

Biotech Daily

Thursday June 7, 2018

Daily news on ASX-listed biotechnology companies

- * ASX, BIOTECH UP: AIRXPANDERS UP 10%; IMUGENE DOWN 7%
- * IMUGENE \$20m FOR KAUMAYA B-CELL CANCER PLATFORM
- * BDI-40: VIRALYTICS OUT, LBT UP, IMUGENE IN
- * FEDERAL GOVERNMENT TO REDUCE CLINICAL TRIAL RED TAPE
- * GENETIC TECHNOLOGIES SIGNS OMIX, SHIVOM GENETIC DATABASE
- * THIRD STUDY BACKS PAINCHEK TECHNOLOGY
- * PHARMAUST, EPICHEM EXTEND \$2.2m UNITY CONTRACT TO 2020
- * ADMEDUS ENDS GO MEDICAL RELATIONSHIP
- * AUSCANN JOINT VENTURE HARVESTS 620kg MARIJUANA CROP
- * STEMCELL PARTNER YUNNAN HUA FANG CHINA MARIJUANA LICENCE
- * CORRECTION: STARPHARMA
- * FIL TAKES 10% OF CYNATA
- * MARJAN MIKEL REPLACES MEMPHASYS DIRECTOR JOHN PERIERA
- * MELANIE LEYDIN REPLACES MEDIBIO CO SEC ROBERT LEES

MARKET REPORT

The Australian stock market was up 0.53 percent on Thursday June 7, 2018 with the ASX200 up 32.2 points to 6057.3 points. Sixteen of the Biotech Daily Top 40 stocks were up, 12 fell, 10 traded unchanged and two were untraded.

Airxpanders was the best, up one cent or 10 percent to 11 cents with two million shares traded. Prescient climbed 7.7 percent; Opthea was up 5.3 percent; Ellex, Factor, Mesoblast and Oncosil rose more than two percent; Bionomics, Cyclopharm, Cynata, Dimerix and Orthocell were up one percent or more; with Cochlear, Medical Developments, Polynovo, Pro Medicus, Resmed and Starpharma up by less than one percent.

Imugene led the falls, down 0.2 cents or 6.7 percent to 2.8 cents with 43.7 million shares traded. Optiscan lost 5.6 percent; LBT fell 4.8 percent; Benitec and Impedimed were down more than three percent; Compumedics and Immutep shed more than two percent; with Admedus and Neuren down more than one percent.

IMUGENE

Imugene says it hopes to raise \$20.1 million at 2.7 cents a share to acquire a suite of B-cell vaccines for cancer from the Mayo Clinic and the Ohio State University.

Imugene said it would licence "the entire body of cancer vaccine work and intellectual property developed by Prof Pravin Kaumaya of the Ohio State University Wexner Medical Centre and the Comprehensive Cancer Centre Arthur G James Cancer Hospital and Richard J Solove Research Institute and the Mayo Clinic".

The company said that acquiring the "extensive B-cell immuno-oncology portfolio ... establishes its leadership position in B-cell cancer vaccines".

Imugene said the Kaumaya acquisition included a current US National Cancer Institutefunded, phase II HER-2 breast cancer trial; a US Food and Drug Administration investigational new drug application (IND) ready programmed cell death-1 (PD-1)

checkpoint inhibitor for a phase I solid tumor trial, as well as two completed phase I trials. The company said that the acquisition expanded its B-cell peptide vaccine pipeline with six additional cancer targets.

Imugene said Prof Kaumaya was "a recognized leader in cancer vaccine research with emphasis on peptide cancer vaccines" and had published more than 130 peer-reviewed articles in scientific journals.

Imugene chief executive officer Leslie Chong told Biotech Daily that Prof Kaumaya's Ohio State University laboratory would be her company's "incubator running pre-clinical trials". "We will support Prof Kaumaya's lab for the next three years," Ms Chong said.

In a media release to the ASX Ms Chong said the "multiple commercial, strategic and clinical benefits of this transaction secures our leadership position in the promising B-cell peptide cancer vaccine sector, and in particular PD-1 checkpoint inhibitors, where Ohio's pre-clinical work for a phase I PD-1 clinical trial is well advanced".

