



# Biotech Daily

Friday November 18, 2011

*Daily news on ASX-listed biotechnology companies*

## **VALE DR MIKE HIRSHORN 1950 - 2011**

- \* ASX, BIOTECH DOWN: PATRYS UP 8%; PHARMAXIS DOWN 10%**
- \* DR MIKE HIRSHORN**
- \* PHARMAXIS INSTITUTIONAL OFFER RAISES \$50m, RETAIL \$30m TO GO**
- \* BENITEC REINVENTS ddRNAi AS PLATFORM FOR PAIN, CANCER, MORE**
- \* 'WORLD LEADING' CSIRO GEELONG BIOSECURITY LAB OPENS**
- \* ISONEA PART-UNDERWRITTEN 3-FOR-4 RIGHTS ISSUE TO RAISE \$4.3m**

## **MARKET REPORT**

The Australian stock market fell 1.91 percent on Friday November 18, 2011 with the S&P ASX 200 down 81.2 points to 4,177.0 points.

Nine of the Biotech Daily Top 40 stocks were up, 15 fell, six traded unchanged and 10 were untraded. All three Big Caps fell.

Patrys was the best, up 0.4 cents or 8.2 percent to 5.3 cents, with 211,000 shares traded.

Antisense, Avita and Bionomics all climbed 4.76 percent; Nanosonics was up 3.3 percent; Biota rose 2.1 percent; with Anteo and Starpharma up more than one percent.

Pharmaxis led the falls, down 12.25 cents or 9.9 percent to \$1.115 with 1.7 million shares traded.

Benitec, Living Cell and Psivida lost more than six percent; Allied Health, Cellmid, Mesoblast and Prima fell more than five percent; Alchemia and Genetic Technologies were down more than three percent; Cochlear, CSL, Resmed and Universal Biosensors shed more than two percent; with Sirtex and Viralytics down more than one percent.

#### [DR MIKE HIRSHORN - MBBS, MBA, OAM \(April 11, 1950 – November 18, 2011\)](#)

Four Hats Capital director, Cochlear founder and Resmed founder Dr Michael Hirshorn died this morning, November 18, 2011, following a battle with cancer.

His business partner at Four Hats, Simon Uzcilas said Mike would be dearly missed by his loving family, colleagues and many friends.

Dr Hirshorn graduated from the University of Melbourne with Bachelor of Medicine and Bachelor of Surgery degrees in 1974 and completed a Masters of Business Administration at Macquarie University in 1981.

Dr Hirshorn had a 30 year career of founding, building, managing and investing in technology companies, including as founder and chief executive officer of Cochlear and Resmed in which he was a founding director.

In recent years Dr Hirshorn specialized in private equity investment and has been a director of companies including QRX Pharma, LBT Innovations, Biotron, Cathrx, ITL, Dynamic Hearing and TGR BioSciences.

Dr Hirshorn was a board or committee member of a large number of organizations including the Garvan Institute Business Development Advisory Board, Yuuwa Capital, Australian Venture Capital (Avcap) Council, ANU Connect Ventures Investment Committee, the ASX- Ausbiotech Biotechnology Reporting Code Committee and the Industrial Research and Development Board.

In 1988, he won the BRW Businessman of the Year (Technology) award for establishing Cochlear in the US, Europe and Japan and in 2004 he was awarded an Order of Australia Medal for his work in commercializing medical technology.

Biotech Daily is deeply saddened by the loss of Dr Hirshorn, who contributed so much to the nascent biotechnology industry.

We wish his wife Susan, family and friends a long life.

A service for Dr Hirshorn will be conducted at 10:30am on November 21, 2011 at the Temple Emmanuel Synagogue at 7 Ocean Street, Woollahra, Sydney.

In accordance with Jewish tradition please do not bring or send flowers.

#### [PHARMAXIS](#)

Pharmaxis says it has raised \$50 million of its \$80 million one-for-three rights offer at \$1.05 a share with the balance fully under-written by Merrill Lynch and Wilson HTM.

Pharmaxis said the settlement of the new institutional offer shares would be in two tranches with about \$43 million to be completed on November 28, 2011 and about \$7 million to be settled on December 15, 2011.

The company said the second settlement satisfied the commitment of Pharmaxis' largest shareholder Orbis Investment Management to maintain its pre-capital raising interest of 19.3 percent of the company post completion of the offer.

Pharmaxis said the offer was strongly supported by both existing and new institutional investors and any entitlements not committed or eligible to be taken up by institutional shareholders had been subscribed through the institutional shortfall book-build.

The company said the retail component would raise about \$30 million.

The record date is November 21, the offer opens on November 24 and closes on December 8, 2011.

Pharmaxis fell 12.25 cents or 9.9 percent at \$1.115 with 1.7 million shares traded.

