



# Biotech Daily

Friday November 19, 2010

*Daily news on ASX-listed biotechnology companies*

- \* **ASX, BIOTECH DOWN: PATRYS UP 5%; USCOM DOWN 25%**
- \* **FEDERAL GOVERNMENT FUTURE FELLOWSHIPS BIOTECH WINNERS**
- \* **NOVOGEN'S NV-128 KILLS RESISTANT OVARIAN CANCER STEM CELLS**
- \* **QRX SHARE PLAN RAISES \$5.8m**
- \* **MESOBLAST MERGER CLEARS LAST US REGULATORY HURDLE**
- \* **ACUVAX APPOINTS IAN MURIE CHAIR, DIRECTORS GO, RAISES \$720k**
- \* **NEURODISCOVERY APPOINTS MICHAEL ROBSON CHAIRMAN**
- \* **MAYNE PHARMA REPLACES HALCYGEN**
- \* **STIRLING REQUESTS FUNDING TRADING HALT**

## MARKET REPORT

The Australian stock market fell 0.24 percent on Friday November 19, 2010 with the S&P ASX 200 down 11.0 points to 4629.2 points.

Seven Biotech Daily Top 40 stocks were up, 18 fell, 10 traded unchanged and five were untraded.

Patrys was best, up half a cent or 4.8 percent to 11 cents with 292,116 shares traded; followed by Prana up 3.45 percent to 15 cents; Tissue Therapies up two percent; with Chemgenex, Cochlear and Pharmaxis up more than one percent.

Uscom led the falls, down eight cents or 25 percent to 24 cents with 1,508 shares traded, followed by Advanced Surgical down 12.5 percent to 35 cents with 5,000 shares traded and Antisense down 10 percent to 0.9 cents with 700,000 shares traded.

Virax lost 9.7 percent; Phosphagenics fell 8.7 percent; Living Cell and QRX were down more than five percent; Optiscan fell 4.8 percent; Biota, Cathrx, Starpharma and Universal Biosensors were down more than three percent; Cellmid and Nanosonics shed more than two percent; with Acrux and Impedimed down one percent or more.

## AUSTRALIAN GOVERNMENT, AUSTRALIAN RESEARCH COUNCIL

Biotechnology and medical research projects have won some of the 200 Australian Government Future Fellowships worth a total of \$143.8 million over four years.

The Department of Innovation website said the inaugural 200 Future Fellows were announced in September 2009 with \$147.4 million awarded over four years.

The second cohort of 200 Fellows was announced by the Minister for Innovation Senator Kim Carr on November 17, 2010 and will receive \$143.8 million over four years.

The Departmental website said that the fellowships provided for salaries of up to \$141,000 a year with administering organizations receiving \$50,000 a year to support related infrastructure, equipment, travel and relocation costs.

An Australian Research Council official told Biotech Daily that the group of biological sciences, biotechnology, environmental, medical and health sciences made up 65 of the 200 successful proposals receiving \$47,520,348 of the \$143.8 million.

Senator Carr said the funding reflected the Government's commitment to ensuring a strong Australian research workforce.

"I created the Future Fellowships to address the lack of Australian opportunities available for our talented mid-career researchers," Senator Carr said. "In this group of 200 researchers, 10 have returned to Australia and 22 are overseas citizens who we welcome to our shores".

The Australian Research Council provided Biotech Daily with some of the winners in biotechnology and medical research.

The Walter and Eliza Hall Institute of Medical Research's Dr Stephen Nutt was awarded \$919,832 for research into genetic networks controlling lymphocyte differentiation.

The University of Melbourne's Dr Anthony White was awarded \$808,793 to investigate the neuroprotective actions of metallo-complexes.

The University of Queensland's Dr Bryan Fry was awarded \$791,360 for research into the adaptive evolution of coleoid (cuttlefish, octopus, squid) venoms as a rich drug design resource.

The University of Queensland's Dr Matthew Sweet was awarded \$705,992 for research into toll-like receptors in infectious and inflammatory diseases - the double-edged sword of innate immunity.

The University of Western Australia's Prof Kevin Pflieger was awarded \$706,424 for the development and use of novel technologies to improve drugs targeting G protein-coupled receptor complexes involved in disease.

Monash University's Dr Sheena McGowan received funding of \$686,552 for the structural and functional characterization of compounds that inhibit the malarial aminopeptidases.

Monash University's Dr Jian Li was awarded \$667,494 for research into the mismatch between increasingly drug-resistant superbugs and development of new antibiotics.

The University of Queensland said it "topped the nation" winning 31 fellowships worth more than \$22 million and its biotechnology and medical winners were:

Dr Thiruma Arumugam for novel pharmacological agents to target stroke-induced brain injury;

Dr Idriss Blakey for smart magnetic resonance imaging contrast agents: from early detection to assessment of drug delivery mechanisms;

Dr Richard Clark for the development of effective peptide-based drugs;

Dr Brett Collins to define the molecular mechanisms of intracellular protein trafficking

Dr Benjamin Hogan for the genetic analysis of lymphatic vascular development;

Prof Mark Schembri for research into how bacteria cause disease in the urinary tract; and

Prof Stephen Williams for the operation of nerve cell networks in the neocortex.

