

Biotech Daily

Tuesday November 18, 2008

Daily news on ASX-listed biotechnology companies

- * ASX, BIOTECHS DOWN: CYTOPIA UP 17%, PHYLOGICA DOWN 29%
- * VICTORIAN GOVERNMENT FUNDS ZEBRA FISH RESEARCH UNIT
- * LABTECH CO-FOUNDER, DIRECTOR PAUL MARIANI DIES
- * PRANA PROTOTYPE BLOCKS ANAESTHETIC PATHOLOGY IN MICE
- * NSW BREAST CANCER INSTITUTE ADOPTS IMPEDIMED'S L-DEX
- * VIRALYTICS AGM DIVIDED; ALL RESOLUTIONS PASSED
- * GOODBYE HEARTWARE LTD, G'DAY HEARTWARE INTERNATIONAL INC
- * KARMELSONIX' NADAISAN LOGARAJ QUITS BOARD, DROPS 1m OPTIONS
- * AUSBIOTECH BIO-BEERS TOMORROW

MARKET REPORT

The Australian stock market fell again, down 3.5 percent on Tuesday November 18, 2008 with the All Ordinaries losing 126.4 points to 3,513.1 points.

Four of the Biotech Daily Top 40 stocks were up, 23 fell, seven traded unchanged and six were untraded.

Cytopia was best, up 2.5 cents or 16.67 percent to 17.5 cents with 71,999 shares traded, followed by Clinuvel up 6.38 percent to 25 cents, Optiscan up 4.92 percent to 6.4 cents, Chemgenex up 2.75 percent to 56 cents and Resmed up 0.38 percent to \$5.33.

Yesterday's best, Phylogica, lost two cents or 28.57 percent to five cents with 6,384 shares traded, followed by Sunshine Heart down 20 percent to 5.2 cents, Living Cell and Antisense were down 16.67 percent to 15 cents and 3.5 cents, respectively, with Pharmaxis down 11.58 percent to \$1.26.

Alchemia lost 9.09 percent; Cellestis fell 8.33 percent; Acrux and Mesoblast were down more than seven percent; Biota, Peplin, Psivida and Viralytics lost more than six percent; Bionomics, CSL and Prana fell five percent or more; Avexa fell 4.17 percent; Cochlear, Neuren and Progen were down more than three percent; Arana, Circadian, Sirtex and Ventracor shed two percent or more; with Novogen down 1.18 percent.

VICTORIAN GOVERNMENT

Victoria's Innovation Minister Gavin Jennings opened the Zebrafish Core Research Facility at Monash University's Clayton Campus today.

In a media release, the Victorian Government said zebrafish had "amazing regenerative properties [and] could hold the key to finding better treatments for muscular dystrophy and heart disease".

Research on the fish will be used "in the fight against incurable diseases" using the \$5 million facility developed by the Victorian Government and Monash University.

"The Zebrafish Core Research Facility is part of the \$153 million Australian Regenerative Medicine Institute which is a partnership between Monash University and the Brumby Government," Mr Jennings said.

He said the research facility would "enable Victorian scientists to better understand how genes control normal development and to characterize the actions of mutations responsible for conditions such as muscular dystrophy and heart disease".

"This is an important investment for Victoria and will position the state as a world-leader in regenerative medicine, helping Melbourne to become one of the top five centres in the world for biotechnology by 2010 leading to better treatment or prevention of these diseases," Mr Jennings said.

The media release said the six centimetre fish were "good models for human disease as they have muscle development similar to humans but also have regenerative properties far greater than in humans, enabling them to repair damaged muscle".

The deputy director of the Australian Regenerative Medicine Institute Prof Peter Currie said zebrafish gave researchers "an insight into a range of things that we haven't been able to investigate before".

"Its transparent embryo and rapid development allow us to see in great detail how it grows and develops," Prof Currie said.

The Ludwig Institute's co-head of colon molecular and cell biology laboratory Prof Joan Heath told Biotech Daily that Prof Currie's interest was in muscular disease and he had fish that were a model for muscular dystrophy.

