

Biotech Daily

Friday August 15, 2014

Daily news on ASX-listed biotechnology companies

* ASX, BIOTECH UP: TISSUE THERAPIES UP 10%, GENETIC TECHNOLOGIES DOWN 10%

- * WEHI IDENTIFIES MCL1 TO CONTROL KILLER CELLS
- * GI DYNAMICS H1 REVENUE UP 149% to \$1.7m, LOSS UP 20% TO \$24m
- * LIVING CELL REVENUE UP 0.5% TO \$8m, LOSS UP 128% TO \$7m
- * PERPETUAL SELLS 15m RESMED SHARES, DOWN TO 6%
- * SIRTEX BREAKS \$20, PERPETUAL TAKES PROFIT, BELOW 5%
- * CELLMID ISSUES 600k MORE SHARES TO BRYNNE EDELSTEN

MARKET REPORT

The Australian stock market climbed 0.32 percent on Friday August 15, 2014 with the S&P ASX 200 up 18.0 points to 5,566.5 points.

Twenty-five of the Biotech Daily Top 40 stocks were up, five fell, six traded unchanged and four were untraded.

Tissue Therapies was the best, up three cents or 10.3 percent to 32 cents with 595,369 shares traded.

Oncosil climbed 9.1 percent, Admedus was up 6.45 percent; Acrux, Impedimed, Living Cell and Psivida climbed more than five percent; Bionomics, Biotron, Prana and Sirtex rose more than four percent; Alchemia, Benitec, Cellmid, Ellex and Universal Biosensors were up more than three percent; Atcor, Circadian, Phosphagenics and Prima rose more than two percent; GI Dynamics, Mesoblast and Osprey were up more than one percent; with Clinuvel, CSL, Resmed and Starpharma up by less than one percent.

Genetic Technologies led the falls, down 0.3 cents or 9.7 percent to 2.8 cents with 95,000 shares traded.

Patrys and Pharmaxis lost more than three percent; Neuren shed 2.1 percent; Nanosonics fell 1.8 percent; with Cochlear down 0.6 percent.

THE WALTER AND ELIZA HALL INSTITUTE FOR MEDICAL RESEARCH

The Walter and Eliza Hall Institute says its researchers have demonstrated the critical importance of natural killer cells in killing melanoma cells that have spread to the lungs. WEHI said that the natural killer cells could be harnessed to find and kill cancers that had spread in the body.

The Institute said that the team also found that natural killer cells were critical to the body's rejection of donor bone marrow transplants and in the runaway immune response during toxic shock syndrome.

WEHI said that the discoveries came after the team showed that the protein myeloid cell leukaemia 1 (MCL-1) was crucial for survival of natural killer cells.

The Institute said the research, co-authored by Dr Nick Huntington, Dr Priyanka Sathe and Rebecca Delconte and entitled 'Innate immunodeficiency following genetic ablation of MCL1 in natural killer cells' was published in Nature Communications, with an abstract at: <u>http://www.nature.com/ncomms/2014/140814/ncomms5539/full/ncomms5539.html</u>.

The Institute said that the discovery would help determine how natural killer cells could be manipulated to fight cancers and other disorders.

WEHI said that MCL-1 could be a target for boosting or depleting natural killer cell populations to treat disease.

The Institute said that natural killer cells were immune predators, searching for foreign invaders such as viruses and sensing changes in cells that were associated with cancer. Dr Huntington said the team showed natural killer cells were needed to fight off invading tumor cells that had spread past the original cancer site.

"MCL-1 is absolutely essential for keeping natural killer cells alive," Dr Huntington said. "Without natural killer cells, the body was unable to destroy melanoma metastases that had spread throughout the body, and the cancers overwhelmed the lungs."

"Knowing how important natural killer cells are for detecting and destroying cancer cells as they spread, suggests they would be a good target for boosting immune defenses to treat cancer," Dr Huntington said.

WEHI said that natural killer cells were present in high frequency in blood and patrolled the body's frontlines: the lungs, intestines, mucous membranes and skin, to detect and destroy diseased cells.

The Institute said that the predatory natural killer cells were a double-edged sword and the team had shown that natural killer cells also played a role in death from toxic shock, or sepsis, and in rejecting bone marrow transplants.

"Natural killer cells led the response that caused rejection of donor stem cells in bone marrow transplantations," Dr Huntington said.

