

# **Biotech Daily**

## Tuesday December 8, 2015

## Daily news on ASX-listed biotechnology companies

- \* ASX, BIOTECH DOWN: ANTISENSE UP 6%, BENITEC DOWN 14%
- \* NATIONAL INNOVATION AND SCIENCE AGENDA COMMENT - BIOTECH DAILY, AUSBIOTECH, MEDICINES AUSTRALIA
- \* SYDNEY UNI, CSIRO JOIN UNISEED \$50m FUND
- \* BIONOMICS RAISES \$16m FOR PHASE II PTSD TRIAL
- \* CORRECTION: TDI, KAYBAN
- \* ANTISENSE ATL1102 SHOWS PROMISE IN AML MOUSE STUDY
- \* FLORIDA'S BROWARD HEALTH ADOPTS 3D'S MACH7 IMAGING
- \* ALCHEMIA RECEIVES \$6.4m FEDERAL R&D TAX REFUND
- \* INNATE TO RELEASE 29m ESCROW SHARES
- \* GOLDMAN SACHS ABOVE 5% OF NANOSONICS

#### MARKET REPORT

The Australian stock market fell 0.91 percent on Tuesday December 8, 2015 with the ASX200 down 47.1 points to 5,108.6 points. Ten of the Biotech Daily Top 40 stocks were up, 19 fell, six traded unchanged and five were untraded.

Antisense was the best, up 0.4 cents or 5.7 percent to 7.4 cents, with 39,304 shares traded. Pro Medicus climbed 4.8 percent; Cellmid and Sirtex were up more than three percent; Medical Developments and Reva rose more than two percent; Biotron and Orthocell were up more than one percent; with Acrux, Admedus, Cochlear and CSL up by less than one percent.

Benitec led the falls, down 5.5 cents or 14.1 percent to 33.5 cents with 608,115 shares traded, followed by Bionomics down 12.5 percent to 42 cents with 1.4 million shares traded. Mesoblast lost 8.6 percent; Circadian and Oncosil fell more than six percent; Neuren shed 4.2 percent; Genetic Technologies, Optiscan, Pharmaxis, Polynovo and Universal Biosensors were down more than three percent; Actinogen and Compumedics shed more than two percent; with Anteo, Ellex, Impedimed, Nanosonics, Prima, Resmed, and Viralytics down one percent or more.

## **BIOTECH DAILY**

Biotech Daily welcomes the Prime Minister Malcolm Turnbull's National Innovation and Science Agenda and the focus on the industries of the future, instead of the past.

The overall tone of the Federal Government since Mr Turnbull deposed Tony Abbott has been a breath of fresh air, not just socially and politically, but with particular reference to the economic base of the country, attempting to come to grips with the industries that will provide the jobs and export earnings of the future.

But the substance has changed little. Perhaps we must wait until Mr Turnbull has won an election in his own right and can dictate more progressive policies to those in his Liberal-National Coalition who proclaim their love of coal and fear of change.

The \$1.1 billion is welcome, with several important caveats:

spread over four years, \$250 million a year is not a large sum of money compared to, say, the \$14 billion projected to be spent on the failed Lockheed Martin F-35A Joint Strike Fighter project, or as a percentage of overall Government spending;

most of the new tax incentives relate to unlisted companies, making it difficult if not impossible for retail investors to be part of the action, keeping the risk and benefits for high net worth individuals and families, the sophisticated and institutional investors;

it has been noted that last year the Government took \$100 million from CSIRO's scientists and is now promising to invest \$70 million to benefit venture capitalists;

a spokesperson for Innovation Minister Christopher Pyne confirmed to Biotech Daily that the Abbott-Hockey penny-pinching 1.5 percent reduction to the Research and Development Tax Incentive remains Government policy. The change before the Senate should be scrapped; and

the piecemeal presentation of the initiatives underlines the lack of a cohesive direction.

Those criticisms aside, we believe it is possible to invest wisely in projects that return far greater rewards than the initial outlay and any Federal Government support for investment is welcome.

