

# **Biotech Daily**

# Friday October 31, 2014

## Daily news on ASX-listed biotechnology companies

- \* ASX, BIOTECH UP: PHARMAXIS UP 10%, GENETIC TECHNO DOWN 11%
- \* VICTORIA BACKS BRANDON MRCF \$200m BIOTECH TRANSLATION FUND
- \* WEHI APOPTOSIS RESEARCH LEADS TO NEW DISEASE TARGETS
- \* STARPHARMA SHARE PLAN \$3.5m TAKES TOTAL RAISED TO \$21.5m
- \* ANALYTICA RIGHTS RAISE \$2.56m TAKING TOTAL TO \$3.4m
- \* ADVANCED SURGICAL WINS \$1.6m NSW MEDICAL DEVICE FUND GRANT
- \* HEARTWARE Q3 REVENUE UP 25% TO \$78m
- \* BLUECHIIP APPOINTS GLORY BIOTECH SOUTH KOREA DISTRIBUTOR
- \* HOCKINGS TAKE 25.5% OF PHYLOGICA

#### MARKET REPORT

The Australian stock market climbed 0.92 percent on Friday October 31, 2014 with the ASX 200 up 50.4 points to 5,526.6 points.

Sixteen of the Biotech Daily Top 40 stocks were up, 11 fell, nine traded unchanged and four were untraded. All three Big Caps were up.

Pharmaxis was the best for the second day in a row, up 0.5 cents or 9.8 percent to 5.6 cents, with 613,835 shares traded.

Compumedics climbed 9.1 percent; Avita was up 7.1 percent; Tissue Therapies was up 6.35 percent; Biotron, Clinuvel and Oncosil were up more than four percent; Alchemia, Anteo and Medical Developments were up more than three percent; Impedimed rose 2.2 percent; CSL, Mesoblast and Sirtex were up more than one percent; with Acrux, Bionomics, Cochlear, Nanosonics and Resmed up by less than one percent.

Genetic Technologies led the falls, down 0.2 cents or 11.1 percent to 1.6 cents with 65,000 shares traded.

Optiscan lost 6.7 percent; Atcor fell 4.3 percent; Admedus, Benitec, Cellmid and Osprey fell three percent or more; Neuren and Prana shed more than two percent; Living Cell lost 1.5 percent; with Psivida down 0.2 percent.

# VICTORIA GOVERNMENT, BRANDON CAPITAL

Victoria has launched a superannuation-backed \$200 million Biotechnology Translation Fund managed by Brandon Capital and supported by all other mainland States. Victoria's Minister for Technology Gordon Rich-Phillips told the launch of the fund, at Melbourne's Baker IDI Heart and Diabetes Institute said that the \$200 million Biotechnology Translation Fund would receive \$5.7 million over seven years from the State Government and would be run in conjunction with fund manager Brandon Capital Partners, the manager of the Medical Research Commercialisation Fund (MRCF). Victoria has a State election on November 29, 2014.

Brandon Capital managing director Dr Chris Nave told Biotech Daily that the State Government funds would offset fund management costs which were of critical importance to superannuation fund investments.

"The leading superannuation funds are happier to invest earlier if they don't have to pay those fees and they can afford to invest and wait the typically five to seven years required before seeing a return," Dr Nave said.

Dr Nave said that similar commitments were expected from the State Governments of New South Wales, South Australia, Queensland and Western Australia.

"We are very close to having more than \$200 million for the fund," Dr Nave said. Mr Rich-Phillips said that the fund would be "the largest-ever life sciences venture fund in Australia and will well and truly cement Victoria as the Asia-Pacific hub for [medical technology, biotechnology] and pharmaceutical translational research and commercialization".

Mr Rich-Phillips said that hundreds of high value jobs could be created over five years from a life sciences fund with an investment pool of \$200 million.

"This is only the beginning of the impact of such a Fund, which will also increase research and development activity in Victoria through clinical trials, meaning Victorians will have access to new ground-breaking treatments sooner," Mr Rich-Phillips said.

A Victoria Government media release said that the MRCF had supported 18 early-stage companies developing breakthrough treatments for patients suffering from diseases ranging from cancer, diabetes, arthritis and chronic pain, through to novel medical devices for managing Parkinson's disease and for treating heart and kidney conditions.

As MRCF's principal executive, Dr Nave said the Fund's model was a highly-effective model for identifying and developing Australia's best medical innovations, guiding them from the laboratory bench to the clinic.

"Australia is one of the best in the world in discovery and one of the worst in translation," Dr Nave said.

