



Biotech Daily

Wednesday January 19, 2011

Daily news on ASX-listed biotechnology companies

- * **ASX UP, BIOTECH EVEN: BENITEC UP 31%; ANTISENSE DOWN 12.5%**
- * **WEHI, UTS OBSERVE MALARIA PARASITE INVADING BLOOD CELLS**
- * **PHARMAXIS COMPLETES TOPIGEN ACQUISITION**
- * **USCOM SHARE PLAN TO RAISE UP TO \$2m**
- * **USCOM EGM FOR CAPITAL RAISING, SHARE ISSUES**
- * **PSIVIDA REQUESTS TRADING HALT**

MARKET REPORT

The Australian stock market climbed 0.68 percent on Wednesday January 19, 2011 with the S&P ASX 200 up 32.8 points to 4834.6 points.

Fifteen of the Biotech Daily Top 40 stocks were up, 15 fell, six traded unchanged and four were untraded.

Benitec was best, up 0.9 cents or 31 percent to 3.8 cents with 20.7 million shares traded, followed by Genetic Technologies up 26.3 percent to 12 cents, with 4.7 million shares traded and Genera up 12.8 percent to 53 cents with 25,000 shares traded.

Biota, Cellmid and Optiscan climbed five percent or more; LBT, Phosphagenics, Uscom and Virax were up more than three percent; Cellestis rose 2.1 percent; with Alchemia, Chemgenex, Cochlear, CSL, Nanosonics and Sirtex up more than one percent.

Antisense led the falls, down 0.1 cents or 12.5 percent to 0.7 cents with 650,000 shares traded, followed by Prana down 10.34 percent to 13 cents with 13,000 shares traded.

Compumedics lost 5.9 percent; Prima and Universal Biosensors fell more than three percent; Circadian and Sunshine Heart shed more than two percent; with Bionomics, Clinuvel, Mesoblast, Pharmaxis and Phylogica down more than one percent.

WALTER AND ELIZA HALL INSTITUTE, UNIVERSITY OF TECHNOLOGY SYDNEY

Walter and Eliza Hall Institute and University of Technology Sydney researchers have for the first time caught malaria parasites in the act of invading red blood cells.

The Walter and Eliza Hall Institute for Medical Research said in a media release that researchers using new image and cell technologies observed the invasion of blood cells by the malaria parasite *Plasmodium falciparum*.

WEHI researchers Dr Jake Baum, David Riglar, Dr Dave Richard and colleagues led the research with researchers from the I3 Institute at the University of Technology Sydney. Dr Baum told Biotech Daily that the group used an OMX three-dimensional, structure-illumination microscopy (OMX 3D SIM) platform along with other microscopy methods including electron, light and super resolution microscopy.

WEHI said the detailed look as the parasite burrowed through the walls of red blood cells would provide insights into the molecular and cellular events that drive cell invasion and may pave the way for developing new treatments for malaria.

In the media release Dr Baum said the real breakthrough for the research team had been the ability to capture high-resolution images of the parasite at each and every stage of invasion and to do so reliably and repeatedly.

The research findings were published in the journal *Cell Host & Microbe* and an abstract is available at: <http://www.ncbi.nlm.nih.gov/pubmed/21238943>.

"It is the first time we've been able to actually visualize this process in all its molecular glory, combining new advances developed at the institute for isolating viable parasites with innovative imaging technologies," Dr Baum said.

"Super resolution microscopy has opened up a new realm of understanding into how malaria parasites actually invade the human red blood cell," Dr Baum said

"Whilst we have observed this miniature parasite drive its way into the cell before, the beauty of the new imaging technology is that it provides a quantum leap in the amount of detail we can see, revealing key molecular and cellular events required for each stage of the invasion process."

WEHI said the OMX 3D SIM super resolution microscopy captured cellular processes unfolding at nanometer scales.

Dr Baum said the methodology would be integral to the development of new malaria drugs and vaccines.

"If, for example, you wanted to test a particular drug or vaccine, or investigate how a particular human antibody works to protect you from malaria, this imaging approach now gives us a window to see the actual effects that each reagent or antibody has on the precise steps of invasion," Dr Baum said.

Dr Baum said one of the most interesting discoveries the imaging approach revealed was that once the parasite attached to the red blood cell and formed a tight bond with the cell, a 'master switch' for invasion was initiated and invasion continued unabated without any further checkpoints.

"Visually tracking the invasion of *Plasmodium falciparum* into a red blood cell is something I've been aiming at ever since I began at the Walter and Eliza Hall Institute in 2003; it's really thrilling to have reached that goal," Dr Baum said.

"This technology enables us to look at individual proteins that we always knew were involved in invasion, but we never knew what they did or where they were, and that, we believe, is a real leap for malaria researchers worldwide."

Malaria is caused by the *Plasmodium falciparum* parasite, transmitted by infected mosquitoes. Each year more than 400 million people contract malaria and as many as a million, mostly children, die.

PHARMAXIS

Pharmaxis says it has issued two million shares completing the acquisition of Topigen Pharmaceuticals.

Pharmaxis chief executive officer Dr Alan Robertson told Biotech Daily the issue of the shares completed the acquisition of the company and its therapeutic candidates for respiratory disorders based on its multi-targeted oligonucleotide technology.

The acquisition announced on January 12, 2010, was valued at up to \$24.2 million. Pharmaxis said at that time that on closing the transaction, Pharmaxis would issue 3,200,000 shares with an additional 5,000,000 shares to be issued subject to the achievement of certain preclinical and clinical milestones specified in the purchase agreement (BD Jan 17, 2010).

Pharmaxis fell three cents or one percent to \$2.95.

USCOM

Uscom hopes to raise up to \$2 million through the issue of shares at 30 cents each.

Uscom said that shareholders eligible at the record date of January 18, 2011 would be able to apply for parcels of shares up to \$15,000.

Uscom said the share plan would open on January 19, 2011 and close on February 11, 2011.

The company said the funds would be used for working capital "to build a global distribution channel, provide superior levels of clinical training and support and establish a sound sales and marketing platform to drive sales particularly in US, Europe and Asia".

The company said funds would also be used "to initiate growth strategies through strategic partnerships and to fully exploit commercialization opportunities for new clinical applications in heart failure, hypertension and electrophysiology".

Uscom raised \$3 million at the end of 2010 (BD: Jan 16, 2011).

Uscom was up one cent or 3.1 percent to 33 cents.

USCOM

Uscom investors will vote on the issue of shares in its recent placement as well as the share plan announced today and the participation of directors in the placement.

The meeting will also vote on the grant of 4,000,000 options to executive chairman Philip Kiely and 400,000 options to director Jochen Bonitz.

The meeting will be held at Level 7, 10 Loftus Street, Sydney on February 24, 2011 at 10am (AEST).

PSIVIDA

Psivida has requested a trading halt pending an announcement "in relation to a capital raising transaction".

Trading will resume on January 21, 2011 or on an earlier announcement.

Psivida last traded at \$5.15.