

# Biotech Daily

Thursday February 16, 2012

Daily news on ASX-listed biotechnology companies

- \* ASX, BIOTECH DOWN: ANTISENSE UP 9.5%, PATRYS DOWN 8%
- \* QUEENSLAND UNI, J&J, JANSSEN WORK ON SPIDER VENOM FOR PAIN
- \* NANOSONICS H1 REVENUE UP 166% TO \$5m, LOSS DOWN 33%
- \* BIONOMICS TARGETS ALZHEIMER'S, NEURO-DEGENERATIVE DISEASES
- \* CERTIFICATE CLEARS GENETIC TECHNOLOGIES BREVAGEN FOR US
- \* ADVANCED SURGICAL TO DISTRIBUTE SMALL BONES PRODUCTS
- \* BROADVECTOR BUYS 50% OF HIP IMPLANT FAILURE THERAPY
- \* CITIGROUP REDUCES 1% IN PATRYS
- \* LA JOLLA COVE REDUCES TO 9% OF BONE

#### MARKET REPORT

The Australian stock market fell 1.68 percent on Thursday February 16, 2012 with the S&P ASX 200 down 71.5 points to 4181.9 points.

Eleven of the Biotech Daily Top 40 stocks were up, 14 fell, eight traded unchanged and seven were untraded. All three Big Caps fell.

Antisense was the best, up 0.2 cents or 9.5 percent to 2.3 cents with 11 million shares traded followed by Living Cell up 4.55 percent to 6.9 cents with 1.1 million shares traded.

Circadian and Mesoblast climbed four percent or more; Avita was up 3.85 percent; Tissue Therapies and Viralytics rose more than two percent; Anteo, Heartware and Sirtex were up more than one percent; with Starpharma up 0.7 percent.

Patrys led the falls, down 0.3 cents or 7.9 percent to 3.5 cents, with 554,351 shares traded.

Cellmid lost 6.7 percent; QRX was down 5.2 percent; Benitec and Impedimed were down more than four percent; Allied Health, Neuren and Prana were down more than three percent; CSL shed 2.1 percent; Acrux and Pharmaxis were down more than one percent; with Biota, Clinuvel, Cochlear, Nanosonics, Resmed and Reva down by less than one percent.

### UNIVERSITY OF QUEENSLAND

Uniquest says that University of Queensland researchers will collaborate with Johnson & Johnson and Janssen affiliates, to develop spider venom as a treatment for pain. Uniquest said that the University's Institute for Molecular Bioscience (IMB) had a 12month agreement with Johnson & Johnson's Corporate Office of Science and Technology and some of its Janssen affiliates, to characterize novel spider venom peptides that were discovered in a proprietary IMB assay to inhibit a human ion channel, critical for sensing pain. The financial terms were not disclosed.

Uniquest said the project team included Prof Glenn King, Prof Richard Lewis, Prof Paul Alewood and their research teams.

Prof King told Biotech Daily that the work involved milking venom from tarantulas, a larger spider species with low toxicity venom in suitable quantities for research.

Uniquest said that chronic pain occurred when the nervous system continued issuing pain signals despite the lack of a pain stimulus and was experienced at some point in the lives of one on five Australians.

Uniquest said that in the US an estimated \$560 billion a year was lost due to healthcare costs and reduced productivity relating to chronic pain.

Uniquest managing director David Henderson said the new agreement between IMB and Johnson & Johnson's Corporate Office of Science and Technology (COSAT) would accelerate the process of seeking a solution to chronic pain.

"Discoveries like this pass through many developmental stages before they become market-ready therapeutic products, so combining the resources and expertise of Australian researchers and COSAT means potential pain drug candidates for clinical trials are likely to be identified much sooner," Mr Henderson said.

### **NANOSONICS**

Nanosonics says that revenue from its Trophon EPR for the six months to December 31. 2011 was up 166 percent to \$5,365,000 compared to the previous corresponding period. Nanosonics said that sales revenue had grown 271 percent to \$5.08 million "reflecting the rapid expansion of sales of the Trophon EPR, primarily in the North American market". The company said that despite increased costs due the ongoing development of the Trophon EPR ultrasound probe disinfection system, increased investment in manufacturing capacity and business development costs, net loss after tax fell 33 percent to \$3.05 million.

Nanosonics said that more than 500 Trophon EPR units had been installed Australia and New Zealand 500 units and the introduction into New Zealand "has been very positive with an almost immediate conversion of trial sites to commercial orders".

The company said that US sales were in line with forecasts and expected to build steadily over the next 12 months and Asian markets were continuing to develop.

Nanosonics said it had multiple revenue streams from the Trophon EPR, including the Nano-Nebulant disinfectant and the chemical indicator test, both of which were required to operate the Trophon EPR; mobile carts which allowed the machine to be easily moved between and within consulting rooms; and wall mounts that ensured the Trophon EPR could be fixed on central wall eliminating the need for additional bench space.

Nanosonics fell half a cent or 0.9 percent to 55.5 cents.

#### **BIONOMICS**

Bionomics says it has applied for a patent covering compounds for the improvement of memory in Alzheimer's disease and other neurodegenerative conditions.

Bionomics said the compounds improved cognition through activation of the alpha7 nicotinic acetylcholine receptor and the patent application was part of its "growing portfolio of patent filings and know-how in the field".

Bionomics said the compounds had the potential to treat Alzheimer's disease by improving memory and also reducing brain tissue inflammation.

The company said that one of the compounds BNC1881 was a strong activator of the alpha7 nicotinic acetylcholine receptor and restored memory in preclinical animal models where treatment with scopolamine was used to reduce memory.

