



# Biotech Daily

Thursday December 6, 2012

*Daily news on ASX-listed biotechnology companies*

- \* **ASX, BIOTECH DOWN: BENITEC UP 8%, IMPEDIMED DOWN 9%**
- \* **CSL: ALL PROGRAMS ON-TRACK; HIRING R&D STAFF**
- \* **MELBOURNE UNI, BIO FARMA ADJUVANT VACCINE COLLABORATIONS**
- \* **STARPHARMA DENDRIMER-DOCETAXEL 4 TUMOR SUPERIORITY IN MICE**
- \* **ROCHE'S 454 SETTLES GENETIC TECHNOLOGIES PATENT CASE**
- \* **ALLAN GRAY TAKES 11% OF QRX**
- \* **GENESIS 6-DAY DIRECTOR HOUWEN (TINA) TAN RESIGNS**
- \* **ISONEA ASTHMA 'PHONE UPDATE**

## MARKET REPORT

The Australian stock market fell 0.25 percent on Thursday December 6, 2012 with the S&P ASX 200 down 11.1 points to 4,509.3 points.

Ten of the Biotech Daily Top 40 stocks were up, 13 fell, 11 traded unchanged and six were untraded.

Benitec was the best, up 0.1 cents or 7.7 percent to 1.4 cents with 325,000 shares traded.

Patrys climbed 6.8 percent; Sirtex and Tissue Therapies were up five percent or more; Circadian was up 4.5 percent; Genetic Technologies, Living Cell and Neuren rose more than two percent; Anteo was up 1.6 percent; with Acrux, Cochlear and CSL up by less than one percent.

Impedimed led the falls, down one cent or 9.1 percent to 10 cents with 127,322 shares traded.

Antisense lost 7.7 percent; Sunshine Heart was down 5.9 percent; Avita, Pharmaxis and Reva were down more than three percent; QRX shed 2.6 percent; Compumedics, Mesoblast, Nanosonics, Starpharma and Viralytics were down more than one percent; with Alchemia and Resmed down by less than one percent.

## CSL

CSL says it has a full portfolio of programs and is hiring staff in all research and development areas, including clinical, regulatory and product development.

CSL's vice-president of research and development strategy and portfolio Dr Andrea Douglas told Biotech Daily, after the annual research and development briefing in Sydney, that the company had made progress on its products for haemophilia, with recombinant coagulant factor 9 in phase III trials, factor 8 in a phase I trial and factor 7a having completed a phase I trial.

Dr Douglas said that progress had been made in its specialty plasma products, most often used for treating bleeding disorders.

Dr Douglas said its immunoglobulin portfolio had expanded in neurology with Privigen in trials for chronic inflammatory polyneuropathy (CIPD) a chronic peripheral nerve disease with progressive muscle weakness and loss of sensation.

She said CSL had submitted a dossier to the European regulatory authorities for Privigen for chronic inflammatory polyneuropathy.

Dr Douglas said most of CSL's products other than the recombinant products were developed from plasma (blood).

CSL research and development director and chief scientist Dr Andrew Cuthbertson led the research and development briefing in Sydney.

The company's presentation said that expenditure on research and development was \$US368 million (\$A351.8 million) in 2011-'12 up 13.9 percent on the previous year.

CSL was up 50 cents or 0.9 percent to \$53.45 with 1.1 million shares traded.

## THE UNIVERSITY OF MELBOURNE

The University of Melbourne says it has an agreement with Indonesia's Bio Farma to develop an adjuvant vaccine delivery system to boost a range of vaccines.

The University of Melbourne said that research led by Department of Microbiology and Immunology's Prof David Jackson's team demonstrated that a synthetic toll-like receptor 2 (TLR2) agonist-based adjuvant could enhance immunity and protect animals from viral and bacterial infections.

The University said the TLR-2 agonist adjuvant vaccine was a TLR2 targeting synthetic Pam2Cys lipopeptide, capable of delivering low dose protein-based vaccine to antigen presenting cells and inducing strong B and T cell responses against such cargo vaccine.

The University said the adjuvant would be developed with Bio Farma to improve the boost the effectiveness of vaccines for diseases including hepatitis B, hepatitis C, diphtheria, tetanus, pertussis and haemophilus influenza type B.

The University said that it would receive research funding to further evaluate and develop a proof of concept but a spokesperson for the University told Biotech Daily the level of funding from Bio Farma was confidential

The University's dean of the Faculty of Medicine Prof James Angus said the collaboration with Bio Farma "could lead to better and more efficacious vaccines against infectious diseases".

"This agreement reflects the desire for research at the University of Melbourne to be translated into impact and recognises the importance of collaboration with leading vaccine companies to achieve this goal," Prof Angus said.

