

Biotech Daily

Thursday April 5, 2018

Daily news on ASX-listed biotechnology companies

* ASX, BIOTECH UP: ITL UP 13%; USCOM DOWN 7%

- * PETER MAC CANCER CENTRE: VENETOCLAX BEATS CHEMO FOR CLL
- * NANOSONICS: GERMANY BACKS HIGH LEVEL DISINFECTION
- * GERMANY APPROVES MEDICAL DEVELOPMENTS PENTHROX
- * NOXOPHARM STARTS 'ABSCOPAL' NOX66 PROSTATE CANCER TRIAL
- * PATRYS RECEIVES \$293k R&D TAX INCENTIVE
- * MMJ 'DOUBLES INVESTMENT' IN DOSECANN
- * OPTISCAN BOARD SPILL EGM SET FOR MAY 10
- * BVF PARTNERS, MARK LAMPERT TAKE 21.5% OF PHARMAXIS

MARKET REPORT

The Australian stock market was up 0.48 percent on Thursday April 5, 2018 with the ASX200 up 27.4 points to 5,788.8 points.

Eighteen of the Biotech Daily Top 40 stocks were up, 13 fell, seven traded unchanged and two were untraded.

ITL was the best, up 3.5 cents or 12.7 percent to 31 cents with 1,774 shares traded.

Mesoblast and Starpharma climbed more than five percent; Dimerix and Immutep were up more than four percent; Ellex was up 3.6 percent; Benitec, Nanosonics, Opthea and Optiscan rose more than two percent; Admedus, Medical Developments, Neuren, Osprey, Pharmaxis, Polynovo, Psivida and Universal Biosensors were up one percent or more; with Cochlear and CSL up by less than one percent.

Uscom led the falls for the second day in a row, down 1.5 cents or 6.8 percent to 20.5 cents with 312,023 shares traded.

Telix fell 4.3 percent; Acrux, Airxpanders, LBT and Orthocell lost more than three percent; Actinogen and Resmed shed more than two percent; Avita was down 1.7 percent; with Bionomics, Pro Medicus, Sirtex, Viralytics and Volpara down by less than one percent.

PETER MACCALLUM CANCER CENTRE, ROYAL MELBOURNE HOSPITAL

Peter MacCallum Cancer Centre and Royal Melbourne Hospital say venetoclax can provide chemotherapy-free treatment for hard-to-treat blood cancers.

A media release from the Melbourne's Peter MacCallum Cancer Centre and the Royal Melbourne Hospital said the Walter and Eliza Hall Institute-developed the oral tablet venetoclax was studied in two trials, the 'Multicenter, phase III, open-label, randomized study in relapsed/refractory patients with chronic lymphocytic leukaemia to evaluate the benefit of venetoclax (gdc-0199/abt-199) plus rituximab compared with bendamustine plus rituximab study' (Murano) involving patients with chronic lymphocytic leukaemia; and the ABT-199 and Ibrutinib in mantle-cell lymphoma (AIM) study.

The Centre said both trials involved patients whose blood cancer had relapsed or was resistant to conventional treatment, used venetoclax in combination with another targeted drug, and the combinations resulted in high rates of patients with no detectable cancer. The Murano study, titled 'Venetoclax–Rituximab in Relapsed or Refractory Chronic Lymphocytic Leukaemia', was published in the New England Journal of Medicine with an abstract available at: <u>http://www.nejm.org/doi/full/10.1056/NEJMoa1713976</u>.

The AIM study, titled 'Ibrutinib plus Venetoclax for the Treatment of Mantle-Cell Lymphoma', was published in the New England Journal of Medicine with an abstract at: http://www.nejm.org/doi/full/10.1056/NEJMoa1715519?query=featured_home.

The Centre said the 389-patient Murano study, led by Prof John Seymour, compared venetoclax plus rituximab to standard immuno-chemotherapy of bendamustine plus rituximab, and venetoclax treatment more than doubled the likelihood that chronic lymphocytic leukaemia patients would live for two years without their cancer recurring (84.9% versus 36.3%; p < 0.001), and the proportion of patients who had very few or no detectable leukaemia cells in their blood was 83.5 percent, compared with 23.1 percent of patients who received standard immune-chemotherapy treatment.

