



Biotech Daily

Wednesday May 8, 2013

Daily news on ASX-listed biotechnology companies

- * **ASX, BIOTECH UP: CELLMID UP 32%, CSL DOWN 5%**
- * **VICTORIA BUDGET – BIOTECHNOLOGY UNAFFECTED**
- * **CELLMID BUYS JAPAN'S ADVANGEN FOR \$4m CASH, SCRIP**
- * **PATRY'S PAT-SM6 TWO MODES OF ACTION FOR MULTIPLE MYELOMA**
- * **USCOM SMITH-MADIGAN INOTROPY CARDIOVASCULAR INDEX**
- * **PSIVIDA'S ILUVIEN FOR DME ON SALE IN GERMANY, UK**
- * **CAPITAL CONCERNS, LOGUE FAMILY TAKE 5% OF IMMURON, AGAIN**
- * **PRIMA APPOINTS DR RUSSELL HOWARD DIRECTOR**

MARKET REPORT

The Australian stock market climbed 1.09 percent on Wednesday May 8, 2013, with the S&P ASX 200 up 56.1 points to 5,199.8 points.

Nineteen of the Biotech Daily Top 40 stocks were up, 11 fell, eight traded unchanged and two were untraded.

Cellmid was the best, up 0.8 cents or 32 percent to 3.3 cents with 26.4 million shares traded, followed by Compumedics up 12.5 percent to 4.5 cents with 30,000 shares traded and Prima up 12.05 percent to 9.3 cents, with 4.8 million shares traded.

Atcor and Nanosonics climbed more than nine percent; Ellex was up 8.6 percent; Psivida was up 7.5 percent; Anteo rose five percent; Patrys and Reva climbed four percent or more; Allied Health and Sirtex were both up more than three percent for the second day in a row; Avita, Circadian, Neuren and Resmed rose more than two percent; with Alchemia, Cochlear, Heartware, GI Dynamics and Mesoblast up more than one percent.

CSL led the falls, down \$3.26 or 5.2 percent to \$59.61 with 5.4 million shares traded.

Medical Developments and Universal Biosensors fell more than four percent; QRX and Pharmaxis were down more than three percent; Acrux, Bionomics, Optiscan and Prana shed more than two percent; with Genetic Technologies, Starpharma and Viralytics down by less than one percent.

VICTORIA GOVERNMENT

The Victoria Government Budget has continued funding to the biotechnology sector with increased funding for general innovation and no cuts to the sector.

The Budget was announced by Treasurer Michael O'Brien last night and primarily concentrated on infrastructure spending.

The Budget confirmed continued spending on the Victorian Comprehensive Cancer Centre in Parkville as well as hospitals and referred to \$16 million of new funding as part of \$112 million for innovation "to drive Victorian business innovation and international engagement in the tourism, international education, health exports, aviation, and screen sectors".

Minister for Innovation, Services and Small Business Louise Asher said the Driving Business Innovation program built on the Market Validation program which had funded more than 31 projects in health, water and transport, by supporting collaborative projects that link Victorian public sector agencies to Victorian small businesses.

A spokesperson for the Minister for Technology Gordon Rich-Phillips told Biotech Daily: "There is no reduction or increase in funding for biotechnology in this year's budget, however, the Coalition [Government] funded \$55 million to the biotech sector in 2011-'12".

CELLMID

Cellmid will acquire Japanese baldness treatment company Advangen for \$1.2 million in cash and \$2,786,881 in scrip.

Cellmid said that Advangen owns the FGF-5 inhibitor hair growth technology marketed by Cellmid through the Évolis hair product range.

The company said the strategic acquisition would significantly increase its revenues in the short to medium term.

Cellmid said along with the payment of JPY120 million (\$A1.2 million) in cash it would 55,737,624 shares at a nominal issue price of five cents each.

Cellmid chief executive officer Maria Halasz told Biotech Daily that Advangen had cash in the bank that was material to Cellmid, had revenue from sales and included a distribution business in Japan.

Ms Halasz said that the acquisition would not affect the company's focus on its midkine assets.

The company said that the FGF-5 inhibitor technology platform was the basis of other Advangen brands generating solid revenues in Japan.

Cellmid said it would gain immediate access to the established Japanese hair growth market and new market opportunities would be pursued including China where import permits are already in place for the Lexilis and Jo-Ju branded products.

The company said its own profitability of Évolis sold in its existing markets would improve as there would no longer be royalties payable and it expected to make savings on raw material costs of the active ingredients.