Bio Farma President Director Dr Iskandar said the agreement "will surely give us an opportunity to enhance our research capacity".

"Hopefully in the future it will lead into a real contribution in the prevention of communicable disease in the world," Dr Iskander said.

## STARPHARMA

Starpharma says its dendrimer-enhanced docetaxel has significantly superior anti-cancer effects across a range of cancer types compared to docetaxel in mice.

Starpharma said that the pre-clinical work on breast, prostate, lung and ovarian tumor types showed that its dendrimer-docetaxel formulation significantly outperformed Taxotere (docetaxel).

The company said the in-vivo results were consistent with, and expanded on, findings from earlier mouse models of breast cancer and showed superior anti-cancer effects for dendrimer-docetaxel compared to docetaxel (BD: Feb 1, Oct 29, 2012).

Starpharma said the earlier experiments demonstrated significant targeting of tumor tissue and extension of half-life with the dendrimer formulation.

The company said that across all four tumor types tested, ovarian, lung, breast and prostate, the number of surviving tumor cells was significantly reduced.

Starpharma said that the dendrimer-docetaxel formulation resulted in a 26 to 47 percent reduction in mean tumor cell survival compared to Taxotere alone.

Starpharma chief executive officer Dr Jackie Fairley said the company was "very pleased to see significantly enhanced efficacy of our dendrimer-docetaxel formulation compared to Taxotere alone across such a wide range of clinically important tumor types".

"If the dendrimer formulation's superiority to Taxotere across these cancers is maintained in the clinic, then it could have very wide application, benefiting many more cancer patients and providing an expanded commercial opportunity for Starpharma," Dr Fairley said.

The company said that the mouse studies were conducted by the UK-based Institute of Cancer Therapeutics with the tumor cells exposed to the drugs for five days.

Starpharma fell 1.5 cents or 1.5 percent to \$1.015 with 1.6 million shares traded.

## GENETIC TECHNOLOGIES

Genetic Technologies says it has a settlement, covenant and licence agreement with 454 Life Sciences Corp, relating to its primary non-coding DNA patents.

Genetic Technologies said that with 454 Life Sciences was one of 10 companies parties to a suit in the US District Court of Colorado (BD: May 26, 2011).

Today, the company said that the agreement with the Branford, Connecticut-based 454 Life Sciences included 454, its affiliates and companies related to Roche Holdings.

The Basel Switzerland-based Roche website said it acquired 454 in March 2007.

Genetic Technologies said the terms of the agreement were confidential and 454 was the fifth counterparty from that case to reach a resolution.

Genetic Technologies was up 0.2 cents or 2.5 percent to 8.2 cents.

## QRX PHARMA

Allan Gray Australia has again increased its substantial holding in QRX, from 14,591,886 shares (10.09%) to 16,198,173 shares (11.20%).

In the previous notice in September, Allan Gray said it increased its holding by 1,830,921 shares to 14,791,886 shares (10.23%) but this appears to have been corrected by Allan Gray today (BD: Sep 25, 2012).

Today's substantial shareholder said that Allan Gray said it bought 1,606,287 shares between September 21 and December 4, 2012 for \$1,128,405 or an average price of 70.25 cents a share.

QRX fell two cents or 2.6 percent to 75 cents.

## GENESIS RESEARCH AND DEVELOPMENT CORP

Genesis says that Houwen (Tina) Tan, who was appointed a director on November 30, 2012 has resigned (BD: Nov 30, 2012).

Genesis said last week that Ms Tan was “not an independent director”.

Genesis was suspended and untraded at 1.9 cents.

## ISONEA

Isona says it has updated its Asthmasense asthma management mobile telephone application.

Isona said the new version was expected to be available by the end of the year and had improved functions to help asthmatics better manage symptoms.

The company said the application update included data synchronization and ‘cloud’ storage.

Isona said that Asthmasense was “the first asthma [application] to provide safe storage of users’ asthma profiles and event history [and] trends in a password protected, ... patient accessible, cloud data warehouse”.

The company said the new program kept a profile record of personal asthma triggers to increase user awareness of potential risk patterns and an automatic emergency number input, so that the emergency contact number was automatically inputted into the telephone, based on the satellite assessed global positioning system location.

Isona chief executive officer Mike Thomas said consumer response to the current Asthmasense application launched in June 2012 had been overwhelmingly positive.

“Enabling these new features will help asthmatics and their caregivers to feel even more confident their information is always available, whatever the circumstance,” Mr Thomas said.

“In the event that a user loses or breaks their smart phone, the cloud data storage feature means their data is never lost,” Mr Thomas said.

Isona was up 0.7 cents or 10.3 percent to 7.5 cents with 2.9 million shares traded.