



Biotech Daily

Tuesday February 12, 2013

Daily news on ASX-listed biotechnology companies

- * **ASX FLAT, BIOTECH DOWN: PATRYS UP 21%, PHYLOGICA DOWN 7%**
- * **MIREVEN: 'MIRNA-7-5P EFFECTIVE FOR MELANOMA IN-VITRO'**
- * **CAPITAL GROUP CLIENTS BELOW 5% OF COCHLEAR**
- * **USPTO ALLOWS ACRUX TRANSDERMAL TESTOSTERONE PATENT**
- * **US PATENT FOR ANTISENSE ATL1102 FOR MULTIPLE SCLEROSIS; STUDY**
- * **ACUVAX SIGNS BIOLIFE DEAL FOR BACK TO CANCER FUTURE**
- * **CHINA PARTNER PAYS BIODIEM \$98k**
- * **AGENIX HOPES TO LICENCE, PARTNER ALL THREE TECHNOLOGIES**
- * **BIOXYNE APPOINTS JARROD WHITE COMPANY SECRETARY**

MARKET REPORT

The Australian stock market slipped 0.01 percent on Tuesday February 12, 2013 with the S&P ASX 200 down 0.5 points to 4,959.0 points. Ten of the Biotech Daily Top 40 stocks were up, 20 fell, eight traded unchanged and two were untraded. All Big Caps were up.

Patrys was the best, up 0.6 cents or 21.4 percent to 3.4 cents with 530,000 shares traded, followed by Acrux up 9.9 percent to \$3.90 with 3.7 million shares traded.

Antisense and Avita climbed more than seven percent; Phosphagenics was up 6.25 percent; Impedimed was up 4.55 percent; Pharmaxis and QRX rose more than two percent; Sirtex was up 1.6 percent; with Cochlear, CSL, Resmed and Reva up by less than one percent.

Phylogica led the falls, down 0.2 cents or 7.4 percent to 2.5 cents with 532,083 shares traded, followed by Ellex down 7.1 percent to 19.5 cents with 31,000 shares traded.

Sunshine Heart lost 5.9 percent; Neuren and Prana fell more than four percent; Allied Health, Anteo, Bionomics and GI Dynamics were down three percent or more; Living Cell, Mesoblast and Universal Biosensors shed more than two percent; Alchemia, Circadian, Tissue Therapies and Viralytics were down more than one percent; with Heartware, Medical Developments, Nanosonics and Starpharma down by less than one percent.

MIREVEN

Mireven says an in-vitro study has shown that its micro-RNA miR-7-5p significantly inhibited the migration and invasion of metastatic melanoma cells.

Mireven said the study, with the Western Australian Institute for Medical Research (WAIMR), was entitled 'miRNA-7-5p Inhibits Melanoma Cell Migration and Invasion' and was published in the journal Biochemical and Biophysical Research Communications.

An abstract is at: <http://www.sciencedirect.com/science/article/pii/S0006291X12022619>.

Mireven said that micro-RNAs or miRNAs were non-coding regulatory RNA molecules with altered expression and function in cancer and had both oncogenic and tumor suppressor potential.

The company said that while the function of many miRNAs in melanoma was unclear, several recent reports implicated specific miRNAs, including miR-7-5p, in the progression to metastatic disease.

Mireven said that in the study, led by WAIMR's Dr Keith Giles and Prof Peter Leedman, miR-7-5p expression was shown to be reduced in metastatic melanoma-derived cell lines compared with primary melanoma cells.

The company said that when the microRNA was reintroduced and expressed ectopically, migration and invasion of the melanoma cells was significantly inhibited in-vitro.

Mireven said the study investigated the mechanism of miR-7-5p and found that insulin receptor substrate-2 (IRS-2) was a functional target of miR-7-5p which then decreased activity in the protein kinase B (Akt) signaling pathway, a key regulator of many oncogenic processes including cell migration.

Prof Leedman said there was "considerable interest in the molecular pathogenesis of malignant melanoma and a focus on finding ways to improve survival of patients with metastatic disease".

"Our study shows that miR-7-5p may represent a novel therapeutic approach to prevent or limit melanoma metastasis," Prof Leedman said.

Mireven chairman and Brandon Capital Sydney managing director Dr Stephen Thompson said the published study was "one of several in press or already published demonstrating the utility of micro-RNAs in the treatment of cancer".

"Alongside antibodies and small molecule inhibitors, a picture is emerging where micro-RNAs offer a new direction for cancer therapeutic interventions," Dr Thompson said.

"Specifically, this study shows that miR-7 acts on other pathways in cancer beyond [epidermal growth factor receptor]," Dr Thompson said.

Mireven said that WAIMR research had shown that miR-7 could knock-out epidermal growth factor receptor (EGFR), an essential growth receptor for cancer, as well as its associated signaling pathways that promote cancer development.

The company said that EGFR was a major target for cancer therapy because it was often associated with disease progression, resistance to chemotherapy and radiation therapy.

Mireven is a private company.

COCHLEAR

The US based Capital Group Companies has further reduced its substantial shareholding in Cochlear from 3,227,012 shares (5.66%) to 2,795,813 shares (4.90%).

Capital Group increased its holding in Cochlear to as much as to 7,322,475 shares (13.03%) on September 11, 2009, and began reductions in May 2010 (BD: May 11, 2010).

Today, Capital Group said it sold 431,199 shares between February 4 and 8, 2013 at an average price of \$69.45.

