

# Biotech Daily

Tuesday April 23, 2013

Daily news on ASX-listed biotechnology companies

- \* ASX UP, BIOTECH DOWN: NEUREN UP 7%, ATCOR DOWN 10%
- \* ALCHEMIA SIGNS 'UP TO \$240m' ASTRAZENECA COLLABORATION
- \* LONZA TO MANUFACTURE BIONOMICS BNC101
- \* NEUREN DOSES 1st PHASE II RETT PATIENT; PHASE I FRAGILE X TRIAL
- \* OBJ RAISES \$860k OF \$3.5m; NOVUS BALKS AT 'FULLY UNDERWRITTEN'
- \* ALLAN GRAY TAKES 6% OF ACRUX

### MARKET REPORT

The Australian stock market was up 1.0 percent on Tuesday April 23, 2013 with the S&P ASX 200 up 49.6 points to 5,016.2 points.

Eleven of the Biotech Daily Top 40 stocks were up, 15 fell, six traded unchanged and eight were untraded. All three Big Caps were up.

Neuren was the best, up 0.2 cents or 6.9 percent to 3.1 cents with 1.8 million shares traded.

Alchemia and Psivida climbed more than four percent; Allied Health and Viralytics were up more than three percent; Bionomics, Cochlear and Prana rose more than two percent; with CSL, Heartware, Mesoblast, Nanosonics, Osprey and Resmed up more than one percent.

Atcor led the falls, despite posting revenue and being cash flow positive in its Appendix 4C quarterly report, down 0.9 cents or 9.9 percent to 8.2 cents, with 264,787 shares traded, followed by Antisense and Cellmid both down 9.1 percent to one cent and three cents, respectively, with 2.0 million and 3.6 million shares traded, respectively.

Benitec lost 7.1 percent; Starpharma was down 6.8 percent; Anteo and Phylogica fell more than five percent; Patrys and Tissue Therapies were down more than three percent; Acrux, Ellex, Genetic Technologies, Prima and Sirtex shed more than two percent; with Medical Developments down 0.3 percent.

## **ALCHEMIA**

Alchemia says it has signed a multi-target, drug discovery collaboration with the UK-based Astrazeneca AB worth up to \$240 million.

Alchemia said that the collaboration included the use of its diversity scanning array (DSA) and versatile assembly on stable templates (VAST) chemistry platform to discover and develop novel small molecules against multiple Astrazeneca targets.

The company said that it would provide its VAST chemistry expertise to develop small molecule clinical candidates for Astrazeneca for diseases including oncology, respiratory, cardiovascular, metabolism, infection and neuroscience.

Alchemia's discovery vice-president and co-inventor of the VAST platform Dr Wim Meutermans said the collaboration had "the potential to demonstrate the unique capabilities and value of VAST and is a pivotal step in the commercialization of both the DSA and the VAST platform".

Astrazeneca's head of discovery sciences Mike Snowden said that Alchemia's DSA library and expertise in carbohydrate chemistry were "welcome additions to our small molecule corporate collection and early discovery hit finding activities".

"We are looking forward to working with Alchemia to maximise the potential of this novel platform in early phase drug discovery at Astrazeneca," Mr Snowden said.

Alchemia said it would receive an undisclosed upfront payment and was eligible for potential preclinical, clinical and commercial launch payments totaling up to \$240 million, as well as a single digit royalty on any subsequent product sales.

Alchemia said it had a designed a suite of novel compounds that scanned three dimensional molecular shapes and peptidomimetic functionality called the diversity scanning array (DSA), containing more than 14,000 unique compounds related by their shape (chemoform) and/or by their functionality (motif, three binding elements). The company said that the DSA was the basis for its VAST discovery platform which, when screened in high throughput screening could identify the shape and binding elements required for target modulation.

Alchemia said that hits from the DSA were related by shape and/or functionality and provided detailed structure activity relationships for rapid optimization Alchemia was up 1.5 cents or 4.5 percent to 35 cents.

#### **BIONOMICS**

Bionomics says that the Basel, Switzerland-based Lonza will manufacture lead anticancer stem cell candidate BNC101 at its Slough, UK facility.

Bionomics chief executive officer Dr Deborah Rathjen said the start of manufacturing activities for BNC101 following completion of preclinical studies "signals a significant step towards clinical trials" expected to begin in 2014.

"BNC101 is a novel therapeutic antibody designed to target cancer stem cells," Dr Rathjen said. "Eliminating cancer stem cells represents a new cancer treatment paradigm that could offer a distinct advantage over existing treatment strategies and a solution for resistance to chemotherapy."

Bionomics said that preclinical data had shown that BNC101 demonstrated functional activity against LGR5, a high-value cancer stem cell receptor, significantly reduced cancer stem cell frequency and prevented tumor re-growth in long term animal studies involving primary colorectal cancer patient samples with multiple underlying gene mutations. The company said BNC101 would target solid tumors expressing LGR5 where there was a high rate of relapse with colorectal and pancreatic cancer as initial priority indications. Bionomics was up one cent or 2.7 percent to 37.5 cents.

