



Biotech Daily

Tuesday September 14, 2010

Daily news on ASX-listed biotechnology companies

- * **ASX UP, BIOTECH EVEN: USCOM UP 20%, PRANA DOWN 7%**
- * **PROGEN TO DIVEST PROMISING CANCER STEM CELL COMPOUND**
- * **BONE TAKES \$6m LA JOLLA COVE NOTE; \$650K PRIVATE RAISING**
- * **BIONOMICS VOTES ON 3m CHAIRMAN, CEO OPTIONS**
- * **STIRLING REQUESTS ACQUISITION TRADING HALT**
- * **PROF DOUG HILTON REVIEWS WEHI AT BIO-MELBOURNE BREAKFAST**

MARKET REPORT

The Australian stock market climbed 0.25 percent on Tuesday September 14, 2010, with the ASX200 up 11.6 points to 4626.5 points.

Twelve of the Biotech Daily Top 40 stocks were up, 13 fell, nine traded unchanged and six were untraded.

Uscom was best, up four cents or 20 percent to 24 cents with 55,000 shares traded.

Genetic Technologies and Virax climbed more than seven percent; Phosphagenics and Psivida were up more than six percent; Cathrx and Cellmid were up more than five percent; Viralytics was up 3.3 percent; Starpharma rose 2.7 percent; with Impedimed and Resmed up more than one percent.

Prana led the falls, down one cent or 6.7 percent to 14 cents with 40,000 shares traded.

Antisense lost 5.9 percent; Chemgenex and Novogen fell four percent or more; Patrys and Prima were down three percent or more; Biota, Pharmaxis and Tissue Therapies shed more than two percent; with Alchemia, Cochlear and Immuron down more than one percent.

PROGEN

Progen says that research with Sweden's Lund University shows that its compound PG11047 targets breast cancer stem cells resistant to trastuzumab (Herceptin).

Progen said the research paper entitled 'Reduction of the putative CD44+CD24- breast cancer stem cell population by targeting the polyamine metabolic pathway with PG11047' was published in the journal, Anti-Cancer Drugs.

An abstract is available via: <http://journals.lww.com/anti-cancerdrugs/toc/publishahead>.

The abstract said that cancer stem cells (CSCs) were of particular concern in cancer "as they possess inherent properties of self-renewal and differentiation, along with expressing certain genes related to a mesenchymal phenotype".

"These features favor the promotion of tumor recurrence and metastasis in cancer patients," the abstract said. "Thus, the optimal chemotherapeutic treatment should target the CSC population, either by killing these cells and/or by inducing their transition to a more differentiated epithelial-like phenotype."

The researchers said experiments were carried out on the trastuzumab-resistant cell line JIMT-1 to unravel the chemotherapeutic effects of the polyamine analogue PG11047 and of the polyamine biosynthetic inhibitor, 2-difluoromethylornithine (DFMO), on the CD44+CD24- cancer stem cell population. Effects on the properties of self-renewal and epithelial or mesenchymal markers were also investigated.

Treatment with PG11047 reduced the CD44+CD24- subpopulation of JIMT-1 cells by about 50 percent, inhibited and/or reduced self-renewal capability of cancer stem cells, decreased cell motility and induced expression of mesenchymal to epithelial transition-associated proteins involved in promoting an epithelial phenotype.

DFMO slightly increased the CD44+CD24- subpopulation, increased cell motility and the level of mesenchymal-related proteins, but reduced the self-renewal capability of the CSC population.

Both PG11047 and DFMO reduced the expression of the human epidermal growth factor receptor 2 protein, which was correlated to malignancy and resistance to trastuzumab in JIMT-1 cells. The trastuzumab-resistant cell line over-expressed human epidermal growth factor receptor 2 (HER2), the target of Herceptin.

"Our findings indicate that treatment with PG11047 targeted the CSC population by interfering with several stem cell-related properties," the research paper said.

Progen said that a separate study described the effects of PG11047 in a panel of 48 breast cell lines that mirrored transcriptional and genomic features present in primary human breast tumors. A 13-gene transcriptional marker set was developed as a predictor of response to PG11047 and the Lund study focused on a single breast cancer cell line.

The company said there was growing data to support the existence of cancer stem cells in breast as well as in other tumors and the stem cells had inherent properties of self-renewal and differentiation and expressed a unique set of genes.

Progen said those features favored the promotion of tumor recurrence and metastasis, so, optimal tumor therapy should target these uniquely malicious cells.