Cochlear was up 10 cents or 0.1 percent to \$70.80 with 350,972 shares traded.

ACRUX

Acrux says the US Patent and Trademark Office has allowed its patent application for the underarm administration of testosterone formulations.

Acrux chief financial officer Jon Pilcher told Biotech Daily that the patent was entitled 'Method and composition for transdermal drug delivery', and while all patents could be challenged, the company had no knowledge of any potential challenge.

Acrux said that the patent was expected to be granted following payment of the issue fee and the USPTO's preliminary calculation of patent term adjustment was one additional year beyond the expiry date of June 2026.

The company said that the date would be re-calculated when the patent was granted.

Acrux said that a similar patent was previously granted in Australia, New Zealand, Singapore and South Africa and applications were under examination in a number of other countries around the world.

Acrux climbed as much as 50 cents or 14.1 percent to \$4.05 before closing up 35 cents or 9.9 percent at \$3.90 with 3.7 million shares traded.

ANTISENSE THERAPEUTICS

Antisense says the US Patent Office has allowed a patent covering ATL1102 for of relapsing-remitting multiple sclerosis patients until 2029, potentially extendable to 2034.

Antisense said that the patent, entitled 'Methods for Treating Multiple Sclerosis using Antisense Oligonucleotides', was expected to be granted in the coming months and was part of a portfolio protecting ATL1102 and its uses, with patent applications under examination in Europe, Japan, Canada, and Australia.

Antisense director of drug discovery and patents, Dr George Tachas said the extension of patent protection on ATL1102 used data from previous phase II studies where ATL1102 confirmed its activity in potently suppressing brain lesions in relapsing-remitting multiple sclerosis patients (BD: Jun 30, 2008; Mar 24, 2010; Jul 18, 2012).

Dr Tachas said the patent extension was with a backdrop of deals in the multiple sclerosis space including Biogen Idec's purchase of Elan's stake in Tysabri and Merck Serono's option over Opexa's Tcelna therapy, entering phase IIb trials.

Antisense said that it had suitable supplies of ATL1102 material for a chronic toxicology study to support a potential phase IIb study in multiple sclerosis patients and the material would be shipped to China for a toxicology study.

Antisense said it was in discussions with the Tianjin International Joint Academy of Biotechnology and Medicine regarding the toxicology study (BD: Feb 29, 2012).

Antisense was up 0.1 cents or 7.7 percent to 1.4 cents with 6.2 million shares traded.

ACUVAX

Acuvax says it will acquire Biolife Science, returning Dr Roger Aston and Paul Hopper to the cancer therapeutics company, to be renamed Biolife Science.

Late last year, Perth's GBU Capital orchestrated the back-door listing for Acuvax to acquire Biolife, conduct a one-for-200 share consolidation, after which Acuvax would have 11,500,000 shares on issue, as well as raising \$4,000,000 (BD: Dec 20, 2012).

Today Acuvax said that Patersons Corp was lead manager in the offer of 25,000,000 shares at 20 cents a share.

Acuvax said that Biolife had the rights to a platform oncology technology developed by scientists at the University of Vienna Medical School.

Acuvax was unchanged at 0.1 cents with 9.8 million shares traded.

BIODIEM

Biodiem says it has received payment of \$US100,000 (\$A) from partner, Changchun BCHT Biotechnology for a licence to its live attenuated influenza virus vaccine.

In February 2012, Biodiem licenced the live attenuated influenza virus (LAIV) vaccine technology to Changchun BCHT targeting the Chinese private sector market for pandemic and seasonal influenza vaccines made using an egg-based production method.

Biodiem said it received annual payments of \$US100,000 (\$A97,620) until the launch of the product.

The company said that Changchun BCHT held a complementary licence to the LAIV for the public market in China via a sub-licence from the World Health Organisation.

Biodiem said that Changchun BCHT was planning to lodge an application with the Chinese Food and Drug Administration for approval to conduct human clinical trials for LAIV flu vaccines, by April 2013.

The company said that Changchun BCHT was constructing a substantial new production facility at the Changchun National High-Tech Industrial Development Zone, with buildings for the manufacture of its proprietary rabies vaccine and a second building for the manufacture of influenza vaccines using Biodiem's LAIV technology.

Biodiem chief executive officer Julie Phillips said the first payment of annual maintenance fees was "a stream of revenue that we expect to increase as the influenza vaccines manufactured with Biodiem's LAIV technology are launched".

Biodiem was unchanged at four cents.

AGENIX

Agenix says all three of its business programs are the subject of ongoing licencing and partnering discussions with potential commercial partners.

Agenix said it was commercializing the Thromboview blood clot diagnostic as well as the recently acquired Diagnostiq point of care diagnostic platform and the Chinese hepatitis B vaccine.

Agenix executive chairman Nick Weston said the current rights issue would close on February 20, 2013 combined with a recent \$3 million funding commitment would strengthen the company's balance sheet and ensure funds as it worked towards important partnering and licencing milestones.

Mr Weston said the board and management intended to take up their full entitlements in the rights issue to raise \$1.2 million if fully subscribed.

Mr Weston told investors that Agenix was well-positioned with a solid management team, a phase III ready lead program and positive healthcare industry dynamics driven by payer and user needs to reduce costs and improve levels of care.

Agenix was up 0.1 cents or four percent to 2.6 cents.

BIOXYNE

Bioxyne says it has appointed Traverse Accountants director Jarrod White as company secretary.

Bioxyne fell 0.3 cents or 10.7 percent to 2.5 cents.