Prof Heath said zebrafish were a vertebrate model for human disease and were "much more amenable to large scale genetic screens than any other vertebrate".

"We study intestinal development which we hope will help better inform us of the genetic pathways involved in colorectal cancer," Prof Heath said.

"Unlike mice, there are several advantages of zebrafish and the main one is housing. "We have 200,000 fish potentially in the Australian Regenerative Medicine Institute. That number of mice would be very difficult to maintain," she said.

"For genetic research we need many mutations and then we look at the consequences and screen across lots of embryos," Prof Heath said.

"It is much easier to do that with zebrafish which can generate 200-400 embryos carrying mutations once or twice a week, compared to a mouse giving a litter of up to 12 mice once every three weeks.

"And from the moment of fertilization the whole process can be observed in these transparent embryos," Prof Heath said.

Prof Heath said the facility would be well-placed for undergraduates to study development biology as a major in their degrees and provide a greater understanding of zebrafish as a model for human disease.

The Victorian Government said it provided \$35 million towards the construction and fit out costs of Australian Regenerative Medicine Institute and Monash University spent \$103 million. The Federal Government provided \$15 million for specialized equipment.

At the opening, a zebrafish with a red fluorescent heart was named Gavin for the Minister.

LABTECH SYSTEMS

Labtech Systems says that its co-founder and director Paul Mariani died unexpectedly on November 16, 2008.

Labtech chairman Bob Finder said the company was "deeply saddened by this event". "As a co-founder and long term director, Paul's contributions in the area of

commercialization and strategy have been extremely valuable and appreciated by all," Mr Finder said.

"On behalf of the company and board of directors, I would like to extend our heartfelt condolences to Paul's wife Kerrie and their children during this difficult time," he said. Labtech was untraded at 12 cents.

PRANA BIOTECHNOLOGY

Prana says a study conducted by Massachusetts General Hospital demonstrates that its metal-protein attenuating compounds can halt Alzheimer's pathology.

The study entitled 'The common inhalation anaesthetic isoflurane induces caspase activation and increases amyloid beta-protein level in vivo' was published in the November edition of Annals of Neurology and showed that the administration of the common anesthetic gas isoflurane can spur the production of amyloid-beta protein, which causes plaques in the brains of Alzheimer's patients.

Prana reported the study in which mice were treated with clioquinol, also known as PBT1 and the predecessor of Prana's compound PBT2, prior to receiving the isoflurance. The treated mice had significant lower levels of the enzyme that leads to amyloid-beta production.

Prana chief executive officer Geoffrey Kempler said that although PBT1 had been superseded by PBT2 and was no longer being developed, "we are happy that once again our underlying technology has demonstrated strong benefits in the fight against Alzheimer's".

The study's senior author, the director of the Genetics and Aging Research Unit at Massachusetts General Hospital Prof Rudolph E Tanzi, who is also Prana's co-founding scientist, said the findings "suggest that post-operative cognitive dysfunction and delirium may be related to increased amyloid beta protein levels driven by the commonly-used anaesthetic, isoflurane".

"The fact that pretreatment with PBT1, which blocks amyloid beta protein accumulation, helped reduce the extent of neuronal cell death in the isoflurane-treated animals suggests that this class of drugs, which includes PBT2, might be considered as a prophylactic for mitigating the potential adverse effects of isoflurane during surgery," Prof Tanzi said. "It must be emphasized, however, that all of these results have thus far been derived from mice studies and would therefore have to be first validated in humans," Prof Tanzi said. Prana said PBT2 was designed to have an improved safety and efficacy profile and demonstrated significantly greater effectiveness in lowering plaque in Alzheimer patients. "Studies conducted by noteworthy institutions such as [Massachusetts General Hospital] reaffirms our commitment to commercialize and develop the second generation of [metal-protein attenuating compounds] for the treatment of Alzheimer's disease," Mr Kempler said.

