



Biotech Daily

Friday February 7, 2014

Daily news on ASX-listed biotechnology companies

- * **ASX UP, BIOTECH EVEN: PRIMA UP 10%, REVA DOWN 9%**
- * **NATURE PAPER BACKS BENITEC TT-034 FOR HEPATITIS C**
- * **ALLAN GRAY TAKES 13% OF ACRUX**
- * **VIRAX HOPES FOR TRANSGENE CO-X-GENE LICENCE ROYALTY**
- * **US ATHLETES SURVEY SHOWS INTEREST IN RHINOMED TURBO**
- * **PHYLOGICA PLEADS SCHULTZ TO ASX 42% QUERY**
- * **MASS MUTUAL CEASES 15.5% IN TYRIAN**
- * **BIO-MELBOURNE BREAKFASTS WITH AVCAL'S YASSER EL-ANSARY**

MARKET REPORT

The Australian stock market was up 0.68 percent on Friday February 7, 2014 with the S&P ASX 200 up 35.1 points to 5,166.5 points.

Sixteen of the Biotech Daily Top 40 stocks were up, 15 fell, seven traded unchanged and two were untraded.

Prima was the best for the second day in a row, up 0.5 cents or 10.2 percent to 5.4 cents with 31.6 million shares traded.

Cellmid, Living Cell and Pharmaxis climbed eight percent or more; Atcor was up 7.4 percent; Universal Biosensors was up 6.7 percent, Impedimed and Oncosil were up four percent or more; Admedus, Acrux, Anteo, QRX and Viralytics were up three percent or more; Neuren and Starpharma rose more than two percent; with Benitec and Cochlear up by less than one percent.

Reva led the falls, down four cents or 8.9 percent to 41 cents, with 56,906 shares traded, followed by Prana down 8.85 percent to \$1.185 with 1.3 million shares traded.

GI Dynamics lost 5.4 percent; Ellex and Phosphagenics fell more than four percent; Avita and Bionomics lost more than three percent; Clinuvel and IDT shed more than two percent; Genetic Technologies, Medical Developments, Optiscan, Psivida and Resmed were down more than one percent; with CSL, Mesoblast and Sirtex down by less than one percent.

BENITEC BIOPHARMA

Benitec says that a scientific paper, characterizing its first-in-man, TT-034, single-shot cure for hepatitis C, has been published in Nature Molecular Therapy.

The detailed scientific discussion in the paper suggests that TT-034 had “an on-target mechanism of action ...without cytotoxicity and question the accepted precision of substrate processing by the key RNA interference (RNAi) enzymes Dicer and siRNA-induced silencing complex (siRISC)”.

Benitec said that the paper, entitled ‘Deep Sequencing Insights in Therapeutic shRNA Processing and siRNA Target Cleavage Precision’ was co written by research and development senior vice-president Dr David Suhy with scientists from Pfizer and the full text was at: <http://www.nature.com/mtna/journal/v3/n2/full/mtna201373a.html>.

The company said that the research was the product of the collaboration between Tacere Therapeutics, which it acquired in October 2012 and Pfizer which generated most of the pre-clinical work for the DNA-directed RNA-interference (ddRNAi) TT-034, reviewed as part of the investigational new drug application by the US Food and Drug Administration. The paper said that chronic hepatitis caused by hepatitis C virus HCV affected 170 million people worldwide, progressed to liver cirrhosis in about one in four cases and was associated with increased risk of hepatocellular carcinoma.

The paper said that combination therapy-based care was not effective against all genotypes, exhibited variable cure rates, was associated with side effects and management strategies required chronic dosing and were prone to viral escape.

“It has been suggested that direct targeting of the HCV genome could provide a valuable alternative,” the Nature paper said. “High genomic variability is encountered in HCV due to error-prone replication ...because the HCV genome is propagated exclusively as RNA, several direct targeting approaches have been proposed, including RNA interference.”

“A high efficiency alternative to synthetic RNAi delivery systems, however, involves the use of recombinant viruses possessing capsid-specific tropism for different organs,” the paper said. “In these systems, siRNA are delivered in the form of short hairpin RNA (shRNA) precursors expressed from virus-encoded DNA plasmids.”

“An example of such an approach is TT-034,” the paper said. “The virus has been modified to encode three shRNAs against HCV ... two of which were designed in a passenger strand-loop-guide strand orientation.”

“We previously reported dose-dependent activity of these shRNAs, delivered individually or together as TT-034, against a HCV genotype 1 replicon model in vitro,” the paper said.

“In those experiments, we did not observe activation of innate immune responses nor detect replicon inhibition following transduction with empty capsid vector confirming that the activity of TT-034 was specifically due to delivery of the shRNAs,” the paper said.

Benitec was up half a cent or 0.6 percent to 83 cents.

ACRUX

Allan Gray Australia has increased its substantial holding in Acrux from 18,955,022 shares (11.38%) to 21,590,115 shares (12.97%).

Allan Gray said that between January 28 and February 4, 2014 it bought 2,635,093 shares for \$5,631,101 or an average price of \$2.14 a share.

Earlier this week, following news of a US Food and Drug Administration inquiry into the cardiac impacts of testosterone products, Macquarie analyst Dr Craig Collie put a \$1.80 valuation on the stock, Wilson HTM analyst Dr Shane Storey said it was a hold at \$3.70 and Morgans’ Scott Power said Acrux was worth \$2.70 a share (BD: Feb 4, 5, 2013).

