



# Biotech Daily

Friday October 10, 2008

*Daily news on ASX-listed biotechnology companies*

- \* **ASX, BIOTECHS WAY DOWN: ANTISENSE UP 5%, PHYLOGICA DOWN 29%**
- \* **IMUGENE VACCINE PROTECTS PIGS FROM LUNG DISEASE**
- \* **IM MEDICAL TAKES HEART TEST TO MINING COMPANIES**
- \* **NUSEP SELLS 1<sup>st</sup> PROTEIN SEPARATOR**
- \* **CYTOPIA VOTES ON 500k CEO OPTIONS, DIRECTORS, PLACEMENT**
- \* **ADVANCED SURGICAL VOTES ON 250k CEO OPTIONS, DIRECTOR**
- \* **CIRCADIAN DIRECTOR DR JOHN STOCKER RETIRES**

## MARKET REPORT

The Australian stock market lost 8.2 percent on Friday October 10, 2008 with the All Ordinaries down 351.8 points to 3,939.5 points.

Two of the Biotech Daily Top 40 stocks were up, 30 fell, three traded unchanged and five were untraded.

Antisense was best, up 0.2 cents or 5.26 percent to four cents, followed by Progen up half a cent or 0.75 percent to 67 cents. Cellestis, Novogen and Proteome looked good by trading unchanged.

Phylogica led the falls, down 2.6 cents or 28.57 percent to 6.5 cents, followed by Cytopia down 3.5 cents or 24.14 percent to 11 cents and Cathrx Cell down 11 cents or 15.49 percent to 60 cents.

Benitec lost 14 percent; Phosphagenics and Prana fell more than 13 percent; Alchemia was down 12.2 percent; Acrux, Chemgenex and Circadian were down more than 10 percent; Genetic Technologies was down 9.09 percent; Neuren and Psivida shed more than eight percent; Mesoblast lost 7.78 percent; Cochlear, CSL, Peplin, Resmed and Starpharma were down more than six percent; Biota, Heartware, Pharmaxis, Polartech and Sirtex fell five percent or more; Clinuvel lost 4.55 percent; Avexa, Bionomics, Living Cell and Optiscan were down more than three percent; Arana and Viralytics shed more than two percent; with Universal Biosensors down 1.43 percent.

Outside the Top 40, Nanosonics was the sector's best, up 15.15 percent to 19 cents while Xceed was worst losing 52.38 percent to three cents.

## IMUGENE

Imugene says the final report of its US porcine reproductive and respiratory syndrome vaccine trial shows it protects pigs from the lung disease, prevents infection in the blood and reduces viral infection in the lungs.

Imugen said the final report, included all results from the recently completed trial and confirmed the preliminary results previously announced.

The company said it provided additional information indicating the high level of effectiveness provided by its modified porcine reproductive and respiratory syndrome (PRRS) vaccine.

Imugene said the vaccine provided “a very high degree of protection against the PRRS disease when two doses are administered either orally or by injection”.

Imugene said porcine reproductive and respiratory syndrome was caused by a viral infection and the major clinical signs were the result of areas of diseased lung (consolidation).

To evaluate the severity of an infection, standardized lung lesion scores were generated by scoring the diseased areas in each of the seven lung lobes from each pig and then generating an average.

The lower the average lung lesion score the better, as this indicates a lower level of disease.

Another important measure of PRRS virus infection in pigs was the level and duration of the virus in the pig's blood, also known as viremia.

In normal situations, following exposure to the PRRS virus, a prolonged acute productive infection takes place characterized by viremia that can last several weeks.

An effective vaccine administered prior to exposure with the PRRS virus will reduce the percentage of viremia and the duration of viremia.

Imugene said clinical illness with the PRRS virus slows weight gain during and after infection and an effective vaccine should result in less clinical illness and therefore better weight gains following infection.

Following challenge with the live PRRS virus, the vaccinated pigs compared to the control pigs: had much lower lung lesion scores; no viremia in the group vaccinated by injection; lower viremia counts in the orally vaccinated group; fewer pigs with virus isolated from lung samples; better weight gains over the 14 day post-challenge period.

The differences between unvaccinated and vaccinated (injected and oral) were statistically significant ( $p=0.000058$  and  $p=0.000025$  respectively). The differences in weight gain between groups were not statistically significant over the 14 day post challenge period.

Imugene managing director Dr Warwick Lamb said the results showed that the modified vaccine correctly primed the pigs' immune system “to very efficiently prevent disease from the PRRS virus challenge”.

“The success of this trial and the compelling results against such a major pig disease is very positive for Imugene's entire pig vaccine platform,” Dr Lamb said.

“The PRRS vaccine is now our lead product to progress into the regulatory process for the [porcine adenoviral] vaccine range with authorities in the US,” Dr Lamb said.

The trials were undertaken at a specialist trial facility in the US.

The trial consisted of 45 piglets split into three groups. Of the two vaccinated groups, one received doses orally, the other via intramuscular injection.