Cellmid said that Advangen had product development expertise in the hair growth sector, which would facilitate Cellmid's program to develop midkine as a hair loss treatment.

Ms Halasz said that the objective was "to establish Cellmid as a global leader in scientifically and clinically validated hair growth technology".

Cellmid said that the market for hair loss products was valued at up to \$US2 billion a year in the US, affecting 52 million customers with a global market several times this amount.

The company said the transaction was expected to take up to two weeks.

Cellmid climbed 0.8 cents or 32 percent to 3.3 cents with 26.4 million shares traded.

PATRYS

Patrys says an in-vitro study has shown proof-of-concept that PAT-SM6 kills multiple myeloma cells through programmed cell death and complement dependent cytotoxicity. The article, entitled 'The Natural Human IgM Antibody PAT-SM6 Induces Apoptosis in Primary Human Multiple Myeloma Cells by Targeting Heat Shock Protein GRP78' was published in the Public Library of Science journal and the full article is available at <http://dx.plos.org/10.1371/journal.pone.0063414>.

Patrys chief executive officer Dr Marie Roskrow said that the study "not only shows that our lead drug candidate PAT-SM6 actively targets and kills cancerous multiple myeloma cells, it explains the mechanism behind this".

"We can see how PAT-SM6 binds to the glucose-regulate protein 78 (GRP78) which is abnormally attached to the outside of multiple myeloma cells and not on the inside as occurs in healthy, non-cancer causing cells," Dr Roskrow said.

"This further validates the potential of PAT-SM6 as an anti-cancer therapy for patients with multiple myeloma," Dr Roskrow said.

Patrys said that the study was conducted in collaboration with Germany's University of Würzburg Institute of Pathology and lead researcher Dr Stephanie Brändlein examined whether the immunoglobulin M (IgM) antibody, PAT-SM6 could effectively kill multiple myeloma cells.

The company said that the study confirmed that PAT-SM6 induced the killing of multiple myeloma cells and induced cytotoxicity in multiple myeloma cells but not normal cells by interacting with (GRP78).

Patrys said that in a normal cell GRP78 was located inside the cell and played a crucial role in cell growth and survival, but in a malignant multiple myeloma cell, it had been shown that isoforms of GRP78 could exist outside the cells on the cell surface.

The company said that these isoforms of GRP78 were important for the multiple myeloma cell survival, metastasis and resistance to chemotherapeutics.

Patrys said that PAT-SM6 bound to this isoform of GRP78 resulting in inhibition of cell survival and specific killing of the cancer cells.

The company said that laboratory experiments showed strong binding of PAT-SM6 to the surface of multiple myeloma cell lines and cancer cells isolated from the bone marrow of newly diagnosed as well as relapsed patients.

Patrys said the binding of PAT-SM6 resulted in killing of the cells through the mechanism called programmed cell death, without releasing any harmful substances.

The company said that PAT-SM6 showed significant induction of this killing mechanism resulting in high levels of cell death in cells extracted from both newly diagnosed patients and those with refractory and relapsed disease.

Patrys said that PAT-SM6 also had an additional anti-cancer effect and was shown to be capable of killing multiple myeloma cells through the mechanism of complement dependent cytotoxicity or CDC.

The company said that CDC was the immune process by which the binding of PAT-SM6 to the cancer cell activated a cascade of proteins and events inside the cell that ultimately resulted in their destruction.

Compared to the induction of programmed cell death, CDC appeared to be moderate, but was an important additive effect to the main killing mechanism.

"This is an exciting study that demonstrates the ability of PAT-SM6 to effectively kill multiple myeloma cells and strongly supports Patrys' current phase I/IIa clinical trial of PAT-SM6 in patients with relapsed and refractory multiple myeloma," Dr Brändlein said.

Patrys was up 0.1 cents or 4.2 percent to 2.5 cents with 28.1 million shares traded.

USCOM

Uscom says the Smith Madigan Inotropy Index is a new method for measurement of cardiovascular performance based on its ultrasonic cardiac output monitor.

Uscom said that the derivation and validation of the method represented six years of pure and clinical research between the authors Prof Brendan Smith and Veronica Madigan.

The article, entitled 'Non-invasive method for rapid bedside estimation of inotropy: Theory and preliminary clinical validation' was published in the British Journal of Anaesthesia.

An abstract is available at:

<http://bjaoxfordjournals.org/content/early/2013/05/02/bja.aet118.abstract>.