## [BENITEC](#)

Benitec has taken its "Chief Investigators Group" to investor and analysts meetings in Melbourne and Sydney to unveil a new commercialization strategy.

Along with chairman Peter Francis, chief executive officer Dr Peter French and director Iain Ross, the company presented with inventor Dr Michael Graham, the originator of the core Graham '099 patent, the chief executive officer of the Shanghai-based Biomics Biotechnologies Dr York Zhu, the head of pharmacoproteomics at the University of New South Wales Prof Maria Kavallaris and the California-based City of Hope's Prof John Rossi.

At an investor briefing at Patersons Securities in Melbourne, Dr French said that a program targeting the PKC-gamma to control neuropathic pain with a single injection had replaced the previous hepatitis C and HIV programs as the company's lead program. Dr French and Prof Kavallaris provided details of new timelines for the range of programs. Dr French said that the DNA-directed RNA interference program (ddRNAi) had applications in cancer-associated pain, drug-resistant lung cancer, hepatitis B and muscular dystrophy.

Dr French said the company hoped to take an investigational new drug application package to the US Food and Drug Administration for the neuropathic pain program by May 2012 and complete a preliminary clinical trial design.

Dr French said that PKC-gamma was "at the top of the pain pathway, specific to neuropathic cancer pain" and the end stage cancer patients made the process easier in terms of regulatory and scientific process and "easier to monetize than hepatitis C and HIV".

Dr French said that Biomics and Benitec were developing a "curative therapy for hepatitis B" and Dr Zhu's team had selected several short hairpin RNA constructs that would be packaged into a triple cassette and delivered to the liver via an adeno-associated virus AAV8.

He said pre-clinical work had shown that the vector could be delivered to 100 percent of liver cells.

Dr French said the company had begun work on a therapy for the orphan indication ocular-pharyngeal muscular dystrophy which caused death through choking.

He said he expected the compound to be in the clinic in 2014.

Prof Kavallaris said that higher levels of beta-III tubulin were found in drug-resistant non-small cell lung cancers and would be the target of a Benitec short-hairpin RNA program. Prof Kavallaris said that survival rates for non-small cell lung cancers were less than 10 percent at five years and it was one of the most common cancers.

She said that shutting down beta-III tubulin appeared to sensitize tumor cells to chemotherapy, and they were not expressed in normal lung cells.

Prof Kavallaris said the first mouse treated had its beta-III tubulin count knocked down by 60 percent.

A chart of overall survival indicated that 50 percent survival was about 300 days longer in people with lower beta-III tubulin levels.

The Benitec presentation provided a timeline with its investigational new drug application preparation by 2013 and a phase I trial in 2014.

Prof Kavallaris said beta-III tubulin was also expressed in ovarian, breast, prostate cancers and glioblastomas, with potential for the treatment to work in any cancer.

Dr French said that the first patient City of Hope HIV patient treated with a Lentivirus short hairpin RNA stem cell transplant was still expressing short hairpin RNA, three years after the single treatment.

Benitec fell 0.1 cents or 6.25 percent to 1.5 cents with 7.1 million shares traded.

## THE COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION

The Minister for Innovation, Industry, Science and Research, Senator Kim Carr has opened “the world’s most advanced bio-secure laboratory” in Geelong, Victoria.

A media release from the Minister’s office said the laboratory was at the Commonwealth Scientific and Industrial Research Organisation’s Australian Animal Health Laboratory and the Collaborative Biosecurity Research Facility allowed researchers from “Australia and overseas to work together on projects of national importance at the highest levels of biological containment”.

The media release said the internationally shared resource was dedicated to research on infectious diseases that affect the health of humans, domestic animals and wildlife and provided the CSIRO and Australia with a unique opportunity to lead bio-security research globally.

A CSIRO media release said the facility incorporated the Biosecurity Microscopy Facility a Federal Government National Collaborative Research Infrastructure Strategy microscopy and microanalysis research facility that enabled fundamental research with infectious disease agents that required the highest levels of bio-containment.

## ISONEA (FORMERLY KARMELSONIX)

Isona hopes to raise up to \$4.3 million through a partly-underwritten, non-renounceable three-for-four share rights issue at half a cent a share.

Isona said there would be one free attaching option for every parcel of four new shares acquired, exercisable at 0.7 cents by June 30, 2014.

The company said Patersons Securities had underwritten the offer to \$3.7 million.

The company said the rights issue would be “an alternative to the recently executed convertible note equity drawn-down [sic] facility”.

Isona said the record date was November 29, the offer would open on December 1 and close on December 15, 2011.

Isona fell 0.2 cents or 25 percent to 0.6 cents with 8.4 million shares traded.