"That venetoclax is able to produce such dramatic results in this hard-to-treat patient group is remarkable and has led to much excitement among blood cancer clinicians globally and the research community," Prof Seymour said.

"The data shows venetoclax should replace chemotherapy altogether in patients with advanced forms of [chronic lymphocytic leukaemia] a practice-changing result which will rapidly translate into the standard of care globally," Prof Seymour said.

The Centre said that the 24-patient AIM study was led by Prof Constantine Tam at the Centre Mac and the Royal Melbourne Hospital and treated mantle-cell lymphoma patients with venetoclax plus ibrutinib, two drugs expected to have an improved synergistic effect. The Centre said it was the first trial of the chemotherapy-free combination.

The Centre said that 17 patients (71%) showed no detectable cancer following treatment and 18 patients (78%) were cancer free for at least 15 months.

"This was in patients who we expected to have a poor outcome on conventional therapy, and in which treatment with either ibrutinib or venetoclax alone was expected to see only 21 percent of patients show a complete response," Prof Tam said.

"These very promising results have triggered additional and larger studies to better understand the synergistic benefits of the venetoclax-ibrutinib treatment combination in [mantle-cell lymphoma] patients," Prof Tam said.

Royal Melbourne Hospital haematologist, Prof Andrew Roberts said that venetoclax "selectively targets BCL-2, essentially causing cancerous cells to simply melt away, in many instances".

The Centre said that the rapidity of this melting away could be problematic for patients leading to the side-effect of tumor lysis syndrome, which affected six patients in the Murano study and two in the AIM study, but was managed safely in all cases.

NANOSONICS

Nanosonics says the German Society of Ultrasound in Medicine has published recommendations requiring high level disinfection for semi-critical ultrasound. Nanosonics said the recommendations state that all semi-critical ultrasound probes need to be cleaned and disinfected with products that are proven to be bactericidal, including mycobacteria, fungicidal and virucidal and its Trophon EPR met all the requirements. Nanosonics said the guidelines were published in the European Journal of Ultrasound and aligned with a growing number of international guidelines.

Nanosonics chief executive officer Michael Kavanagh said "the new guidance from the German Society of Ultrasound in Medicine adds to a growing number of European guidelines, all supporting the requirement for high level disinfection of all semi-critical ultrasound probes".

"It is encouraging that the market development and education investments we have made in Germany are resulting in a greater awareness of the importance of ultrasound probe decontamination," Mr Kavanagh said.

Nanosonics was up seven cents or 2.8 percent to \$2.57 with one million shares traded.

MEDICAL DEVELOPMENTS INTERNATIONAL

Medical Developments says its inhaled methoxyflurane analgesic Penthrox has been approved for sale in Germany.

Medical Developments chief executive officer John Sharman said that "Germany is one of the most important markets for [Medical Developments], as the country is seen by many as a leader in pain drugs and therefore their imprimatur is doubly important for us". "With a population of almost 83 million people, Germany is the largest spender on healthcare in Europe," Mr Sharman said. "Germany is also the largest user of opioids in Europe... we anticipate millions of patients could benefit from the introduction of Penthrox as a non-opioid, rapid and safe pain relief treatment."

Medical Developments was up nine cents or 1.3 percent to \$7.10.

<u>NOXOPHARM</u>

Noxopharm says it has treated the first cohort of four patients in its 24-patient trial of NOX66 for late-stage prostate cancer.

Noxopharm said that the "direct and abscopal response to radiotherapy study" (DARRT-1) would be conducted at 11 centres in Australia, New Zealand and Georgia, Eastern Europe.

The company said that the study would assess the use of NOX66 to increase the effect of radiotherapy "both to kill cancer cells directly exposed to radiation (direct response), and to result in the death of cancer cells outside of the field of radiation (abscopal response)". Noxopharm said patients would have one to three individual tumors exposed to external beam radiotherapy daily for five days in combination with NOX66 daily for up to 15 days. The company said that tumor response would be assessed by scans at six, 12 and 24 weeks after treatment.