"There is a growing body of evidence that B-cell peptide vaccines may have a safety and specificity advantage over other immunotherapy approaches," Ms Chong said.

"The PD-1 targeting cancer vaccine has shown robust inhibition of tumor growth in validated pre-clinical animal models," Ms Chong said.

Professor Kaumaya said Imugene's research "has closely paralleled my own work ... and together we will form a significant team driving multiple combination immunotherapy drugs through the clinic targeting breast, gastric and other cancer targets".

The company said the transaction provided a broad patent portfolio including six patent families comprising 16 issued patents or pending applications for compositions of matter and/or methods of use of a large range of B-cell peptide and cancer vaccines comprising PD-1, HER1, HER2, HER3, VEGF, IGF-1R, CD28 peptides and combinations thereof. Imugene executive chairman Paul Hopper said the deal was "a transformational opportunity and is highly accretive to shareholders".

The company said that the licence included an upfront payment, milestone payments and the majority of licencee fees to be paid by single-digit product sales royalty payments or tiered sub-licencing fees.

Imugene said it had commitments from institutional and sophisticated investors to raise about \$12 million at 2.7 cents a share with one option attaching for every three shares issued exercisable at four cents each by November 30, 2021, subject to shareholder approval at a meeting expected to be held on July 9, 2018.

The company said Bell Potter Securities was the placement lead manager with Aurenda Partners as co-manager and Roth Capital Partners as US placement agent, and there would be a share plan to raise a further \$8.1 million on the same terms as the placement for holders at the record date of June 13, opening on June 18 and closing on July 3, 2018. Imugene fell 0.2 cents or 6.7 percent to 2.8 cents with 43.7 million shares traded.

BIOTECH DAILY TOP 40 INDEX (BDI-40)

With the departure of Viralytics from the BDI Top 20 yesterday, LBT will be promoted into the Top 20 from tonight, with Imugene promoted into the Second 20 (BD: Jun 4, 2018).

FEDERAL GOVERNMENT

The Federal Government says it will work with state and territory governments to reduce red tape and make it easier to conduct clinical trials in Australia.

A media release from Federal Health Minister Greg Hunt from the Biotechnology and Innovation Convention in Boston, Massachusetts said the Federal Government would provide \$7 million to support states and territories to redesign their trial systems to make it easier for researchers and companies to conduct clinical trials.

Mr Hunt said the plan would "ultimately mean Australian patients get first access to the best medicines, devices and treatments in the world".

"The concept will be informed by a review of the clinical trial registry system in Australia," Mr Hunt said.

GENETIC TECHNOLOGIES

Genetic Technologies says it has a binding agreement with Omix which operates Project Shivom to build "the world's largest sequenced genetic database".

In March, Genetic Technologies said it had a non-binding term-sheet with the Munichbased Omix Ventures Private to become a collaborative laboratory as part of a network of laboratories for Project Shivom and improve its development of predictive cancer tests through access to a large population of data and new markets (BD: Mar 6, 2018). Today, the company said the terms of the binding agreement were confidential, but the initial phase included Project Shivom providing access "to a significant pool of data, particularly related to the Indian population" and, through access to the Indian population data, Genetic Technologies would modify its risk assessment kits as well as develop new Indian specific tests or products, including tests related to diabetes and other disease, based on opportunity and areas of need.

Genetic Technologies said Project Shivom would facilitate access to Indian hospitals and patients and help promote and market its risk assessment tests on the Shivom platform. The company said it would receive \$US200,000 (\$A261,358) from Project Shivom within 180 days from the original term-sheet as an initial payment to begin research and development and product development activities, with the balance of any cost to finalize the test development to be jointly funded.

Genetic Technologies executive chairman Dr Paul Kasian said the collaboration was "an exciting opportunity ... in terms of opening up new markets for the company's genomic tests, particularly one of the size and diversity of the Indian market".

"According to available market data ... India had in excess of 70 million living with diabetes in 2017," Dr Kasian said.

Genetic Technologies said that Project Shivom had raised \$US35 million to begin a decentralized blockchain where people could have their genome sequenced and stored. The company said that Project Shivom planned to collect significant volumes of genomic data to establish a platform to provide ancestry data, personal health insight and genomic data for research and wanted collaborations across multiple industries "to establish a fully integrated, open, shareable, scalable ecosystem".