The nagging doubt is that the sunrise industries of 2015 remain biotechnology, information and communication technologies and renewables, and the Federal Government has within its ranks those who claim that coal is clean, wind towers are a blight on the landscape and Mr Turnbull's own proposed National Broadband Network to the neighbourhood node is sufficient.

As one reader commented: "Compared to China, the US, Britain and Israel, [the Innovation Agenda] is so small it hardly matters. You don't transform an economy with \$1 billion dollars over four years."

David Langsam Editor

### **AUSBIOTECH**

Ausbiotech welcomed "innovation's new place firmly on Australia's agenda" saying the tax breaks in early stage innovative companies and the Biomedical Translation Fund were among long-advocated policies delivered in the National Innovation and Science Agenda.

Ausbiotech said that Prime Minister Malcolm Turnbull had raised the prominence of innovation within Government, by establishing the innovation and science committee of cabinet, which he would chair.

Ausbiotech chief executive officer Dr Anna Lavelle said that it was "indisputable that innovation is firmly on the agenda, where it ought to be, as a key driver of productivity".

"We are keen to see this positive policy transformed into action that makes a difference to Australia's ability to commercialise and benefit from our world-class research and development," Dr Lavelle said.

"The message is loud and clear that Australia needs innovation to be the big winner for our quality of life and economy," Dr Lavelle said. "Ausbiotech is pleased to see the Government has been listening to its calls for capital gains tax breaks for investors in early stage companies, the same business test, the Biomedical Translational Fund and improvements to employee share schemes."

Dr Lavelle said that the introduction of the patent-box style incentive was "an important, but so far overlooked opportunity, to keep home-grown intellectual property in Australia once it nears and reaches commercialization".

"Ausbiotech will continue to advocate for the Australian innovation and manufacturing incentive," Dr Lavelle said.

Ausbiotech said that under the Agenda, Innovation and Science Australia, chaired by Bill Ferris, with Australia's next chief scientist Dr Alan Finkel as deputy chair, would replace Innovation Australia and be responsible for coordination and advising Government on science, research and innovation matters.

Ausbiotech said it welcomed bipartisan support for innovation as seen in the Federal Opposition's launch of its innovation policy last week and says if elected, the Australian Labor Party would establish an independent agency called Innovate Australia charged with accelerating economic growth, delivering critical innovation programs and providing expert advice to governments modelled on the successful British agency, Innovate UK.

"Ausbiotech has welcomed the convergence of views and bipartisan support for innovation in the recent raft of announcements," Dr Lavelle said.

Ausbiotech said that both major parties were committed to innovation as a key driver of the economy; tax incentives to encourage investment in early stage and start-up companies; increased support for collaboration between industry and researchers; support for science, technology, engineering and maths skills; support for incubators and accelerators; and global engagement for companies.

## MEDICINES AUSTRALIA

Medicines Australia says it welcomes the National Innovation and Science Agenda and "its recognition that innovation is a key to economic growth".

Medicines Australia said that the growing policy focus on innovation from all sides of politics was "positive news not only for the Australian economy, but ultimately the livelihoods and health of all Australians".

Medicines Australia chief executive officer Tim James said that the "interest from our politicians in unlocking the opportunities for Australian innovation and ingenuity should be commended".

"The right innovation policies can enable industry to invest in highly-valued jobs within sectors such as the Australian biopharmaceutical community which is good for the economy and the community," Mr James said.

Medicines Australia said it would review and asses several of the Innovation Agenda initiatives.

"The Biomedical Translation Fund, the creation of Innovation and Science Australia, intangible asset depreciation, investment in national research infrastructure, a greater emphasis on commercial outcomes for university research, and encouraging more women to work in [science, technology, engineering and mathematics] jobs will all help to support the ecosystem [within] which the Australian biopharmaceutical sector operates, collaborates and invests"

Medicines Australia said it welcomed the recognition afforded to intangible assets such as patents, as critical to driving growth and ensuring that Australia's intellectual property regime remained internationally competitive.

"Ultimately, in our sector, it's important that innovation policies help stimulate Australia's capabilities to discover and develop the next generation of breakthrough medicines because this delivers not just economic but also health benefits for the Australian people," Mr James said.