Dr Nave said that the MRCF started in 2007 with seven research institutions working with venture capital and had grown to 51 institutions, with the \$30 million invested by the fund matched with a further \$250 million.

"The increased capital we hope to have available to the MRCF Biotechnology Translation Fund will continue to allow new companies to be seeded, as well as now providing the capacity to support the successful technologies through to advanced clinical development and commercialization of their products," Dr Nave said.

The Government said that the MRCF Biotechnology Translation Fund was in advanced discussions with superannuation funds and was on-track to begin operations in early-2015.

Separately, Dr Nave said that the MRCF had signed a term sheet with a new company Cardiora, created with the Baker's clinical cardiologist Dr David Kaye to develop an existing intra-venous inotropic agent for heart disease to be taken orally, allowing patients to continue treatment while at home.

# THE WALTER AND ELIZA HALL INSTITUTE FOR MEDICAL RESEARCH

The Walter and Eliza Hall Institute says its staff have uncovered key steps in programmed cell death, offering new targets for lupus, cancers and neurodegenerative diseases. The Institute said that the research teams discovered the three dimensional structure of the cell death protein Bak and showed the first steps in how it caused cell death. WEHI said that one study, entitled 'Bak Core and Latch Domains Separate during Activation, and Freed Core Domains Form Symmetric Homodimers' was published in the journal Molecular Cell and an abstract was available at:

http://www.sciencedirect.com/science/article/pii/S1097276514006091.

The Institute said that the second study, entitled 'Apoptotic pore formation is associated with in-plane insertion of Bak or Bax central helices into the mitochondrial outer membrane' was published in the Proceedings of the National Academy of Sciences and available at: <u>http://www.pnas.org/content/early/2014/09/15/1415142111.full.pdf+html</u>. WEHI said that programmed cell death, known as apoptosis, occurs naturally when the body had to remove unwanted cells.

The Institute said that chemical signals told the cell to die by activating the apoptosis proteins Bak and Bax, which broke down the mitochondria, the energy factory of the cell. WEHI said that when this process failed, defective cells such as cancer cells continued to live, or healthy cells could die unnecessarily, as with Alzheimer's disease.

The Institute said that using the Australian Synchrotron the researchers, Jason Brouwer, Dr Peter Czabotar, Dr Ruth Kluck and colleagues from the structural biology division investigated how the structure of Bak changed to initiate cell death.

"Understanding the way cell death proteins work and what they look like is crucial to finding new ways to treat disease," Dr Czabotar said.

"Our research showed how Bak morphs from one shape to another to trigger apoptosis," Dr Czabotar said.

"Once Bak becomes activated within the cell, it couples with another Bak molecule to form a dimer, which then goes on to initiate apoptosis," Dr Czabotar said.

Dr Czabotar said that understanding apoptosis would allow researchers to develop new ways to treat disease.

"Knowing the structure of these proteins and how they work in the cell is essential in designing new treatments to fight disease," Dr Czabotar said.

WEHI said that Dr Dana Westphal, Dr Ruth Kluck, Dr Grant Dewson, Professor Jerry Adams and colleagues from the molecular genetics of cancer and cell signalling and cell death divisions examined how the Bak and Bax dimers attached to mitochondria and perforate them.

Dr Kluck said that dimers of Bak and Bax broke open the mitochondrial surface, but the mechanism remained poorly understood.

"A crucial stage of apoptosis is the release of key proteins from within the mitochondria," Dr Kluck said.

"Scientists thought this happened by Bak and Bax poking through the mitochondrial membrane to form a hole, but our work has shown this doesn't happen," Dr Kluck said. "Instead, these proteins collapse onto the oily surface of the mitochondria and crowd the surface until holes form," Dr Kluck said.

"We and others are now working to discover exactly how these proteins come together to destroy the mitochondria and trigger apoptosis," Dr Kluck said.

A deeper understanding of this pivotal event is likely to suggest new ways to regulate apoptosis to combat disease," Dr Kluck said.

## STARPHARMA HOLDINGS

Starpharma says its share plan at 65 cents a share has raised about \$3.5 million taking the total raised with the recent placement to about \$21.5 million (BD: Sep 22, 2014). Starpharma said the \$18 million placement "was significantly oversubscribed" and shar plan participation was 70 percent of the \$5 million capped amount.

The company said that there was "strong participation in the placement from existing investors, including Allan Gray Australia, which increased its holding", with six new domestic and seven new international funds joining the register.

Starpharma chief executive officer Dr Jackie Fairley said the company was "very pleased with the strong demand shown in the recent capital raising by both new and existing institutional investors, and retail shareholders, particularly through what has been a very volatile time in global equity markets".

