



# Biotech Daily

Tuesday July 7, 2009

*Daily news on ASX-listed biotechnology companies*

- \* **ASX, BIOTECH DOWN: CATHRX UP 12.5%, GENETIC TECHNO DOWN 14%**
- \* **CENTRE FOR CANCER BIOLOGY, CSL TRIAL AML COMPOUND**
- \* **PEPLIN COMPLETES PHASE III TRIAL RECRUITMENT**
- \* **MEDICAL THERAPIES' PLACEMENT RAISES \$550k**
- \* **SIRTEX CHAIRMAN RICHARD HILL BEATS DR BRUCE GRAY COUP, AGAIN**
- \* **NSW \$17m LAND-FOR-CASH-FOR-RESEARCH PLAN**

## MARKET REPORT

The Australian stock market fell 0.44 percent on Tuesday July 7, 2009 with the S&P ASX 200 down 16.8 points to 3,766.9 points.

Eight of the Biotech Daily Top 40 stocks were up, 17 fell, six traded unchanged and nine were untraded.

Cathrx was best, up five cents or 12.5 percent to 45 cents with 11,862 shares traded, followed by Antisense up 0.2 cents or five percent to 4.2 cents.

Novogen climbed 4.8 percent; Peplin was up 3.8 percent; Bionomics, Optiscan and Sirtex rose more than two percent; with CSL and Impedimed up by less than one percent.

Genetic Technologies led the falls, down 0.8 cents or 13.8 percent to five cents with 70,000 shares traded followed by Prana down two cents or 12.1 percent to 14.5 cents.

Phosphagenics fell 7.7 percent; Chemgenex and Cytopia lost more than six percent, the former with 1.9 million shares traded; Polartech and Psivida were down more than five percent; Novogen fell 4.4 percent; Compumedics, Heartware and Starpharma were down more than three percent; Living Cell shed 2.7 percent; Alchemia and Biota were down more than one percent; with Acrux, Circadian, Cochlear and Pharmaxis down by less than one percent.

## [CENTRE FOR CANCER BIOLOGY, CSL](#)

Adelaide's Centre for Cancer Biology has created an antibody targeting the IL-3 receptor-alpha chain, CD123, to treat acute myeloid leukaemia with reduced side effects.

A media release from the Children's Cancer Institute Australia for Medical Research and the University of New South Wales said the 7G3 antibody was created by Prof Angel Lopez at Adelaide's Hanson Institute and was being developed in conjunction with CSL in Melbourne.

CSL's public affairs director Dr Rachel David told Biotech Daily that CSL had licenced 7G3 also known as CSL360 and was conducting a phase I clinical trial in which there was "some early promise".

The head of the Children's Cancer Institute's leukaemia biology program Prof Richard Lock said the antibody seemed to preferentially target cancer initiating cells compared to normal blood cells, which would mean "very few long term side effects of treatment". Prof Lock said but acute myeloid leukaemia (AML) was one of the most aggressive cancers, especially in adults, with poor survival rates despite the availability of many types of treatments.

"We know there are a small number of cells called cancer initiating cells, or leukemia stem cells, that are relatively resistant to conventional chemotherapy and that these cancer initiating cells can repopulate an entire cancer causing the patient to relapse with disease," Prof Lock said.

"It is believed this is a major reason we struggle to cure most AML, and that improving the outlook for patients with AML will require elimination of these cancer initiating cells," Prof Lock said.

He said the 7G3 antibody helped target the CD123 protein that appeared more abundantly on cancer initiating cells in acute myeloid leukaemia than healthy cells, blocking the protein's function and inhibiting the growth and survival of leukaemia cells.

A paper on the research 'Monoclonal Antibody-Mediated Targeting of CD123, IL-3 Receptor Alpha Chain, Eliminates Human Acute Myeloid Leukemic Stem Cells' with Prof Lock as lead author was published in Cell Stem Cell (2009).

The media release said 7G3 targeted the CD123 (IL-3 receptor alpha chain) on the surface of the leukaemic cancer initiating cells, blocking its function, as well as the growth and survival of leukaemia cells.

It said CD123 was found on the surface of normal blood cells much less abundantly and 7G3 had substantially less effect on normal blood cell development.

The research paper, described the treatment with 7G3 of irradiated immune-deficient (NOD-SCID) mice engrafted with original patient samples.

Human AML cells were treated with 7G3 and then injected into the mice, which were compared with a control group of mice injected with untreated AML stem cells.

The media release said overall survival of the mice with antibody-treated cells "was doubled".

It said 7G3 was administered to mice with established AML and reduced the burden and spread of AML around the body.

The media release said the ability of leukaemic stem cells to re-establish leukemia was markedly reduced.