Bionomics chief executive officer Dr Deborah Rathjen said her company was "working towards the selection of a drug candidate in this program later this year and protection of our intellectual property is essential to our future partnering strategy".

"This patent application strengthens the company's intellectual property portfolio in an area of increasing strategic interest for Bionomics," Dr Rathjen said.

"In addition to the large and growing Alzheimer's disease market, this therapeutic strategy has potential application for correcting cognitive impairment in Parkinson's disease, multiple sclerosis, schizophrenia and [attention deficit hyperactivity disorder]," Dr Rathjen said.

Bionomics said that the worldwide costs of dementia, including direct and indirect costs of care, were estimated to be \$604 billion, affecting an estimated 35.6 million people. The company said the program confirmed its focus on the discovery of well differentiated drug candidates and was a significant addition to its pipeline, which included BNC105 for the treatment of solid tumors, BNC210 in development for anxiety disorders and Kv1.3 blockers for the treatment of multiple sclerosis and other autoimmune conditions. Dr Rathjen said the new compounds including BNC1881 were discovered by Bionomics her company and like BNC105, were products of the company's Multicore chemistry platform for the discovery of small molecule drugs. Bionomics was unchanged at 46.5 cents.

### **GENETIC TECHNOLOGIES**

Genetic Technologies says it has been granted a US certificate of compliance for its Melbourne laboratory allowing Brevagen sales in eight more US states.

Genetic Technologies said the certificate was issued under the US Clinical Laboratories Improvements Amendments (CLIA) regulations, administered by the Centers for Medicare and Medicaid Services and followed a survey conducted by US inspectors.

The company said that its Melbourne laboratory was "the only laboratory in the Southern Hemisphere with a CLIA certificate of compliance".

Genetic Technologies said it received CLIA registration for the Melbourne laboratory in April 2011, enabling Brevagen to enter the 42 US states which do not require additional "out of state licensure" (BD: April 28, 2011), but the initial registration did not enable entry into the key markets of California and Florida and the certificate cleared the path to market Brevagen in California, Florida, Maryland, Nevada, New York, Pennsylvania, Rhode Island, and Tennessee.

The company said that launch preparations for market entry in California and Florida were underway and the next significant launch milestone would be New York State, which would require a submission to the New York State Department of Health.

Genetic Technologies was unchanged at 13.5 cents.

#### ADVANCED SURGICAL DESIGN AND MANUFACTURE

Advanced Surgical says it has a distribution agreement with Small Bones Innovations APAC for a range of products.

Advanced Surgical said that the products included the Star ankle replacement as well as technologies for elbow wrist hand and foot.

The company said the products were in use in Australia "providing a ready market to drive immediate revenue".

Advanced Surgical was untraded at 22 cents.

## **BROADVECTOR**

Broadvector says it has acquired 50 percent of the intellectual property rights to its therapy for treating hip implant failure due to aseptic loosening.

Broadvector said the intellectual property rights to the gene-directed enzyme prodrug therapy (GDEPT) were acquired from the UK-based Vectura Group plc subsidiary, Innovata.

Broadvector chief executive officer Dr Andrew Bray told Biotech Daily said that his company originally had a licence with Innovata with an option to acquire its 50 percent share of the intellectual property prior to Innovata's acquisition by Vectura.

The other 50 percent is held by Broadvector's partner, the Leiden University Medical Center in the Netherlands.

"We look after the intellectual property and they conduct the clinical research," Dr Bray said.

Broadvector said the therapy had completed a phase I trial in the Netherlands and it would take the therapy through phase II efficacy trials.

Broadvector said that aseptic prosthetic loosening was the most common cause for hip implant failure and was a debilitating condition associated with hip and knee prosthesis in particular, where bone into which a prosthetic implant was mounted was gradually replaced by non-bone tissue.

The company said the prosthesis lost adequate fixation to the bone and the joint lost its mechanical strength, causing chronic pain and loss of the ability to walk.

Broadvector said that about 10 percent of hip implants had to be surgically replaced within 10 years of the initial hip replacement due to aseptic loosening.

The company said that revision surgery was "a major procedure where the old prosthesis is removed, the non-bone tissue removed and a larger prosthesis fitted into the enlarged cavity".

Broadvector said the GDEPT therapy removed the non-bone tissue associated with the loosening, allowing the original prosthesis to be re-aligned and re-cemented into place without the need for open surgery.

When the company first announced its program, Dr Bray said the vector would carry a gene which would be injected into the deteriorating tissue and allowed an incubation period, followed by a direct injection of the relevant pro-drug and after another incubation period, orthopaedic surgeons would extract the now-liquefied sinovial-like tissue and fill the space with orthopaedic cement to re-anchor the prosthesis (BD: Sep 6, 2010). Last year, Broadvector acquired the intellectual property to a GDEPT treatment for prostate cancer from the Commonwealth Scientific and Industrial Research Organisation (BD: Nov 11, 2011).

Broadvector is a public unlisted company.

## **PATRYS**

Citigroup Global Markets Australia has reduced its substantial holding in Patrys from 22,575,819 shares (6.209%) to 18,344,535 shares (5.045%).

Citigroup said the decrease was in its capacity as prime broker under a securities lending agreement.

Citigroup did not disclose the identity of the owner of the shares, nor the value, if any, in the disposal of the shares (BD: Feb 15, 2012)

Patrys fell 0.3 cents or 7.9 percent to 3.5 cents.

## **BONE MEDICAL**

La Jolla Cove Investors has reduced its substantial holding in Bone from 17,500,000 shares (10.5%) to 15,050,000 shares (9.1%).

La Jolla Cove said it sold 827,500 shares on February 14, 2012 at 1.51 cents each for a total of \$12,495.

Bone was unchanged at 1.7 cents with 2.6 million shares traded.