The full list of winners is at: [http://www.arc.gov.au/pdf/FT10/ft10\\_FOR.pdf](http://www.arc.gov.au/pdf/FT10/ft10_FOR.pdf).

## NOVOGEN

Novogen says pre-clinical data on NV-128 shows its ability to induce mitochondrial instability, leading to cell death in chemotherapy-resistant ovarian cancer stem cells. Novogen said the data from its US 71.3 percent subsidiary Marshall Edwards mitochondrial inhibitor program was reported overnight at the first World Congress on Targeting Mitochondria, in Berlin by Yale University School of Medicine's Dr Ayesha Alvero.

"This study showed for the first time that targeting the mitochondria induces caspase-independent cell death in otherwise chemotherapy-resistant ovarian cancer stem cells," Dr Alvero said.

"The demonstration that a compound can disrupt cancer cell metabolism by specifically targeting the mitochondria to induce cell death opens an avenue for the development of potential new therapeutics for ovarian cancer patients," Dr Alvero said.

Novogen said the study further characterized the novel mechanism of action of NV-128, an isoflavone derivative that promotes a state of cellular starvation, resulting in the activation of two independent signaling pathways in cancer cells through the AMPkinase pathway leading to inhibition of the mammalian target of rapamycin (mTOR) complexes and the induction of destructive autophagy; and the mitogen-activated protein kinase kinase (MEK) and extracellular signal-regulated kinases (ERK) pathway leading to mitochondrial depolarization and DNA fragmentation.

Marshall Edwards chief executive officer Dr Daniel Gold said that in addition to the Yale data, "our first-generation compound NV-128 has shown preclinical activity against a broad range of cancers, including KRAS-mutant, Tarceva-resistant non-small cell lung cancer cell lines".

Marshall Edwards said it had identified a next-generation compound named NV-344 that appeared to be significantly more active than NV-128 in pre-clinical studies and planned to conduct the necessary non-clinical studies to initiate clinical trials of NV-344 in 2011.

Novogen was up two cents or 16.7 percent to 14 cents.

## QRX PHARMA

QRX says its share purchase plan has raised \$5.8 million and with the recent \$14.0 million placement, brings total proceeds to \$19.8 million.

QRX said RBS Morgans was the lead manager to the placement and share purchase plan with all shares offered at 85 cents each.

QRX chief executive officer Dr John Holaday said the company was "delighted to have such strong support from existing shareholders and welcome new institutional investors during this exciting and pivotal period for QRX Pharma".

The company said the proceeds would to fund a Moxduo Immediate Release phase III adverse event study for registration in Europe which also had "the potential to enhance marketing and advertising claims in the US".

QRX said the funds would also be used to support the filing of the new drug application with the US Food and Drug Administration and advance its marketing authorization application in Europe in 2011 as well as progress the development of the Moxduo intravenous and controlled release formulations.

QRX fell 5.5 cents or 5.2 percent to 99.5 cents.

### MESOBLAST

Mesoblast says the objection period under US anti-trust regulations relating to its acquisition of Angioblast Systems has expired.

Mesoblast said all merger conditions were being finalized and on completion, the group would have about 250 million shares on issue and a market capitalization of \$750 million. Mesoblast was unchanged at \$2.95.

### ACUVAX

Acuvax has made major changes to its board, appointing Perth lawyer Ian Murie as chairman, Keong Chan as a director and Lloyd Flint as a director and company secretary. Acuvax said that directors Dr Yvonne Foong and Patrick Elliott had resigned.

Dr William Ardrey continues as chief executive officer and a director.

Acuvax said that a further 360,000,000 shortfall shares had been placed to clients of RM Corporate Finance raising \$720,000.

Acuvax was unchanged at 0.3 cents.

### MAYNE PHARMA (FORMERLY HALCYGEN PHARMACEUTICALS)

The supergenerics company formerly known as Halcygen has formally become Mayne Pharma and began trading today under the ASX code MYX.

Last year, Halcygen bought Mayne Pharma International from Hospira Inc for \$US15million and a share of the next six years' profits (BD: Sep 25, 2009).

Mayne Pharma fell half a cent or 0.75 percent to 66.5 cents.

### NEURODISCOVERY

Neurodiscovery says non-executive director Michael Robson has been appointed company chairman, effective immediately.

Neurodiscovery said Mr Robson previously held senior management positions in the Western Australian government and in private industry, was the non-executive chairman of Datamotion Asia Pacific and was a compliance and risk management consultant.

Neurodiscovery was untraded at 4.3 cents.

### STIRLING PRODUCTS

Stirling Products has requested a trading halt pending an announcement "to its funding arrangements and capital raising".

Stirling had a cash burn for the three months to September 30, 2010 of \$1,026,000, with cash at hand at that date of \$211,000.

In its notice of annual general meeting (BD: Nov 2, 2010) Stirling said its shareholders would vote to issue up to 1,616,657,716 shares to cover several acquisitions, along with placements, convertible notes and to raise working capital.

Trading will resume on November 23, 2010 or on an earlier announcement.

Stirling last traded at 0.8 cents.