"Our members already deliver more than \$1 billion every year to Australian research and development and the more our politicians deliver policies which encourage innovation the more chance for this investment to grow," Mr James said.

"There have been some positive signals from our politicians to the world that Australia wants investment, it wants opportunities for its people and we look forward to seeing more of it in 2016," Mr James said.

"A key opportunity will be to ensure it leads to better lives for all Australians in the years ahead," Mr James said.

## <u>UNISEED</u>

## COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION

Uniseed says the University of Sydney and CSIRO will join the launch of a 10-year, \$50 million investment fund to commercialize research.

Uniseed said it was a venture fund operating at the Universities of Melbourne, New South Wales and Queensland and the fund was the third and largest investment fund, following three high profile exits, Fibrotech, Spinifex and Hatchtech, over the past 14 months.

The investment group said that the addition of the University of Sydney and CSIRO "further validates the innovative approach and success to date which [it] has achieved in commercializing Australian research".

Uniseed said it would have access to the research of the fund's partners and would work closely with the commercialization staff of each organisation.

Uniseed chief executive officer Dr Peter Devine said that his organization wanted "to see research inventions ... make a difference to people's lives".

The investment group said that fund's partners collectively accounted for about \$4 billion worth of research each year, about 40 percent of the total research spending at public research organizations in Australia.

#### **BIONOMICS**

Bionomics says it has raised \$16,404,649 for a phase II trial of its anxiety drug BNC210 for post-traumatic stress disorder, expected to begin by July 2016.

Bionomics said it raised the funds in a private placement to four US institutional investors and would issue 40,207,472 shares at 40.8 cents a share with 40,207,472 attaching warrants to purchase shares at 59.38 cents a share, the same price as the recent \$12,861,251 Merck Sharp and Dohme investment, with 16,082,988 warrants subject to shareholder approval with (BD: Oct 8, 2015).

Bionomics said that patients would be recruited at trial sites in Australia and New Zealand and would have experienced severe trauma, including war, natural disasters or have been involved in serious accidents.

Bionomics chief executive officer Dr Deborah Rathjen said that all existing data indicated that BNC210, which was currently in a trial to treat generalized anxiety disorder, could be an effective therapy for post-traumatic stress disorder (PTSD) patients.

"After reviewing the extensive datasets from pre-clinical studies and phase I clinical trials of BNC210, we believe that the safety and efficacy profile of BNC210 suggests that it will be an effective treatment for PTSD sufferers," Dr Rathjen said. "This trial will be critical to building out our clinical package to drive partnering deals."

Bionomics fell six cents or 12.5 percent to 42 cents with 1.4 million shares traded.

#### CORRECTION: CSIRO, KAYBAN

Last week, Biotech Daily reported a Commonwealth Scientific and Industrial Research Organisation flaxseed oil anti-microbial collaboration with Kayban (BD: Dec 2, 2015). Kayban is a public unlisted company, 47.5 percent owned by the public unlisted pooled development fund, Technology Development and Investment (TDI).

Biotech Daily was given incorrect contact details for Kayban and TDI, which should have been Kayban managing director Frank Palermo by phone on +613 9388 1022 or by email to <u>frank@frankpalermo.com</u> and TDI chairman Ian Ferres by phone on +613 9602 9754 or by email to <u>lan\_Ferres@tresscox.com.au</u>.

No sub-editors were hurt in making this correction.

## ANTISENSE THERAPEUTICS

Antisense says a pilot animal study shows that ATL1102 led to the rapid mobilization of acute myeloid leukaemia cells to the peripheral blood in mice.

Antisense says that ATL1102 was tested in an animal cancer research study conducted at the Children's Hospital Los Angeles and the data was to be presented at the American Society of Hematology meeting in Orlando, Florida, today.

The company said the data showed that ATL1102, an antisense drug targeting the glycoprotein CD49d, or very late antigen-4 (VLA- 4), led to the rapid mobilization of acute myeloid leukaemia (AML) cells to the peripheral blood in mice that had been engrafted with human AML cells.

Antisense said that it had filed a provisional patent application incorporating this data and covering ATL1102's potential application in acute myeloid leukaemia and other leukaemias.