Exposure to 7G3 had little effect on normal human bone marrow stem cells.

"This is a form of leukaemia where the outcomes of treatment haven't improved much in 20 to 30 years," Prof Lock said.

He said the research was in collaboration with Prof Lopez and Prof John Dick at the University Health Network, University of Toronto.

CSL was up nine cents or 0.29 percent to \$30.63.

## PEPLIN

Peplin has completed enrolment of its two phase III clinical trials of PEP005 Gel or ingenol mebutate for actinic keratoses.

Peplin said the Region-IIa and Region-IIb trials enrolled about 250 patients each and were designed to replicate the positive results demonstrated in earlier trials, specifically the results of the phase IIb trial announced earlier this year (BD: Jan 16, Mar 6, 2009).

Peplin said it expected to announce the trial results by the end of 2009.

Peplin's chief executive officer Tom Wiggans said the "continued enthusiasm for our trials, as demonstrated by the remarkable speed of enrolment, highlights the unsatisfied medical need which PEP005 Gel addresses".

Mr Wiggans said the Region-II trials were important because actinic keratoses on the face and scalp, comprised 70 percent of the actinic keratoses market "and have the potential to provide the most patient benefit".

"Based on the data we have generated up to this point, we believe PEP005 Gel and its short course of therapy represent an advance in the treatment of a common skin condition, which, if left untreated, can progress to squamous cell carcinoma," Mr Wiggans said.

Peplin said the Region-II trials were randomized, double-blind, vehicle-controlled studies conducted at multiple sites in the US and Australia.

The primary efficacy endpoint was the complete clearance rate of lesions and the secondary efficacy endpoint was the partial clearance rate of lesions.

In addition to the Region-II trials on head locations, Peplin said it recently completed its Region-Ia trial for non-head locations, including the trunk and extremities and planned to initiate the Region-Ib trial during the third quarter of 2009 to corroborate the results of the previously completed trial.

Peplin plans to file a new drug application to the US Food and Drug Administration in mid-2010.

Peplin was up two cents or 3.77 percent to 55 cents.

## MEDICAL THERAPIES

Medical Therapies has raised \$550,000 in a placement of shares at 2.2 cents a share along with attaching options.

Subscribers to the placement will receive one attaching five year unlisted option, exercisable at five cents, for every five shares subscribed.

Medical Therapies was down 1.4 cents or 31.1 percent to 3.1 cents with 1.1 million shares traded.

## SIRTEX

Sirtex says a resolution from founder and former chairman Dr Bruce Gray to remove chairman Richard Hill has been rejected by shareholders.

Sirtex said the resolution "failed on a poll" with 18,008,337 proxy votes in favor and 27,717,581 proxy votes against with 2,415,583 proxy votes open to the chairman of the meeting, effectively providing 30,179,064 votes against the Dr Gray resolution.

According to Sirtex's 2008 annual report Dr Gray held 17,332,283 shares or 31.08 percent of the company.

Dr Gray has previously tried to remove Mr Hill as chairman (BD: Oct 24, 2006), losing by a similar margin.

Sirtex climbed seven cents or 2.05 percent to \$3.49.

## NEW SOUTH WALES GOVERNMENT

The New South Wales Minister for Science and Medical Research Jodi McKay says “an innovative funding plan” will invest \$17 million in science and research.

Ms McKay said that universities could buy or sell state-owned land and the Government would invest its proceeds into the Knowledge Fund.

Ms McKay said an example of how the fund would be applied was the recent sale of land to the University of Sydney.

“\$30 million of the profits from this land sale will enable the construction of state-of-the-art research facilities at Westmead Hospital, and \$17 million of the proceeds will make up the initial Knowledge Fund investment,” Ms McKay said.

“We are in the process of identifying other unused land adjacent to universities that might be suitable for the Knowledge Fund program,” Ms McKay said.

She said the Fund would support New South Wales universities, which employ more than 26,000 people and contribute close to \$4.4 billion to the State’s economy each year.

“Universities are the powerhouses of new knowledge and skills, and critically important to the future of NSW,” Ms McKay said.

“The Knowledge Fund will also help universities leverage greater funding through the Commonwealth’s Federal Health and Hospital Fund, which provides money for health institutes to carry out capital works, research, clinical training and better cancer care,” she said.

The vice-chancellor of the University of Western Sydney Prof Jan Reid said the Government should be applauded for the initiative.

“It is a really imaginative long-term commitment,” Prof Reid said.

“Higher education is one of the nation’s largest economic and export sectors,” Prof Reid said.

The vice-chancellor of the University of NSW and convenor of the New South Wales vice-chancellor’s committee Prof Fred Hilmer said the investment would help secure the State’s place “as a magnet for advanced knowledge professionals and students”.