



Biotech Daily

Monday July 25, 2011

Daily news on ASX-listed biotechnology companies

- * **ASX, BIOTECH DOWN: BENITEC UP 14%; GENERA DOWN 16%**
- * **CHINESE PAPER BACKS BPH, MOLECULAR DISCOVERY HLS5 GENE**
- * **SUNSHINE HEART PLACES \$4.6m IN US, \$9.1m TO GO**
- * **PATRY'S DOSING LAST PHASE I PAT-SM6 MELANOMA PATIENTS**
- * **SINGAPORE SUPPORTS NUSEP FRACTIONATION PLANT**
- * **CBIO TAKES TRIAL RESULTS HALT TO SUSPENSION**

MARKET REPORT

The Australian stock market fell 1.58 percent on Monday July 25, 2011 with the S&P ASX 200 down 72.5 points to 4530.4 points.

Just four of the Biotech Daily Top 40 stocks were up, 22 fell, six traded unchanged and eight were untraded.

Benitec was the best, up 0.4 cents or 13.8 percent to 3.3 cents with 36.4 million shares traded, followed by Virax up 10 percent to 2.2 cents with 72,000 shares traded.

Bioniche and Circadian climbed more than four percent; with Resmed up 0.3 percent.

Genera Biosystems led the falls, down three cents or 15.8 percent to 16 cents with 89,967 shares traded; followed by Genetic Technologies down three cents or 12.5 percent to 21 cents with 3.1 million shares traded.

Sunshine Heart lost 9.1 percent; Cellmid was down eight percent; Pharmaxis fell 7.7 percent; Prana was down 5.9 percent; Biota and Viralytics fell more than four percent; Bionomics, Living Cell, Nanosonics and Phosphagenics were down more than three percent; CSL, Impedimed, QRX and Universal Biosensors shed more than two percent; Anteo, Clinuvel, Mesoblast, Starpharma and Tissue Therapies were down one percent or more; with Alchemia, Cochlear and Sirtex down by less than one percent.

BPH ENERGY

BPH Energy says independent research supports the role of subsidiary Molecular Discovery Systems cancer tumor suppressor gene, HLS5, also known as TRIM35.

BPH said Molecular Discovery was a 20 percent subsidiary.

The company said the study was conducted by independent researchers in China who found that reduced HLS5 levels were shown to correlate with worse tumor grade, increased tumor size and elevated serum alpha-fetoprotein (AFP) levels, a marker of liver cancer.

BPH said the paper indicated that the loss of HLS5 expression is a critical event in liver cancer.

The research paper, entitled 'Genome-Wide Copy Number Analyses Identified Novel Cancer Genes in Hepatocellular Carcinoma' was a collaboration between Fudan University, Shanghai Cancer Institute, Shanghai Jiao Tong University and Qi Dong Liver Cancer Institute and was accepted for publication in the journal Hepatology.

An abstract is at: <http://onlinelibrary.wiley.com/doi/10.1002/hep.24495/abstract>.

BPH said that the article defined key genes involved in liver cancer by identifying genes that were frequently altered in liver cancer.

The company said the paper identified 362 genes that were differentially expressed in liver cancers and further investigations reduced the 362 genes down to 20 genes of interest, of which HLS5 was one.

BPH said the study used a cohort of 207 paired liver cancer samples.

The company said that by over-expressing HLS5 in two liver tumor cell lines, SMMC-7721 and Huh-7, the Chinese scientists determined that HLS5 was capable of significantly inhibiting the growth of liver cancer cells in vitro and tumor growth in vivo.

BPH said that when the HLS5 gene was deliberately switched off by the researchers there was a significant increase in proliferation of liver cancer cells.

The company said that the most significant finding was that HLS5 was negatively correlated with tumor size, tumor grade and AFP levels, so the loss of HLS5 expression was a critical event in the development and progression of liver cancer.