The article is in the November edition of Annals of Neurology and can be found at: <u>http://www3.interscience.wiley.com/journal/121511597/abstract?CRETRY=1&SRETRY=0</u> Prana fell two cents or five percent to 38 cents.

IMPEDIMED

Impedimed says the New South Wales Breast Cancer Institute has implemented a program of screening for lymphoedema using its technology.

Impedimed chief executive officer Greg Brown told Biotech Daily that the company had sold the lymphoedema testing equipment to the Breast Cancer institute and had expected the Institute to conduct a trial.

Mr Brown said the company had sold the Institute four units and received ongoing income from the sale of electrodes for the units.

Mr Brown said he was pleasantly surprised to learn that the NSW Breast Cancer Institute had announced "an innovative lymphoedema screening program using bio-impedance spectroscopy to monitor women before surgery and during the first two years after surgery to detect and treat early stages of lymphoedema and prevent long-term severe lymphoedema symptoms".

In a media release Impedimed said it was "delighted that a prestigious institution like the [New South Wales Breast Cancer Institute] has recognized the benefits of using the L-Dex approach to aid their health professionals in the pre-operative care of breast cancer patients for the early clinical assessment and prevention of lymphoedema".

In the media release Mr Brown said that the use of L-Dex (lymphoedema index) technology at the Institute and other centres around the world represented "an ongoing emergence of a new clinical standard of care for medical professionals in their management of breast cancer patients in an attempt to prevent lymphoedema".

"It is particularly gratifying to see just how Australian medical care is on the leading edge of change," Mr Brown said.

"It is truly a proactive approach to medicine and demonstrates how the Australian healthcare system is very focused on addressing all the needs of breast cancer patients from day one," he said.

He said the Institute was well-recognized and "having such a reputable institute using our technology for this pro-active care model is both exciting and influential in changing medical practice globally".

Impedimed was untraded at 65 cents.

VIRALYTICS

Viralytics annual general meeting saw strong division on all issues with the grant of 3,000,000 options each to directors Paul Hopper and Peter Molloy, the closest votes. Mr Molloy's options and Mr Hopper's options supported by more than 29.8 million proxy votes (55.5%) with more than 23.9 million proxy votes against. With proxy votes exercised by the chair and other sources there were 52.5 million proxy votes in favor (68.7%). The remuneration report was opposed by more than 4.8 million votes.

The reelections of directors Dr Phillip Altman and Paul Hopper were opposed by more than 19.9 million proxy votes, with more than 34 million in favor and a further 19.9 million votes cast in favor by the chairman.

Director Peter Molloy's reelection was opposed by more than 19.9 million proxy votes, with more than 24 million in favor and a further 19.9 million votes cast in favor by the chairman.

Ratification of share issues were also divided with a prior placement opposed by 9.9 million proxy votes and the approval for a 2008 placement of 60,000,000 shares opposed by more than 21 million proxy votes.

No one at Viralytics was available to explain the strong opposition to all resolutions. Viralytics fell 0.3 cents or 6.25 percent to 4.5 cents.

<u>HEARTWARE</u>

Heartware will be removed from the ASX from the close of trading today, November 18, 2008, following completion of the scheme of arrangement with Heartware International Inc.

The company's ASX code of HTW has been replaced with HIN, trading Chess Depository Instruments.

Heartware was unchanged at 48 cents.

KARMELSONIX

Karmelsonix says director Nadaisan Logaraj will not seek re-election at the annual general meeting scheduled for November 21, 2008.

The company said Mr Logaraj's tenure would conclude on the day of the meeting and resolutions on his reelection and the granting of 1,000,000 unlisted options to him would be withdrawn at the meeting.

Karmelsonix was unchanged at 1.7 cents.

AUSBIOTECH

The industry organization Ausbiotech has reserved part of the Treasury bar at The Sebel for tomorrow night's informal Bio-Beers.

Ausbiotech describes the event as "an opportunity to meet other people from the industry over a beer or wine".

Bio-Beers will be held at The Sebel, Melbourne, 394 Collins Street, Melbourne, November 19, 2008 from 6pm to 9pm.

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