



Biotech Daily

Monday March 7, 2011

Daily news on ASX-listed biotechnology companies

- * **ASX DOWN, BIOTECH UP: MESOBLAST UP 5%; OPTISCAN DOWN 8%**
- * **WEHI FINDS ACTIVE REGULATORY T CELLS FOR IMMUNE RESPONSE**
- * **VICTORIA PARTLY RESPONDS TO ATEC QUESTIONS**
- * **NUSEP APPOINTS MALCOLM COLEMAN CFO**
- * **BRAIN RESOURCE TO TRADE IN THE US**
- * **NEURODISCOVERY RAISES \$440k; HOPES FOR \$245k MORE**
- * **FERMISCAN RIGHTS ISSUE RAISES \$240k OF HOPED-FOR \$1m**

MARKET REPORT

The Australian stock market fell 1.37 percent on Monday March 7, 2011 with the S&P ASX 200 down 66.4 points to 4797.9 points.

Thirteen of the Biotech Daily Top 40 stocks were up, nine fell, 14 traded unchanged and four were untraded. All three Big Caps fell.

Mesoblast was best for the second trading day in a row, up 32 cents or 5.1 percent to \$6.65, with 1.7 million shares traded.

Phylogica climbed 4.3 percent; Bionomics, Cellestis, QRX and Universal Biosensors rose more than two percent; with Chemgenex and Clinuvel up more than one percent.

Optiscan led the falls, down half a cent or 7.9 percent to 5.8 cents, with 52,151 shares traded, followed by LBT down 7.1 percent to 6.5 cents with 113,097 shares traded.

Prima lost 4.3 percent; Genera, Impedimed and Living Cell were down more than three percent; Genetic Technologies, Patrys and Pharmaxis shed two percent or more; with Resmed down 1.9 percent.

WALTER AND ELIZA HALL INSTITUTE FOR MEDICAL RESEARCH

The Walter and Eliza Hall Institute (WEHI) says its scientists have identified the key immune cell population responsible for regulating the body's immune response.

The Institute said the finding could have "wide-ranging repercussions for the treatment of autoimmune diseases, organ transplantation and cancer and change how the efficacy of newly developed drugs is measured".

A WEHI media release said the discovery was made by Dr Erika Cretney, Dr Axel Kallies and Dr Stephen Nutt from the institute's molecular immunology division and centred on regulatory T cells, responsible for limiting the immune response.

The study, entitled 'The transcription factors Blimp-1 and IRF4 jointly control the differentiation and function of effector regulatory T cells' was published in Nature Immunology.

An abstract is at <http://www.nature.com/ni/journal/vaop/ncurrent/abs/ni.2006.html>.

The authors said in the abstract that they had demonstrated that expression of the transcription factor Blimp-1 defined a population of regulatory T (T-reg) cells that localized mainly to mucosal sites and produced IL-10 and that Blimp-1 was required for IL-10 production by these cells and for their tissue homeostasis.

"We provide evidence that the transcription factor IRF4, but not the transcription factor T-bet, was essential for Blimp-1 expression and for the differentiation of all effector T-reg cells," the abstract said. "Thus, our study defines a differentiation pathway that leads to the acquisition of T-reg cell effector functions and requires both IRF4 and Blimp-1."

The WEHI media release said that disorders that decreased T-reg activity could lead to autoimmune disorders such as type 1 diabetes or coeliac disease, while increased T-reg activity could suppress the immune system when it should be actively killing cancerous or infected cells.

Dr Kallies said the team used molecular signatures to identify which cells within the regulatory T cell population were responsible for suppressing immune responses and found that the bulk of cells classified as regulatory T cells "may not do much".

"In this study we have identified a distinct group of effector regulatory T cells, or active T-regs, which are the key drivers of immune response regulation," Dr Kallies said.

Dr Nutt said the research had implications for clinical trials as researchers often measured regulatory T cell numbers to establish whether there was a positive immune response.

"We have shown that the absolute number of regulatory T cells isn't as important as the presence of this particular active regulatory T cell population," Dr Nutt said.

Dr Nutt said that mice without active T-reg cell populations developed severe autoimmune inflammatory bowel disease, which was fatal and not having that T cell population in the gut caused the immune response to go into overdrive and attack the body's own cells.

"A lack of the factor that is needed to generate active T-reg cells has also been implicated in human genome-wide studies of Crohn's disease," Dr Nutt said. "So it would seem that this cell population is strongly linked to the development of autoimmunity."

WEHI said that re-defining the active subset of the T-reg population would give researchers the ability to develop new ways to increase or block their activity in the body and the next step was to look at the function of the active T-reg population in autoimmunity and in cancer.

Dr Kallies said that for these reasons, there was a lot of excitement in the medical community about regulatory T cells.

"Many research teams are trying to manipulate and expand these cells for therapeutic use," Dr Kallies said.