Acrux recovered six cents or three percent to \$2.06 with 2.05 million shares traded.

VIRAX HOLDINGS

Virax says it will be entitled to a royalty payment should Transgene progress its TG4010 phase III TG4010 drug for non-small cell lung cancer to commercialization.

Virax said it had licenced its Co-X-Gene to Transgene for two of Transgene's immunotherapeutic products and on January 8, 2014 Transgene released results of its phase IIb evaluating TG4010 in combination with chemotherapy versus placebo plus chemotherapy in the first-line treatment of MUC-1 positive advanced non-small cell lung cancer patients.

The company said that the overall results warranted continuation into the phase III part of the study.

Virax said that since completion of the phase IIb trial, Transgene had signed an exclusive option agreement with Novartis for the development and commercialization of TG4010 for the first-line treatment of non-small cell lung cancer and other potential cancer indications. The company said it expected to receive the intellectual property report prepared by its independent expert to assisting in the further development and exploitation of its licencing arrangements, patents and intellectual property portfolio.

Virax said it was confident it could build on the experience with its Co-X-Gene technology and generate further licencing opportunities.

The company said it had been approached by third parties to explore potential collaborative opportunities and on development of its patent portfolio.

Virax was up 0.1 cents or 7.1 percent to 1.5 cents with 36.4 million shares traded.

RHINOMED

Rhinomed says a US market research study of its Breatheassist Turbo with 1,000 "committed athletes" shows that most would be interested in trying the nasal plugs. Rhinomed said that the US cycling, triathlon and exercise market was a significant opportunity for the company's nasal plugs.

The company said that the research objective was to confirm and quantify benefits of the Turbine and provide an objective, independent assessment of athlete preference and potential product uptake prior to an expansion into the US in 2014.

Rhinomed said that 84 percent of respondents found breathing during exercise a challenge; 94 percent believed maintaining deep regular breathing patterns throughout exercise was important; 82 percent of respondents reported that they struggled to maintain deep breathing and 84 percent reported that achieving controlled breathing during surges was challenging.

The company said that after being told of the features of the Breatheassist Turbine and being exposed to the nasal plugs 83 percent of respondents indicated that they would be likely or very likely to try the Turbine.

Rhinomed said that 78 percent believe the turbine would help them to breathe more easily during strenuous activity; 80 percent believe the Turbine would aid their overall endurance; 73 percent believe the Turbine could increase their performance intensity; 83 percent understood the importance of nasal breathing for optimal sports performance; and 64 percent would look for the Turbine online.

Rhinomed chief executive officer Michael Johnson said the independent research "has allowed us to validate in a detailed fashion the core benefits of the Turbine in the US market".

"The results confirm a compelling commercial proposition, addressing an unmet need in a large, growing market," Mr Johnson said.

Rhinomed was up 0.2 cents or 5.3 percent to four cents with 4.3 million shares traded.

PHYLOGICA

Phylogica has told the ASX that it is not aware of any information it has not announced which, if known, could explain recent trading in its securities.

The ASX said the company's share price rose 41.7 percent from 2.4 cents on January 31 to 3.4 cents today, February 7, 2014 and noted an increase in trading volume.

Phylogica was up 0.2 cents or 6.7 percent to 3.2 cents with 6.2 million shares traded.

TYRIAN DIAGNOSTICS

Massachusetts Mutual has ceased its substantial holding in Tyrian selling 157,879,432 shares for 0.15 cents a share.

In 2012, Massachusetts Mutual was a new entity in Oppenheimer Funds group and became a substantial shareholder in Novogen and Tyrian (BD: Mar 23, 2012).

The initial substantial shareholder notice filed by the Sydney office of law firm, DLA Piper, for the Massachusetts-based MM Asset Management said at that time that the company was a new entity joining the Oppenheimer International Growth Fund and other related companies, which already held shares in Novogen and Tyrian.

The notice said that MM was a related party to 11,552,712 Novogen shares or (11.31%) and 157,879,432 Tyrian shares (15.46%).

Tyrian was up 0.05 cents or 33.3 percent to 0.2 cents with 16.3 million shares traded.

BIO-MELBOURNE NETWORK

The Bio-Melbourne Network says AVCAL chief executive Yasser El-Ansary will discuss 'Boosting Investment in Innovation' at its February 11, 2014 Bio-Breakfast

The Network said Mr El-Ansary would address Australian Private Equity and Venture Capital Association 2103 Yearbook which describes the current state of Australian private equity and venture capital market and the outlook for investment in 2014 and beyond.

The Bio-Melbourne Network said that Mr El-Ansary would release AVCAL's Five Point Plan for Boosting Investment in Innovation, which sets out policy initiatives that the Federal Government should put in place to support greater investment in Australian venture capital funds.

The Network said that AVCAL represented Australia's \$24 billion private equity and venture capital industry and Mr El-Ansary was previously the Institute of Chartered Accountants general manager of policy and advocacy and had about 20 years experience as a business adviser and public policy expert, through previous roles with Price Waterhouse Coopers, Rio Tinto, Australand Property Group and the Department of Treasury in Canberra.

The Bio-Breakfast will be held at the Shell Conference Centre, 1 Spring Street, Melbourne, on February 11, 2014 with registration from 7.15am.

For further information contact Nicole Pitcher at: npitcher@biomelbourne.org or by telephone on: +613 9650 8800.

To register go to: <http://www.biomelbourne.org/events/view/310>.