"They also produced inflammatory signals that can result in toxic shock syndrome, a potentially fatal illness caused by bacterial toxins that causes a whole-body inflammatory reaction," Dr Huntington said.

He said that the discovery provided a solid lead to look for ways of boosting natural killer cells when they were needed in higher supply, or depleting them when they were causing illness.

"We showed MCL-1 levels inside the cell increase in response to a blood cell signalling protein called interleukin 15," Dr Huntington said.

"We previously knew IL-15 boosted production and survival of natural killer cells, and we have shown that IL-15 does this by initiating a cascade of signals that tell the natural killer cell to produce MCL-1 to keep it alive," Dr Huntington said.

"Now that we know the critical importance of MCL-1 in the survival of natural killer cells, we are investigating how we might manipulate this protein, or other proteins in the pathway, to treat disease," Dr Huntington said.

GI DYNAMICS

GI Dynamics says revenue for the six months to June 30, 2014, rose 148.7percent to \$US1,746,000 (\$A1,871,380) with net loss after tax up 19.85 percent to \$US21,981,000 (\$A23,559,560).

GI Dynamics said it had cash and cash equivalents of \$US71,667,000 at June 30, 2014, compared to \$58,616,000 at December 31, 2013.

The company said that net tangible assets per Chess depositary interest was up 77.8 percent to 16 US cents for the six months to June 30, 2014 compared to the half-year to June 30, 2013.

GI Dynamics was up 0.5 cents or 1.1 percent to 47.5 cents.

LIVING CELL

Living Cell says that revenue for the year to June 30, 2014, was up 0.5 percent to \$7,941,227 with net loss after tax up 127.6 percent to \$6,778,896.

Living Cell said the increase in loss was due to "the prior year including a \$3 million option fee from Otsuka Pharmaceutical Factory Inc and an increase in the share of the joint venture loss".

The company said that net tangible asset backing per share fell 35.1 percent to 2.4 cents, with diluted loss per share up 216.7 percent to 1.9 cents.

Living Cell said that it had cash and cash equivalents of \$4,554,399 at June 30, 2014 compared to \$4,504,083 at June 30, 2013.

Living Cell was up 0.3 cents or 5.9 percent to 5.4 cents.

RESMED

Perpetual and its subsidiaries have reduced their substantial shareholding in Resmed from 104,190,299 shares (7.36%) to 89,091,117 shares (6.35%)

The substantial shareholder notice said that Perpetual bought and sold shares in a very large number of trades, from March 24 to August 13, 2014 at prices ranging from \$4.70 to \$5.70.

In March, Perpetual increased the substantial shareholding by 15,149,465 shares in a large number of trades at prices ranging from \$4.79 to \$5.89 (BD: Mar 25, 2014). Resmed was up two cents or 0.4 percent to \$5.51 with 6.1 million shares traded.

SIRTEX MEDICAL

Perpetual and its subsidiaries have ceased their substantial shareholding in Sirtex falling from 3,122,165 shares (5.56%) to below 5.0 percent.

Perpetual said it sold the shares from July 7, to August 13, 2014 at prices ranging from \$18.70 to \$18.95.

Perpetual has been taking profit in Sirtex this year, having bought founder Dr Bruce Gray's shares in 2013 (BD: Aug 12, 2013; Feb 5, 18, 19, 21, Apr 4, May 16, Jul 9, 2014). Sirtex was up 80 cents or 4.2 percent to \$20.20 with 477,110 shares traded.

<u>CELLMID</u>

Cellmid has issued a further 600,000 shares to Brynne Pty Ltd, a company associated with Brynne Edelsten, for "endorsement services".

In February, Cellmid issued Ms Edelsten 600,000 shares, also for "endorsement services" (BD: Feb 17, 2014).

Ms Edelsten is the estranged wife of controversial de-registered doctor and entrepreneur Geoffrey Edelstein.

Last year, Cellmid said that Ms Edelsten would receive up to 1,400,000 shares for the provision of endorsement services for the company's Évolis FGF-5 inhibitor hair growth products (BD: Nov 18, 2013).

Today, in an Appendix 3B new issue announcement, Cellmid said that the shares were issued under its employee incentive plan.

Cellmid was up 0.1 cents or 3.3 percent to 3.1 cents.