The Lund University study showed that PG11047 targeted the cancer stem cell population of this tumor line by interfering with stem cell-related properties, such as self-renewal, differentiation, motility, and the cancer related mesenchymal phenotype.

The company said PG11047 had been studied in multiple phase I human clinical trials and one phase II trial, both alone and in combination with each of six other approved drugs and has displayed limited toxicity and promise with regard to efficacy.

Progen chief executive officer Sue MacLeman said the company would divest the compound.

Progen was up 1.5 cents or 4.8 percent to 33 cents.

BONE MEDICAL

Bone says it has signed a \$US6 million (\$A6.4 million) non-binding convertible note with the San Francisco-based La Jolla Cove Investors.

Bone said the convertible note comprised four consecutive notes of \$US1,500,000 funded by an initial payment of \$US100,000 and minimum monthly payments of \$US10,000 incrementing higher in relation to the Bone trading price.

The company said the interest rate was 4.75 percent a year payable monthly in cash or fully paid ordinary shares and notes had a maturity of three years from the closing of each convertible note.

The number of shares into which the convertible note may be converted is equal to the dollar amount being converted divided by the conversion price, which is the lesser of the ceiling price of 40 cents or 80 percent of the average of the three lowest five-day volume weighted average price (VWAP) prices during the 20 trading days prior to the election to convert.

Bone said the note included a floor price of 4.5 cents, so that if the company's shares are trading at or below that, the company could refuse the conversion.

Two years after the closing date, if Bone shares are trading below eight cents and La Jolla Cove had only funded \$10,000 a month, for three consecutive months, Bone could terminate the financing and could terminate the third and fourth note if its shares are trading below eight cents a share.

La Jolla Cove was limited to holding no more than 19.9 percent of Bone's shares.

The issue of shares for the note is subject to shareholder and regulatory approvals.

Bone also said it had commitments from private and sophisticated investors to fund a non-interest bearing loan for a minimum of \$180,000 for working capital and to support the commercialization of its biopharmaceutical projects.

As part of this funding round, Bone said it had confirmed commitments from directors and consultants to convert part or all of their accrued obligations, which equates to a minimum of \$470,000, on the same terms as the participants in the most recent convertible note funding round, subject to shareholder approval where necessary.

Bone fell 0.8 cents or 12.3 percent to 5.7 cents.

BIONOMICS

Bionomics annual general meeting will vote on the grant of 2,500,000 options to chief executive officer Dr Deborah Rathjen and 500,000 options to chairman Christopher Fullerton.

Mr Fullerton's options would be exercisable at 30 cents each over four years.

Dr Rathjen would receive 500,000 options exercisable at 30 cents with the remaining 2,000,000 exercisable at 45 cents over five years.

The meeting will also vote on the re-election of director Dr Errol De Souza.

The meeting will be held in the Banksia Room, Intercontinental Hotel, North terrace, Adelaide on October 15, 2010 at 10.30am.

Bionomics was unchanged at 27 cents.

STIRLING PRODUCTS

Stirling has requested a trading halt pending an announcement on the acquisition of a pathology business "with current revenues of approximately \$7,500,000".

Trading will resume on September 16, 2010 or on an earlier announcement.

Stirling was unchanged at one cent.

[BIO-MELBOURNE NETWORK, WALTER AND ELIZA HALL INSTITUTE](#)

Walter and Eliza Hall Institute director Prof Doug Hilton will share his vision for the Institute at the October 5, 2010 Bio-Melbourne Network Bio-Breakfast.

Bio-Melbourne Network chief executive officer Michelle Gallaher said there had been “a significant change in attitude at WEHI and many other research institutes over the last decade”.

“Starting under the directorship of Prof Suzanne Cory, WEHI has changed from being an ivory tower to being a highly collaborative entity benefiting industry and research institutes alike,” Ms Gallaher said.

“This strategy of collaborating with partners that have world’s best practice is proving to be a highly successful model,” Ms Gallaher said.

The Bio-Melbourne Network said Prof Hilton would discuss the Walter and Eliza Hall Institute’s approach to translational research and commercialization “and how that has changed dramatically in the last 10 years in a post-Amrad era”.

The October 5 Bio-Breakfast will be held at the Supper Room, Melbourne Town Hall, Swanston Street, Melbourne.

Registration is from 7:15am with the presentation at 8am.

For more information go to: www.biomelbourne.org/events/view/146.