# Biotech Daily

Wednesday January 23, 2013

*Daily news on ASX-listed biotechnology companies*

*** ASX UP, BIOTECH DOWN: BENITEC UP 13%, QRX DOWN 9%**

*** CELLMID ANTI-MIDKINE ANTIBODIES REDUCE KIDNEY DAMAGE IN MICE**

*** ALLIED SHARE PLAN'S $2.9m TAKES RAISING TO $4.6m**

*** BIO-MELBOURNE, RED CROSS, CSL BREAKFAST ON ARTIFICIAL BLOOD**

*** REVA RELEASES 23m ESCROW SHARES**

## MARKET REPORT

The Australian stock market climbed 0.18 percent on Wednesday January 23, 2013, with the S&P ASX 200 up 8.7 points to 4,787.8 points.

Thirteen of the Biotech Daily Top 40 stocks were up, 15 fell, nine traded unchanged and three were untraded.

Benitec was the best, up 0.2 cents or 13.3 percent to 1.7 cents with 1,048,962 shares traded, followed by Patrys up 12.5 percent to 3.6 cents with 50,000 shares traded..

Antisense and Bionomics climbed more than seven percent; Optiscan was up 5.3 percent; Allied Health climbed 4.35 percent; both Anteo and Phosphagenics were up 3.45 percent; Acrux, Genetic Technologies, GI Dynamics and Sirtex rose more than two percent; Heartware was up 1.2 percent; with Resmed up 0.2 percent.

QRX led the falls, down 9.5 cents or 9.1 percent to 95 cents with 175,297 shares traded.

Sunshine Heart lost 6.9 percent; Impedimed was down 5.6 percent; Avita, Living Cell and Viralytics fell more than four percent; Circadian and Tissue Therapies were down more than three percent; CSL and Reva shed more that two percent; Alchemia, Clinuvel, Medical Developments, Mesoblast and Universal Biosensors were down more than one percent; with Cochlear and Pharmaxis down by less than one percent.

CELLMID

Cellmid says that a study of two of its anti-midkine antibodies for diabetic nephropathy in mice reduced kidney damage significantly.

Cellmid said that kidney damage was assessed by functional and histological analysis, with kidney structure largely preserved in the treated animals.

The company said that the study was the first time its anti-midkine antibodies had been used in a therapeutic setting for a kidney disease model.

Cellmid said that renal histological assessment showed that glomerular sclerosis was reduced from 48 percent in untreated animals to below 20 percent in both anti-midkine antibodies treated groups ($p < 0.01$).

The company said that interstitial volume was also significantly reduced, from 35 percent in untreated animals to 12 percent in both antibody groups ($p < 0.01$).

Cellmid said that anti-midkine antibodies treatment also maintained tubular cell height, with untreated animals having mean cell heights below 2.0 micrometres, compared to 4.0 micrometres for treated animals ($p < 0.05$).

The company said that kidney function was preserved, with anti-midkine antibodies treated animals showing reduced protein leakage into the urine compared to untreated controls.

Cellmid said that protein casts in the kidney, indicating damage, were also significantly reduced in antibody treated animals and anti-midkine antibodies treated animals showed healthy weight gain and reduced mortality compared to untreated controls, with 6.3 percent of treated animals dying before the end of the study, compared to 25 percent of the untreated animals.

Cellmid said that midkine's role in kidney disease had been extensively studied and was the subject of a dozen peer-reviewed publications, which showed that midkine was a key driver of inflammation and damage in a variety of kidney disease and injury settings.

Cellmid said the study was conducted at the Centre for Transplantation and Renal Research, based at the Westmead Millennium Institute and University of Sydney, Westmead Hospital, using an Adriamycin-induced mouse model of nephropathy.

The company said that a single Adriamycin injection led to kidney damage reminiscent of that seen in human diabetic nephropathy, the leading cause of chronic kidney disease globally and one of the most significant long-term complications in terms of morbidity and mortality for patients with diabetes.

Cellmid said that diabetes affects 26 million US citizens and the US Centre for Disease Control estimated that as many as one in three adults could have diabetes by 2050 if current trends continued.

The company said that diabetic nephropathy was managed by keeping glucose levels under control, however many of the patients develop end-stage renal disease and it was estimated that up to 40 percent of all end-stage renal disease was caused by diabetic nephropathy.

Cellmid said that end-stage renal disease required traumatic and costly kidney dialysis or transplant and a treatment that slowed or halted the progression of diabetic nephropathy into end-stage renal disease would have benefits for the quality of life of diabetes sufferers in addition to reducing the costs associated with the treatment of the disease.

The company said that a 2010 report by Kidney Health Australia estimated that dialysis costs between $53,000 and $79,000 per patient per year, kidney transplants costing $81,000, with about $12,000 per patient per year in ongoing costs.

Cellmid said that its diabetic nephropathy mouse study presented a promising start to its review of the therapeutic potential of its anti-midkine antibody portfolio.

Cellmid was unchanged at 2.3 cents with 27.5 million shares traded.

## ALLIED HEALTHCARE GROUP

Allied says its share purchase plan has raised $2.9 million taking the total raised with its $1.7 million December 2012 placement to $4.6 million (BD: Dec 17, 2012).
Allied said the majority of funds raised would go to the preparation and market launch of its Cardiocel bovine cardiac tissue product, as well as building the company's regenerative tissue franchise, which was expected to begin generating revenue this year.
Allied said that funds would be used to invest further into its 44.4 percent-owned Coridon DNA vaccine programs, with the lead program targeting herpes virus infections scheduled to begin phase I studies this year with initial results by the end of the year.
Allied was up 0.1 cents or 4.35 percent to 2.4 cents with 5.8 million shares traded.

## BIO-MELBOURNE NETWORK

The Australian Red Cross and CSL Behring will discuss the development of artificial blood components at the Bio-Melbourne Network's first Bio-Breakfast for 2013.
Bio-Melbourne Network chief executive officer Michelle Gallaher said that the Australian Red Cross Blood Service collected about 1.4 million blood donations each year, which most of the demand.
"Plasma demand, however, is such that there is a clear need to supplement local supplies with imported product," Ms Gallaher said. "Despite decades of attempts to produce artificial blood, with limited success, there is no substitute for plasma-derived immunoglobulins in the foreseeable future."
The Network said that Intravenous immunoglobulins were used in an array of medical therapies with global demand growing.
The Network said that while substitutes for other plasma products, particularly clotting factors, had been in place for many years, there had been recent developments in next generation clotting factors.
The Bio-Melbourne Network said that Australian Red Cross Blood Service executive director of research and development, Dr David Irving would discuss the state of play in the blood industry at the February 5, 2013 Bio-Breakfast and CSL Behring Australia's vice-president of research and development medical affairs Dr Darryl Maher would speak about future research and commercial priorities to ensure the Australian blood industry continues to meet demand.
The Network said that the February 5 Bio-Breakfast would be held at a new location at the Shell Building Conference Centre, 1 Spring Street, Melbourne, with registration from 7:15am for a presentation from 8am to 9am.
For more information and to book go to: http://www.biomelbourne.org/events/view/261.

## REVA MEDICAL

Reva says that 2,280,129 US common shares equivalent to 22,801,290 Chess depositary interests (CDIs) were released from voluntary escrow on December 23, 2012.
The company said that and 1,062,500 options over common shares (equivalent to 10,625,000 CDIs) were released at the same time.
Reva said in an accompanying Appendix 3B that it had 330,979,530 CDIs quoted, assuming all shares of common stock were held as CDIs.
Reva fell one cent or 2.1 percent to 46 cents.