## NEUREN PHARMACEUTICALS

Neuren says it has dosed the first patient in its phase II trial of NNZ566 for Rett syndrome and will begin a phase I trial of NNZ2566 for Fragile X syndrome trial.

Neuren said that following a strategic review it had decided to locate the company's investor relations and some administrative functions in Australia and consolidate all clinical development and operations in the US.

The company said that Rett syndrome was caused by mutations on the X chromosome of a gene called MeCP2, across all racial and ethnic groups and occurred in up to one of in 10,000 female births and affected about 20,000 girls and women in the US, alone. Neuren said a trial of NNZ-2566 in the MeCP2 mouse model showed positive effects on synaptic plasticity, dendritic morphology and survival and the putative mechanism of action was inhibition of neuro-inflammatory cytokines and normalization of microglial function, which were key molecular and cellular processes, abnormal in Rett syndrome. Neuren said the phase II Rett syndrome clinical study was actively recruiting and the first of up to 60 patients patient had been enrolled, in the trial, partly-funded by a \$US600,000 grant from the International Rett Syndrome Foundation to the principal investigators at Baylor College of Medicine (BD: Nov 22, 2012; Jan 20, 2013).

Neuren said that like Rett syndrome, Fragile X syndrome was a genetically-caused neurodevelopmental disorder and was the most common inherited form of intellectual disability in males with approximately 60,000 people affected.

The company said that NNZ-2566 was tested in a mouse model of Fragile X syndrome and a range of behavioral and anatomic outcomes were assessed at 42 days following 28 days of treatment, with NNZ-2566 normalizing anatomic, biochemical and behavioral features of the disorder with results that achieved statistical significance in all measures (BD: Nov 30, 2012).

Neuren said the results appeared to be "among the most compelling obtained with any molecule in a validated model that has been posited to predict the outcome of clinical studies in human patients".

"We believe that NNZ-2566 has the potential to represent a major breakthrough in this therapeutic area," Neuren said.

Neuren said it planned to go to a phase II clinical study to begin in 2013 and complete subject enrolment by the end of 2014.

The company said it was extending its therapeutic focus from acute brain injury to chronic conditions, with Rett syndrome and Fragile X syndrome meeting all the criteria of scientific rationale, unmet medical need, market opportunity and a clear regulatory path to approval. Neuren said its lead pre-clinical molecule was NNZ-2591, a cyclic dipeptide (diketopiperazine or DKP) and a synthetic analogue of the DKP cyclo-(Gly-Pro) which, like Glypromate, NNZ-2566's parent molecule, occurred naturally in the brain and was described as having neuroprotective, anxiolytic and nootropic or memory enhancing effects, significantly attenuates activation of microglia following injury.

The company said the molecule had excellent oral bioavailability and was being assessed as a clinical candidate for the treatment of a number of chronic neurological disorders. Neuren said it had a collaborative research and development agreement with the Walter Reed Army Institute of Research to further investigate the effects of 28 days of orally administered NNZ-2591 on mTOR and biomarkers of synaptic plasticity, inflammation and apoptosis.

Neuren announced the trial and operational information last week in a 'shareholder update' which the sub-editor failed to comprehend and appreciate. He will be included as a subject in one of the rodent cognition trials.

Neuren was up 0.2 cents or 6.9 percent to 3.1 cents with 1.8 million shares traded.

# OBJ

OBJ says it has raised \$859,832 of a hoped for \$3.53 million, but Novus Capital has terminated the underwriting agreement.

In February, OBJ said it hoped to raise about \$3.53 million through a fully underwritten, non-renounceable, one-for-five rights issue at 1.5 cents a share (BD: Feb 28, 2013). OBJ said at that time that two free attaching options would come with every five new shares subscribed, exercisable at one cent each by December 31, 2014.

The company said that Novus Capital would be manager and underwriter for the offer. Today, OBJ said that it received acceptances for 51,892,727 new shares and 20,757,091 free attaching options, 22.07 percent of the securities offered, raising \$778,391.

The company said that the total shortfall was 183,206,723 new shares and 73,282,689 free attaching new options.

OBJ said that acceptances for 81,441,373 new options under the option offer were received, representing a take-up of 94.2 percent, raising about \$81,441, with a total shortfall of 5,014,554 new options.

OBJ said that Novus had been advised of the shortfall but it had received a notice from Novus "purporting to terminate the underwriting agreement".

The company said that with its professional advisers, it was considering the validity of, and its response to, the termination notice.

OBJ fell 0.2 cents or 16.7 percent to one cent with 6.0 million shares traded.

# **ACRUX**

Allan Gray Australia (formerly Orbis Investment Management) has increased its substantial holding in Acrux from 8,566,799 shares (5.14%) to 10,260,256 (6.16%). Allan Gray said that between March 21 and April 18 2013 the company bought 1,693,457 shares for \$6,359,265 or an average price of \$3.755 a share.

Last month, Allan Gray returned to its substantial holding in Acrux following a February reduction below five percent selling shares at prices around \$3.86, having acquired shares in December 2012 at about \$2.70 each (BD: Dec 19, 2012; Feb 14, Mar 20, 2013). Acrux fell seven cents or 2.0 percent to \$3.47 with 367,943 shares traded.