Noxopharm said that the protocol specified that the first cohort of four patients would receive a daily dose of 400mg of NOX66 to assess the safety of the treatment, a second cohort of four would receive 800mg of NOX66, a third cohort of four would receive 1200mg of NOX66 and the dose for the final cohort of 12 patients would be decided based on a review of the first 12 patients after all had been assessed at six weeks. Noxopharm fell 2.5 cents or 2.8 percent to 87 cents.

PATRYS

Patrys says it has received \$292,777 from the Australian Tax Office under the Federal Government Research and Development Tax Incentive program.

Patrys said that the tax incentive was for research and development programs for the year to June 30, 2017 and would be used to progress its Deoxymab cancer platform.

Patrys fell 0.2 cents or 4.65 percent to 4.1 cents with five million shares traded.

MMJ PHYTOTECH

MMJ says Toronto, Canada-based Cannabis Wheaton Income Corp will acquire investee Dosecann for \$C38 million (\$A38.69 million).

MMJ said in January it had taken a \$C2.5 million convertible note in the Toronto-based Dosecann which was valued at \$C19 million at the time (BD: Jan 30, 2018).

The company said the convertible note gave it the option to acquire 2.5 million Dosecann shares for \$C1.00 a share, before accounting for accrued interest, and that it held warrants in Dosecann that could allow it to acquire a further 1.25 million Dosecann shares for \$C1.20 a share.

MMJ said it was "considering whether to exercise these in-the-money warrants or exchange them for similar instruments in Cannabis Wheaton".

The company said that as part of the acquisition of Dosecann, MMJ's convertible note and any accrued interest would be converted into Dosecann shares and exchanged for consideration shares or exchanged for Cannabis Wheaton convertible securities based on the exchange ratio used in the acquisition of Dosecann.

MMJ chief executive officer Jason Conroy said the company was "delighted to have more than doubled [its] money on the investment in Dosecann in such a short space of time". "It also shows that Canada remains a jurisdiction where corporate activity in the cannabis space can deliver significant returns on investment for MMJ's shareholders," Mr Conroy said.

MMJ was up 1.5 cents or 4.3 percent to 36.5 cents.

OPTISCAN IMAGING

Optiscan says its extraordinary general meeting to consider nine board spill resolutions will be held in Melbourne on May 10, 2018 (BD: Mar 16, 27, 28, 29, Apr 3, 2018). Optiscan said that the resolutions called for the removal of chairman Alan Hoffman and directors, Peter Francis, Dr Ian Griffiths and Dr Philip Currie, the appointment of former chief executive officer Archie Fraser and Ron Grey as directors; the removal of directors Ian Mann and the appointment of Darren Lurie and Graeme Mutton as directors.

The first six resolutions were included in the requisition of meeting signed by Mr Mann, Mr Fraser, Optiscan founder, former director and chief technology officer Peter Delaney and the Wymant family, who said they held 13.41 percent of the company.

The three remaining resolutions were included in the requisition of meeting signed by Mr Mutton, Susy Munro, Stewart Brash, Gregory and Kaye Allen, Chris and Diane Graham, Wally Knezevic and others, who said they held 14.21 percent of the company.

Optiscan said that the meeting would be held at the offices of Chartered Accountants Australia and New Zealand, Level 18, 600 Bourke Street, Melbourne on Thursday May 10, 2018 at 3pm (AEST).

Optiscan was up 0.2 cents or 2.9 percent to 7.2 cents.

PHARMAXIS

BVF Partners and Mark Lampert say they have increased their substantial holding in Pharmaxis from 63,823,669 shares (19.97%) to 68,885,856 (21.54%).

The San Francisco, California-based BVF Partners and Mr Lampert said that between March 23 and April 3, 2018 they acquired the 5,062,187 shares for \$1,669,278 or 32.98 cents a share.

Pharmaxis was up half a cent or 1.5 percent to 33 cents.