



Biotech Daily

Monday March 26, 2012

Daily news on ASX-listed biotechnology companies

- * **ASX, BIOTECH DOWN:**
 - **TISSUE THERAPIES UP 6.5%, SUNSHINE HEART DOWN 5%**
- * **PROBIOMICS, HUNTER MERGER NEARLY DONE; APRIL RELISTING**
- * **AUSTRALIAN AXCESS IV PATENT FOR BONE**
- * **JOURNAL ARTICLE SUPPORTS PRANA'S PBT2 FOR ALZHEIMER'S**
- * **ORBIS TAKES PROFIT, REDUCES TO 11% OF ACRUX**
- * **SHIRE CANADA FALLS BELOW 5% IN AVEXA**
- * **TOM MILICEVIC REPLACES ADVANCED SURGICAL CEO DR GREG ROGER**

MARKET REPORT

The Australian stock market slipped 0.18 percent on Monday March 26, 2012, with the S&P ASX 200 down 7.6 points to 4262.8 points.

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

Tissue Therapies was the best, up 2.5 cents or 6.5 percent to 41 cents, with 372,849 shares traded.

Bionomics climbed 4.4 percent; Allied Health was up 3.45 percent; Patrys, Pharmaxis and Phosphagenics rose more than two percent; Anteo, Biota and Mesoblast were up more than one percent; with Sirtex and Starpharma up by less than one percent.

Sunshine Heart led the falls, down 0.2 cents or 5.4 percent to 3.5 cents with 289,000 shares traded, followed by Compumedics down 5.1 percent to 7.5 cents with 10,000 shares traded.

Neuren, QRX, Phylogica, Prima and Viralytics fell four percent or more; Genetic Technologies, Optiscan and Prana lost three percent or more; Alchemia, Avita, Impedimed and Nanosonics shed more than two percent; with Acrux, Cochlear, CSL and Resmed down by less than one percent.

PROBIOMICS, HUNTER IMMUNOLOGY

Probiomics says it has acquired more than 90 percent of all Hunter Immunology stock and will proceed to compulsory acquisition.

Probiomics said it had acquired an aggregate relevant interest in 95.98 percent of all Hunter shares; 96.17 percent of all Hunter options; and 100 percent of all Hunter tranche 1 convertible note interests.

The company said that at the close of the takeover offers on March 23, 2012 each of the defeating conditions to the offers had been satisfied or waived.

In announcing the backdoor listing of the \$30 million Hunter Immunology into the \$3 million Probiomics, the companies said that the new entity would be renamed Bioxyn (BD: Oct 11, 2012).

At that time, Hunter Immunology chief executive officer David Radford told Biotech Daily that the backdoor listing through Probiomics would see an expansion of the listed company's probiotic products and there were talks with a potential global partner.

Mr Radford said the new entity would establish higher value over-the-counter products and distribution of nutritional products and additives.

Today Mr Radford told Biotech Daily that Hunter Immunology had completed treatment on 292 of the targeted 320-patients in its phase IIb HI-164 Haemophilus influenzae vaccine for chronic obstructive pulmonary disease (COPD).

Mr Radford said there had been early indications of safety with more detailed results expected by July 2012.

In 2010, Hunter reported its 40-patient trial of HI-164OV (oral vaccine) for COPD had reduced hospital admissions by 90 percent (BD: Apr 22, 2010).

Mr Radford said that "on current indication Probiomics expects to relist as PCC on April 4 with the name change later in the month".

Mr Radford said he would become Probiomics managing director and chief executive officer on relisting.

Probiomics last traded at one cent.

BONE MEDICAL

Bone says IP Australia has granted a patent for its Axxess IV oral peptide formulation technology.

The company said it had an exclusive world-wide license to the Axxess oral peptide formulation technology in its target disease fields from Proxima Concepts, whose co-founder Dr Roger New was its chairman and chief scientific officer and the inventor of the Axxess technology.

"The Australian Axxess IV patent grant is a very important development, coming on the heels of recent grants for our Axxess II and III patent families in Europe and Korea," Dr New said.

"Those patent families give us extensive global proprietary coverage for Capsitonin, our oral calcitonin product for osteoporosis and arthritis pain," Dr New said.

"Axxess IV covers the oral peptide formulation technology that we use in Capthymone, our oral parathyroid hormone product for osteoporosis," Dr New said.

"Parathyroid hormone is one of the most important treatment alternatives for osteoporosis but is only available in an injectable form," Dr New said.

Bone said that the Australian patent was the second issued patent for Axxess IV, following New Zealand.

Bone fell 0.2 cents or 12.5 percent to 1.4 cents with 6.2 million shares traded.