Starpharma said the funds would go to all areas of the business including commercialization activities for Vivagel for symptomatic relief of bacterial vaginosis and pivotal phase III trials of Vivagel for the prevention of recurrence of bacterial vaginosis; advancing the drug delivery and agro-chemical programs and strengthen the balance sheet for the commercialization discussions underway.

Starpharma was unchanged at 63 cents with 1.8 million shares traded.

## ANALYTICA

Analytica says that its one-for-eight entitlement offer at three cents a share raised \$2.56 million of the hoped for \$3.17 million (BD: Oct 3, 2014)

Analytica said the funds were for its domestic marketing activities for the Pericoach intravaginal pelvic floor and incontinence diagnostic and training tool.

Earlier this month Analytica raised \$850,000 in a placement, taking the total raised to \$3.41 million.

Analytica was unchanged at 3.4 cents.

#### NSW GOVERNMENT, ADVANCED SURGICAL DESIGN AND MANUFACTURE

Advanced Surgical says it has been awarded \$1.6 million of this years \$6 million ingrants from the New South Wales Government's Medical Devices Fund.

Advanced Surgical chief executive officer Tom Milicevic said the funds would "assist us in accelerating the development of our synthetic bone substitute which will revolutionize the treatment of trauma, tumor and reconstructive medicine".

The company said it was in the process of changing its name to Allegra Orthopaedics. New South Wales Minister for Health and Medical Research Jillian Skinner said the grants would enable the four recipients to accelerate their medical devices to market.

"In its second year, the Medical Devices Fund is going from strength to strength and this year's recipients have developed technologies which will go a long way to improving the lives of patients," Ms Skinner said.

A media release from Ms Skinner's office said that the other recipients were Speedx Pty Ltd for an in-vitro diagnostic test for the detection of viruses and bacteria causing meningitis, Kico Knee Innovation Company for patient-specific surgical planning and simulations and the Sydney Children's Hospitals Network for a paediatric implant to treat children born with brittle bones or malformed legs.

Advanced Surgical said that it was in the process of changing its name to Allegra Orthopaedics.

Advanced Surgical fell half a cent or 9.1 percent to five cents.

## HEARTWARE INTERNATIONAL

Heartware says that revenue for the three months to September 30, 2014, was up 25 percent \$US68.6 million (\$A78.05 million).

Heartware said that 675 Heartware Ventricular Assist Systems were sold globally in the three months, compared to 550 units in the third quarter of 2013.

The company said that US revenue from 361 units was \$US39.1 million, a 39 percent increase and revenue from international markets was \$US29.5 million up 11 percent. Heartware chief executive officer Doug Godshall said that the company "advanced our clinical initiatives, including preparing our request to commence a [Conformité Européenne] mark study of our next-generation MVAD System, which we expect to submit for regulatory review later this year or in early 2015".

"For the HVAD System, we also completed enrollment in our Japan study during the quarter, advanced enrollment in our US destination therapy study and are finalizing plans to initiate a US [investigational device exemption] study for the thoracotomy implant technique later this year," Mr Godshall said.

"As we continue to drive these programs forward, we remain focused on addressing and remedying the observations raised by FDA following an inspection at our Miami Lakes, Florida facility earlier this year," Mr Godshall said.

Heartware said that for the nine months to September 30, 2014, revenue increased 33 percent to \$US205.2 million, compared to \$US154.9 million in the first nine months of 2013.

On the Nasdaq last night, Heartware fell \$US9.89 or 11.5 percent to \$US76.14 with 640,125 shares traded.

#### **BLUECHIIP**

Bluechiip says it has appointed Glory Biotech Corp as its South Korea distributor for its tracking product range for bio-banking and life science-related markets.

Bluechiip said that the Seoul, South Korea-based Glory Biotech was a provider and supplier of research and manufacturing equipment and had in-house experts in the life sciences business.

The company said that the agreement had minimum ordering obligations including annual purchases of about \$300,000.

Bluechip said that the agreement intention was to transition to a licencing agreement after market validation and minimum volumes were reached.

Bluechiip fell 0.4 cents or 4.65 percent to 8.2 cents.

#### **PHYLOGICA**

Dr Bernard and Dianne Hockings have increased their substantial shareholding in Phylogica from 225,399,915 shares (22.49%) to 255,468,182 shares (25.49%). The substantial shareholder notice said that BEF and DC Hockings bought 30,068,267 shares off-market for \$390,887 or 1.3 cents a share.

In January, Phylogica appointed Perth cardiologist Dr Hockings a director of the company (BD: Jan 24, 2014).

Phylogica was unchanged at 1.5 cents with 1.5 million shares traded.