"Our finding will transform the way that researchers look at immune responses and open new avenues for treating diseases such as autoimmunity and cancer," Dr Kallies said.

DEPARTMENT OF BUSINESS & INNOVATION, ATEC, NEOPEC, BERNARD O'BRIEN

Last Friday, Biotech Daily posed a series of questions to the Department of Business and Innovation regarding the Australian Tissue Engineering Centre, the Bernard O'Brien Institute and Neopec (BD: Mar 3,4, 2011).

Last week, Australian Tissue Engineering Centre business development officer Dr Buzz Palmer and Neopec chief executive officer Dr Peter Mountford both departed their jobs, unexpectedly.

St Vincent's Hospital has said the future of Neopec, a breast reconstruction company created from a consortium of institutes, was safe.

But the future of the Australian Tissue Engineering Centre is less certain, with ATEC and Bernard O'Brien Institute director Prof Wayne Morrison saying: "The O'Brien Institute is in the process of streamlining operations".

"This involves discussions with ATEC," Prof Morrison said.

Bernard O'Brien Institute chairman Ron Walker is also on the board of ATEC.

ATEC was established in 2007 with a Victorian Government \$5.2 million grant to integrate the Bernard O'Brien Institute of Microsurgery, the Australian Stem Cell Centre, the University of Melbourne and St Vincent's Hospital (BD: Mar 28, 2007).

In 2009, the Victoria Government provided \$2.95 million to ATEC to develop the Neopec technology (BD: Oct 29, 2009).

Following publication on Friday, Biotech Daily received replies to some of its questions to the Victorian Department of Business and Innovation.

The Department said that of its funds directed to ATEC some had been spent in the "establishment of a new [good laboratory practice] accredited pre-clinical biological facility for the testing of the materials and devices pertaining to tissue engineering".

Asked if the funds had been expended as the Government had expected, the Department said: "Annual audit opinions declared that funds were expended in accordance with the purpose of the project."

The Department said that any questions relating to the accounts of ATEC and/or Bernard O'Brien should be directed to the organizations.

A spokesman for St Vincent's Hospital told Biotech daily that any takeover of ATEC by the Bernard O'Brien Institute would be "subject to State Government approval".

The spokesman said that each organization "has separate accounts and separate boards".

The spokesman said the two boards had some common directors.

Biotech Daily believes that Mr Walker and Prof Morrison are on the ATEC board.

NUSEP

Nusep says it has appointed Malcolm Coleman as chief financial officer.

Nusep said Mr Coleman held a Bachelor of Science and had more than 20 years experience in banking and finance.

The company said Mr Coleman was most recently the head of debt products at ABN AMRO Australia and previously held debt capital markets and treasury roles, including specific experience with treasury hedging products.

Nusep managing director Dr Hari Nair said Mr Coleman's appointment reflected the company's focus on strengthening its financial skills base as it expanded, primarily through its investment in Singapharm.

Nusep was untraded at 18 cents.

BRAIN RESOURCE

Brain Resource says it has hired the Bank of New York Mellon to establish a level one American depository receipt facility.

Brain Resource said it was “capturing a leading US market position” in brain health measures and hoped to file US Food and Drug Administration submissions for brain tests in depression and attention deficit hyperactivity disorder

The company said the level one American depository receipt program and quotation on the over-the-counter (OTC) market in the US was “nearing final completion”.

Brain Resource said the program would allow US residents and investors to hold and trade securities on the OTC market and to enable them to trade in a US dollar denominated security.

Brain Resource was unchanged at 35 cents.

NEURODISCOVERY

Neurodiscovery says it trying to place the 4,458,776 options undersubscribed in its recent non-renounceable rights issue.

The company said in February that 48,489,637 options would be issued at one cent each to raise up to \$484,896.

Neurodiscovery said that it also hoped to place 20,000,000 options to raise a further \$200,000.

Neurodiscovery fell 0.2 cents or 3.5 percent to 5.5 cents.

FERMISCAN

Fermiscan says its one-for-two rights issue at one cent a share has raised \$75,430 from the issue of 7,542,989 shares at one cent a share.

Fermiscan said there were shortfall subscriptions for a further 16,100,000 shares to raise \$161,00 and nine late applications had been received for an additional 354,525 shares to raise \$3,545.

Fermiscan originally said it hoped to raise \$1 million, but proxy votes defeated a vote to issue 150,000,000 shares to Antus Capital (BD: Nov 23, 2010).

Fermiscan said at that time, the vote was passed on a “show of hands”.

In February Fermiscan published a prospectus to raise \$767,000 in a one-for-two rights issue (BD: Feb 4, 2011) to complete Italian and French trials of the x-ray diffraction of hair test for breast cancer developed by Prof Veronica James, acquired by Fermiscan and subsequently sold to the SBC Research which disputed Fermiscan’s ownership of the intellectual property (BD: Jan 16, 2011).

Fermiscan has been suspended since October 28, 2009 and last traded at three cents.