The company said that the Smith Madigan Inotropy Index was based on its ultrasonic cardiac output monitor (Uscom) and provided a simple and improved method for identifying and treating all cardiovascular conditions including heart failure, hypertension and sepsis.

Uscom said that measurement of the Smith Madigan Inotropy Index could be performed in less than two minutes, replacing complex catheter-based measurements that were invasive, time consuming, costly and associated with the clinical risk of complications.

Uscom said that the Smith Madigan Inotropy Index was patent-protected and would be released as a new feature on Uscom devices.

New South Wales Department of Health consultant anaesthetist and the Bathurst-based Charles Sturt University professor of biomedical sciences Prof Smith said that Uscom was "a central part of my clinical practice for over eight years and the Inotropy Index has developed from this practice".

"The Inotropy Index is an improvement on other measures of cardiovascular function and will allow for greater application of the Uscom in clinical practice," Prof Smith said.

"Our team is currently working on incorporating these parameters into new clinical treatment algorithms to simplify and improve care of sepsis, heart failure, major surgery, circulatory disorders and hypertension," Prof Smith said.

"In our hospital the Inotropy Index is saving lives in these complex diseases and is a major component of the [Bathurst Uscom haemodynamic] protocol for treatment of sepsis and septic shock," Prof Smith said.

Uscom executive chairman Rob Phillips said that Prof Smith and Veronica Madigan were "early adopters of Uscom and world leaders in the field of clinical haemodynamics".

"The Inotropy Index will change the way we look at cardiovascular function and is already saving lives and changing the management of sepsis and septic shock," Mr Phillips said.

Uscom said that a study presented at the Society of Critical Care Medicine in January 2013 by Prof Smith demonstrated that adoption of the Bathurst Uscom haemodynamic (Bush) protocol Australia-wide between 2006- 2012 would have saved 8,237 lives.

Uscom was untraded at 21 cents.

PSIVIDA

Psivida says that Iluvien is commercially available in Germany through licensee Alimera Sciences and the first commercial diabetic macular oedema patient has been treated.

Psivida chief executive officer Dr Paul Ashton said he was "very pleased Iluvien [was] available in Germany as well as for privately insured and private pay patients in the UK".

Dr Ashton said Psivida would be entitled to 20 percent of net profits in Germany and the UK and if the US Food and Drug Administration approved the drug, "we would also be entitled to an additional \$US25 million milestone payment from Alimera as well as 20 percent of net profits on any sales in the US."

Psivida was up 20 cents or 7.5 percent to \$2.88.

IMMURON

Capital Concerns Pty Ltd as the Logue Family Super Fund has again become substantial in Immuron with the acquisition of 54,627,723 shares or 5.38 percent.

Capital Concerns and the Logue family substantial shareholder notice said that the most recent transaction on May 3, 2013, was the purchase of 30,000,000 shares for \$90,000 or 0.3 cents a share.

Capital Concerns and the Logue family previously became substantial in Immuron with 20,771,223 shares or 5.58 percent 12 months ago (BD: May 3, 2012).

Last year the shares were acquired for \$743,452 or an average price of 3.58 cents a share.

Immuron was up 0.1 cents or 33.3 percent to 0.4 cents with 13.9 million shares traded.

PRIMA BIOMED

Prima says it has appointed Dr Russell Howard as a non-executive director effective from today.

Prima said that Dr Howard had “a strong scientific background and significant executive-level industry experience”.

Prima said that Dr Howard was “a pioneer in the field of molecular parasitology and in leading the commercialization of ‘DNA shuffling’ or ‘molecular breeding’ and an inventor on five patents with more than 140 scientific publications.

The company said that most recently Dr Howard was the founder of the clean technology company Oakbio.

Prima said that Dr Howard previously worked in the immuno-parasitology laboratory at the Melbourne’s Walter and Eliza Hall Institute and was a tenured investigator at the US National Institutes of Health in Bethesda, Maryland.

The company said that Dr. Howard worked at Schering-Plough’s DNAX Research Institute of Molecular and Cellular Biology in Palo Alto, California.

Prima said that Dr Howard was the scientific director of Affymax Inc and was the co-founder and chief executive officer of Maxygen after its spin-out of Affymax-Glaxowellcome.

The company said that Dr Howard led the Maxygen initial public offer and a secondary offer raising a total of \$US260 million.

Dr Howard holds a Bachelor of Science and Doctor of Philosophy in biochemistry from the University of Melbourne.

Prima was up one cent or 12.05 percent to 9.3 cents with 4.7 million shares traded.