Phillips said the company was "very pleased to establish an important research partnership with the University of Canberra and its world-leading researchers".

"This technology is built on excellent science and the potential applications in hepatitis are very exciting," Ms Phillips said.

"As with our other recent acquisitions we have the in-house expertise to significantly boost the value of this asset, and believe that development towards a high-value orphan indication may allow us to achieve a rapid entry to clinical trials and eventual out-licencing," Ms Phillips said.

Biodiem was untraded at six cents.

## ATCOR MEDICAL

The Australian Leaders Fund has increased its substantial shareholding in Atcor from 11,936,907 shares (8.90%) to 14,825,157 shares (10.03%).

The Australian Leaders Fund said it most recently acquired 1,666,667 shares for \$100,000 or an average price of 6.0 cents a share.

Atcor was untraded at 6.8 cents.

## NUSEP

Director Andrew Goodall has increased his holding in Nusep but has been diluted through a share purchase offer, the exercise of options and conversion of convertible notes.

In the change of substantial shareholder notice, Mr Goodall said he increased and was diluted from 17,000,000 shares (18.86%) to 19,000,000 shares (17.60%).

Mr Goodall said he most recently acquired 1,680,000 shares in an off-market transfer for \$47,040 or 2.8 cents a share on June 19, 2012.

Nusep was up 1.5 cents or 33.3 percent to six cents.

## USCOM

Uscom says that further clinical evidence further confirm the gold standard status of its ultra-sonic cardiac output monitor in anaesthesia.

Uscom chief executive Rob Phillips said the new study presented at the World Congress of Anesthesia and published in the British Journal of Anesthesia "confirms that Uscom can replace the Cardioq device in anaesthesia".

"The Cardioq device has outcomes evidence confirming lifesaving and cost limiting benefits which is being used to support Government adoption guidelines in the UK [National Health Service]," Mr Phillips said. "The study demonstrates that Uscom can achieve superior results non-invasively and at reduced cost."

"This study also confirms Uscom's claim to be the gold standard platform cardiac monitoring technology," Mr Phillips said.

Uscom said the publication by the Hong Kong Prince of Wales Hospital's Prof Lester Critchley compared Uscom with an alternate method endorsed by the UK National Institute for Health and clinical excellence (NICE) guidelines, Cardioq Doppler, in high risk surgery patients during anaesthesia.

Uscom said the study, entitled 'Differences between Cardioq and Uscom Doppler cardiac output readings in high risk surgical patients' was published in the British Journal of Anaesthesia 2012; 108(S2): ii113.

The company said that Prof Critchley found that while both methods were acceptable, the Cardioq method was inaccurate at low and high cardiac output values, the values where accuracy became critical, while the Uscom device remained accurate throughout.

Uscom said the Cardioq Doppler required the insertion of a single patient use intra-oesophageal probe costing between \$100 to \$200, while Uscom was totally non-invasive, reusable and had no consumables.

The company said that anaesthesia was an important clinical application and growing market for its monitor and the study followed recognition by the UK National Health Service Intraoperative Fluid Management Technologies Pack last month citing Uscom as a preferred method of fluid management in high risk surgery (BD May 11, 2012).

Uscom was up 0.1 cents or 1.1 percent to 9.5 cents.

## CELLMID

Cellmid says it will hold the second 'Excellence in Midkine Research Conference' in Istanbul, Turkey, from June 27 to 30, 2012.

Cellmid said the event was hosted by Istanbul University and Yeni Yuzyil University and would be held in the historic Rectorate of Istanbul University.

The company said the event followed "the success of the first midkine conference held in Sydney in November 2010".

Cellmid said the meeting would be attended by researchers and clinicians from 12 countries from a number of new therapeutic and diagnostic fields, including midkine as a tool for diagnosing inflammation, stem cells and cancer therapeutics.

The company said the conference would be the forum for launching the book 'Midkine: From Embryogenesis to Pathogenesis and Therapy', published by Springer.

Cellmid said that due to the confidential nature of some of the data discussed presentations will not be published.

The company said the discoverers of midkine Prof Takashi Muramatsu and Prof Kenji Kadomatsu would make keynote addresses on the progress made in midkine research.

For details go to [http://www.cellmid.com.au/content\\_common/pg-2012-program.seo](http://www.cellmid.com.au/content_common/pg-2012-program.seo).

Cellmid was unchanged at 1.5 cents with 4.5 million shares traded.

### [BPH ENERGY, MOLECULAR DISCOVERY SYSTEMS](#)

BPH Energy says that 20 percent subsidiary Molecular Discovery Systems has been granted a patent relating to the tumor suppressor gene HLS5.

BPH said that the patent, entitled 'Sumoylation control agent and uses thereof' was valid until October 2026 and was the fourth issued patent for Molecular Discovery Systems.

The company said that Molecular Discovery had an extensive patent portfolio encapsulating the tumor suppressor gene HLS5, both as a potential cancer therapeutic target and also underpinning its involvement in a variety of other diseases.

BPH was unchanged at 1.7 cents.