BPH said that Molecular Discovery Systems had exclusive rights to the tumor suppressor gene HLS5, both as a potential therapeutic target and also underpinning its involvement in a variety of diseases.

BPH chairman David Breeze said that the testing of the HLS5 gene by an independent research team "has strongly correlated levels of HLS5 with liver cancer".

"The results indicate that the loss of HLS5 expression is a critical event in the development and progression of this cancer," Mr Breeze said.

Molecular Discovery Systems has been researching the tumor suppressor gene with the Western Australia Institute of Medical Research.

BPH was unchanged at 3.6 cents.

SUNSHINE HEART

Sunshine Heart has placed 115 million shares on common stock in the US at four cents a share raising \$4.6 million.

Sunshine Heart said each share came with one attaching warrant or option to acquire 0.3 of a share exercisable at 5.6 cents in four years.

The company said the placement was managed by Summer Street Research Partners and an Australian placement for a further \$9.1 million is expected to be raised in Australia from clients of RBS Morgans, pending shareholder approval.

Sunshine Heart fell 0.4 cents or 9.1 percent to four cents with three million shares traded.

PATRYS

Patrys says its PAT-SM6 phase I melanoma trial at the Royal Adelaide Hospital is recruiting the third and final group of patients.

Patrys said the 10-patient trial was designed to assess the safety and tolerability of the antibody treatment and no safety issues had been observed or reported for any patients treated with PAT-SM6 (BD: Dec 15, 2010).

Patrys chief executive officer Dr Marie Roskrow said the company was confident it would recruit the final patients quickly to enable completion of the clinical trial.

"With no major adverse safety events reported to date, this final phase is an exciting step for the company," Dr Roskrow said.

Patrys said the trial was evaluating three different dosages in three groups of patients, with a particular form of the disease called in-transit melanoma, which was limited to a single limb and had usually undergone multiple treatments prior to the PAT-SM6 trial.

The company said that by recruiting patients with in-transit disease, it could collect tissue samples to study the effects of PAT-SM6 on the tumors, but the primary aim of this study was to measure the safety and tolerability of the drug.

Patrys said that multiple secondary endpoints were aimed at preliminary measuring of the anti-tumor activity of PAT-SM6, which would be examined in later trials.

Patrys said PAT-SM6 was a natural human antibody that had shown promise as a potential treatment for multiple types of cancer including melanoma.

The company said the compound was the first reported clinical product to target the GRP78 protein on the surface of cancer cells, which played a number of roles in cancer cell survival, growth and metastasis.

Patrys said melanoma was a serious medical problem, with an expected doubling of incidence every 15 years and treatments were largely ineffective, resulting in a five year survival rate of 16 percent.

Patrys was unchanged at nine cents.

NUSEP

Nusep says the Singapore Economic Development Board will provide financial and economic support for its Singapore plasma fractionation facility.

Nusep did not state the level of support but the Singapore Economic Development Board has been said to typically provide about \$S1 million (\$A764,626) in cash and up to \$S2 million in tax-free benefits, training and other in kind services and for up to five years.

The Board said on its website it had recently funded three solar research teams with a total of \$S8 million.

Nusep said the Board was the lead government agency that planned and executed economic strategies to enhance Singapore's position as a global hub for business, investment and talent.

Nusep executive chairman John Manus said the decision was "a significant step forward as we now have investment support from the Singapore Government for our Singapore plasma fractionation project".

Nusep managing director Dr Hari Nair said that once the facility was operational, the investment would reduce the cost of public healthcare to Singapore and other Asian countries.

"Fundamentally this will help countries in the region to become self-sufficient in their requirements for plasma proteins with the main demonstrator facility being in Singapore," Dr Nair said.

Nusep was unchanged at 10.5 cents.

CBIO

CBio has requested a voluntary suspension to follow the trading halt it requested on July 21, 2011, “pending the release of a material announcement concerning the recently completed phase IIa clinical trial in rheumatoid arthritis” (BD: Mar 28, 2011). CBio last traded at 68 cents.