The company said that the bone marrow micro-environment had been shown to promote cell adhesion-mediated drug resistance in leukaemia cells and breaking the adhesive bonds of AML cells with their protective niche to mobilize them from the bone marrow to the peripheral blood might make drug treatment more effective.

Antisense said that studies suggested the adhesion molecule CD49d was an anchor molecule for acute myeloid leukaemia and certain other leukaemia cells in the bone marrow and that drugs like ATL1102 which reduced CD49d expression might cause the release of these cancer cells from their protective environment to make the cancer cells more accessible to chemotherapy.

The company said that no drug targeting CD49d was approved for use in leukaemia. Antisense said that acute myeloid leukaemia was the most common acute leukaemia in adults and the seventh most common paediatric malignancy comprising about one-fifth of paediatric leukaemias, with treatment dominated by generic chemotherapeutic drugs. The company said that in children, relapse following primary chemotherapy was about 40 percent and the five-year event-free survival rate was about 50 percent.

Antisense said that the Children's Hospital Los Angeles was conducting further animal studies at its cost to more fully assess ATL1102's therapeutic potential for acute myeloid leukaemia.

Antisense was up 0.4 cents or 5.7 percent to 7.4 cents.

#### **3D MEDICAL**

3D Medical says merger target Mach7 Technologies has implemented an enterprise imaging platform at the Fort Lauderdale, Florida-based Broward Health medical centre. 3D said that the Broward implementation was "a significant milestone" providing validation of Mach7's commercial application in large scale hospitals.

The company said that Broward operated at 50 clinical locations across Broward County Florida, with 8,100 staff, 1,200 physicians, more than 1,500 hospital beds and generating annual revenues of \$US1 billion.

3D said that Broward estimated it would recover the full cost of their investment in the Mach7 platform after one year of use and Mach7 would begin generating revenue from its annual support contract and as well as licencing fee revenue based on the volume of medical studies transacted beyond agreed milestones.

The company said Broward generated about one million imaging studies a year annum across radiology, endoscopy, ophthalmology, orthopaedics and wound care. 3D Medical fell 0.2 cents or 2.7 percent to 7.1 cents.

#### <u>ALCHEMIA</u>

Analytica says it has received \$6.4 million from the Australian Tax Office under the Federal Government Research and Development Tax Incentive program. Alchemia said that \$6.2 million of the rebate related to research and development expenditure for the year to June 30, 2015, with a further \$200,000 from the previous year. Alchemia fell 0.1 cents or 1.1 percent to 9.2 cents.

#### **INNATE IMMUNOTHERAPEUTICS**

Innate says that 19,632,865 shares held in voluntary escrow and 9,369,703 shares held in ASX escrow will be released on December 23, 2015.

Innate said that 16,496,110 options would also be released on the same date. Innate company secretary Andrew Cooke told Biotech Daily that following the release of the shares, the company would have 196,442,177 shares available for trading. Innate was unchanged at 19 cents.

#### NANOSONICS

The Delaware-based Goldman Sachs Group says that, yet again, it has become substantial in Nanosonics with 14,458,152 shares or 5.10 percent.

Throughout October and November, Goldman Sachs repeatedly increased above or reduced below the five percent substantial threshold in Nanosonics, primarily borrowing or returning shares "to the counterparty under a repurchase agreement" for no applicable consideration (BD: Oct 2, 5, 15, 16, 20, 23, 27, 28, Nov 5, 6, 9; Dec 2, 4, 7, 2015). Today, Goldman Sachs reported more than 100 trades said that between August 6 and December 1, 2015 it bought and borrowed shares in more than 100 previously reported trades with the most recent the acquisition by Rothesay Life of 837,004 shares for no applicable cost.

Previously, under a counterparty agreement, Goldman Sachs returned, lent and borrowed shares held by subsidiaries, Rothesay Life, JP Morgan Chase, RBC Dexia Australia, HSBC Custody Nominees Australia and the Bank of New York Mellon (BD: Apr 13, 2015). Nanosonics fell two cents or 1.2 percent to \$1.635.