Each group received two doses, 14 days apart. All groups were challenged with the live PRRS virus 14 days following the second dose vaccine administration.

Imugene said PRRS caused industry losses of up to \$1 billion each year.

Imugene fell 1.5 cents or 30 percent to 3.5 cents.

## IM MEDICAL

IM Medical and Fire Rescue Safety Australia will offer the Intelliheart cardiovascular assessment to mining companies in Western Australia and Queensland.

IM Medical said that under the partnership, Fire Recue Safety Australia (FRSA) would visit about 350 mines in WA and Queensland in their regular call cycle.

The mines employ 70,000 workers and would provide a new potential market for the Intelliheart test, IM Medical said.

After initial training, FRSA sales staff would promote the Intelliheart product from early November 2008. FRSA services the mining industry with medical products and associated fire, rescue and safety equipment.

IM Medical said its non-invasive Intelliheart test is portable so that tests can be conducted at the mining sites with data sent back via secure internet to its Melbourne office.

Each report is vetted by an in-house doctor while the cardiologists in the Heart Care Victoria group provide interpretation of the electrocardiograph.

The company said the advantage of the test was that it could be conducted in remote locations and results can be viewed by IM Medical doctors shortly after.

The company said Australian Bureau Statistics data show an increase in overweight and obesity rates.

One of the groups with the highest levels of overweight and obesity is the mining industry, with 76 percent of the industry reported as being overweight or obese, while individual site research shows some mine sites have more than 85 percent of the workforce as overweight or obese.

This far exceeds rates in other occupations.

FRSA and IM Medical believe that the adoption of Intelliheart tests in the mining industry would add further to the wellbeing of mine employees and provide tangible benefits to the mining companies themselves.

The national president of the Construction Forestry Mining and Energy Union's mining division Tony Maher told Biotech Daily that there was a problem with obesity in the sector.

"A decent health program is welcomed by the union," Mr Maher said.

"There is a regime of health monitoring at least in Queensland and New South Wales and there are periodic medicals," Mr Maher said.

IM Medical was unchanged at 0.6 cents.

## NUSEP

Nusep has achieved its first US sale of the MF10 protein separation instrument.

Nusep said the MF10 was a unique product generating a gross margin seven times that of the gels division.

The list price for the MF10 is \$US10,000 and Nusep said it expected to sell a further \$US5,000 in consumables per unit per year.

Nusep said it was budgeting to sell 200 MF10 instruments in the 2008-'09 financial year and 300 in the next 12 months.

The company said there had been "significant interest" in the MF10 and along with the Spermsep would drive future sales and profits.

Nusep managing director Dr Hari Nair said it was "a significant development ...as it opens up a second and highly profitable part of our business".

The first production units were manufactured by Nusep in the last week of September and shipped to its US facility on October 3, 2008. The first US was on October 7, 2008.

Nusep expects to ship 10 units this month, the company said.

Nusep fell 1.5 cents or 23.08 percent to five cents.

### CYTOPIA

Cytopia shareholders will vote on the grant of 500,000 options to chief executive officer Andrew Macdonald.

Cytopia said the options were exercisable at 33.4 cents with an expiry date of August 6, 2013.

Cytopia shareholders will also vote on the prior issue of 11,000,000 shares at 46 cents a share and the reelection of directors Dr Geoffrey Vaughan and Dr Kevin Healey.

The annual general meeting will be held at the Garden Room, Leonda, 2 Wallen Rd, Hawthorn, Victoria on November 20, 2008 at 11am.

Cytopia fell 3.5 cents or 24.14 percent to 11 cents.

### ADVANCED SURGICAL DESIGN & MANUFACTURE

Advanced Surgical shareholders will vote on the grant of 250,000 options to chief executive officer Dr Greg Roger.

Advanced Surgical said the options were exercisable at 60 cents conditional on meeting budgeted earnings before taxation depreciation and amortization targets.

Shareholders will also vote on the reelection of director Walter Kmet.

The annual general meeting will be held at 2/12 Frederick Street, St Leonards, NSW, on November 20, 2008 at 11am.

Advanced Surgical fell three cents or 8.57 percent to 32 cents.

### CIRCADIAN

Circadian says Dr John Stocker will not be seek re-election as a director at its annual general meeting on November 14, 2008 and will be retire at that date.

Circadian said Dr Stocker joined the board in May 1996 when Australia's biotechnology sector was in its infancy.

The company said Dr Stocker brought many years of experience in scientific and medical research and innovation through his roles at Hoffman-La Roche, the Commonwealth Scientific and Industrial Research Organisation, Cambridge Antibody Technology (now part of Astra Zeneca) and as former Commonwealth Government Chief Scientist.

Circadian chair Dominique Fisher said the company was "grateful for the wisdom and insights" Dr Stocker provided the company over the past 12 years.

"He has been a great mentor and we have been very fortunate to work with him and draw from his vast experience in science and the commercialization of it," Ms Fisher said.

Circadian fell eight cents or 10.81 percent to 66 cents.