PRANA BIOTECHNOLOGY

Prana says a journal article 'strongly endorses' the potential of its compound PBT2 to treat Alzheimer's disease.

Prana said the paper, co-written by the company's chief scientific officer Prof Rudy Tanzi was entitled 'The Zinc Dyshomeostasis Hypothesis of Alzheimer's Disease' presented an integrated explanation of the major pathological features of Alzheimer's disease, based on a combination of new experimental data and mathematical modeling.

An abstract of the article, published by the US Public Library of Science, is available at <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0033552>.

Dr Tanzi said that "the hallmark pathological features of Alzheimer's disease are the amyloid plaques, composed of the [amyloid beta] protein and neurofibrillary tangles, composed of Tau protein".

"Everything we have learned from the genetics of Alzheimer's disease indicates that the disease is caused by excessive accumulation of the [amyloid beta] protein in the brain," Prof Tanzi said.

"We also know that hyperphosphorylation of the Tau protein which forms [neurofibrillary tangles] is the feature of the disease which correlates with neuronal damage and cognitive loss," Prof Tanzi said.

Prof Tanzi said PBT2 reduced levels of both amyloid beta and hyperphosphorylated tau in animal studies and improved cognition and lowered amyloid beta in a phase IIa clinical trial of Alzheimer's disease patients.

Prof Tanzi said the question was amyloid how aggregation lead to neurofibrillary tangles and the research paper proposed that at least part of the answer was zinc dyshomeostasis, or abnormal distribution of zinc in the brains of Alzheimer's disease sufferers.

"PBT2 directly addresses this problem by binding zinc and normalising its distribution," Prof Tanzi said. "This bodes very well for the current PBT2 clinical trial that is in progress."

Prana said the paper's authors proposed that sequestration of zinc by amyloid beta deposits drove amyloid beta aggregation and disrupted zinc homeostasis in zinc-enriched brain regions important for memory and vulnerable to Alzheimer's disease pathology, resulting in intra-neuronal zinc levels, which were either too low, or excessively high. The company said the authors modeling suggested that this could lead microtubule instability and the abnormal tau pathology, including neurofibrillary tangles.

Prana said the authors used molecular modeling of zinc binding to the microtubule component protein tubulin, identifying specific, high-affinity zinc binding sites that influenced side-to-side tubulin interaction, the sensitive link in microtubule polymerization and stability.

The company said the authors found excess zinc in brain regions associated with memory processing and neurofibrillary tangles pathology.

Prana said the paper presented a theoretical framework and support for a theory of Alzheimer's disease linking extra-neuronal amyloid beta to intra-neuronal neurofibrillary tangles and cognitive dysfunction.

The company said the connection was based on amyloid beta-induced alterations in zinc ion concentration inside neurons affecting stability of polymerized microtubules, their binding to MAP-tau, and molecular dynamics involved in cognition.

Prana said the theory supported novel Alzheimer's disease therapeutic strategies targeting intra-neuronal zinc homeostasis and microtubule dynamics to prevent neurodegeneration and cognitive decline, such as PBT2.

Prana fell half a cent or 3.1 percent to 15.5 cents.

ACRUX

Orbis Investment Management has reduced its substantial holding in Acrux from 20,499,214 shares (12.31%) to 17,912,892 shares (10.76%).

Orbis said it bought and sold shares between September 7, 2011 and March 22, 2012, with the single largest sale last week of 1,536,599 shares for \$6,143,340 or \$4.00 a share. Acrux fell one cent or 0.25 percent to \$4.01.

AVEXA

Shire Canada has ceased its substantial holding in selling 1,304,283 shares for \$45,642 or 3.5 cents a share.

Shire previously told the ASX in March 2010 that its 47,341,839 shares had been diluted from 6.95 percent to 5.58 percent in a 2009 placement and share issue at 14 cents a share (BD: Nov 30, 2009).

Avexa fell 0.1 cents or 2.9 percent to 3.4 cents with 2.6 million shares traded.

ADVANCED SURGICAL DESIGN AND MANUFACTURE

Advanced Surgical says that chief financial officer Tom Milicevic has replaced founder and chief executive officer Dr Greg Roger as acting chief executive officer, from today.

Advanced Surgical said that Mr Milicevic had 20 years' financial management experience and had held senior finance roles with Babcock & Brown, Avantogen and Cochlear before joining the company in 2007.

The company said that Dr Roger would resign as a director but would establish and lead a clinical advisory committee ensuring continued involvement in the evaluation and development of new products.

Advanced Surgical said that Peter Welsh will assume the role of managing director to assist Mr milicevic.

The company said that Mr Welsh became a director in November 2011 and had 43 years' experience in the medical device and health care industry with the last 28 years being directly involved in orthopaedics.

Advanced Surgical was untraded at 24 cents.