Genetic Technologies fell 0.1 cents or 10.0 percent to 0.9 cents with 3.3 million shares traded.

PAINCHEK (FORMERLY EPAT TECHNOLOGIES)

Painchek says a third study has confirmed the "accuracy and clinical utility" of its Painchek mobile telephone application compared to the standard Abbey pain scale.

Painchek said the study assessed 400 paired assessments in 34 aged care facility residents with moderate to severe dementia found that its facial recognition system had a "high sensitivity" of 96.1 percent, "high specificity" of 91.4 percent, and "high clinical accuracy" in screening and finding cases of pain of 95.0 percent.

The company said the study had been published in the Journal of Pain Research. Painchek said the results from the study confirmed findings from previous studies published in the Journal of Alzheimer's Disease and the journal Dementia and Geriatric Cognitive Disorders (BD: Aug 16, Dec 13, 2017).

Painchek chief executive officer Philip Daffas said the results from the study "combined with previous studies, support the clinical usefulness of Painchek and further confirms its accuracy in detecting and quantifying pain in non-verbal people".

Painchek was up 0.7 cents or 13.0 percent to 6.1 cents with 1.8 million shares traded.

PHARMAUST

Pharmaust says its wholly owned subsidiary Epichem has extended its contract to provide chemistry expertise to the California-based Unity Biotechnology until 2020.

Pharmaust said that under the extended contract, Epichem would continue to provide synthetic and medicinal chemistry expertise to "support Unity's drug discovery projects" aimed at extending human health span" and expected to generate up to \$US1.65 million (\$A2.16 million) in revenue over this period.

Pharmaust chairman Dr Roger Aston said the extended contract "further demonstrates the significance of the expansion of the laboratory capacity at Epichem".

Pharmaust was unchanged at 4.5 cents.

ADMEDUS

Admedus says it has concluded its relationship with Go Medical Industries Pty Ltd which has been a supplier for its infusion business.

Admedus said the change of supplier was "expected to have a 5.7 percent impact on topline revenue for the financial year".

The company said that ending its relationship with the Perth-based Go Medical related to the supply of smaller intravenous consumable medical products and had "no impact on Admedus' distribution of infusion pumps to major hospitals".

Admedus said that the head of its business unit Glenn Gilchrist had led the "refreshing [of] its long-term strategic plan for the infusion business, which includes assessing its capabilities, organizational footprint and product portfolio".

"The review identified certain products and pricing within the portfolio which needed to be more competitive," the company said.

Admedus said it "engaged Go Medical on these topics, seeking a mutually beneficial outcome, but unfortunately were unable to reach agreement".

The company said it would work with existing customers and Go Medical in the transition and had adequate supply to meet demand during the 45-day completion period.

Admedus chief executive officer Wayne Paterson said the change "may have a short-term impact on the timing of breakeven earnings, [but] the company still aims to be profitable for 2019".

Admedus fell half a cent or 1.8 percent to 27 cents with 1.5 million shares traded.

AUSCANN

Auscann says its Chilean joint venture Dayacan with Chile-based Fundación Daya, has harvested 620kg of dried cannabis product from its second marijuana crop.

Auscann said the yield from the crop planted at the end of 2017 was "an increase of over 50 percent on the 400kg yielded from the first crop".

Auscann was up half a cent or 0.35 percent to \$1.435.

STEMCELL UNITED

Stemcell says China has granted an industrial hemp licence to its partner Yunnan Hua Fang Industrial Hemp Co.

Stemcell said the licence would allow Yunnan Hua Fang to grow, process and sell hemp products.

The company said it could use cannabis seeds for research into traditional Chinese medicine cosmetic products.

Stemcell was up 1.2 cents or 52.2 percent to 3.5 cents with 279.0 million shares traded.

CORRECTION: STARPHARMA

Last night's edition incorrectly said that FIL Limited was based in the Cayman Islands. Fidelity International has its corporate headquarters in Bermuda.

The mistake was made by the Wednesday sub-editor who has been seconded to Tax Haven Monthly to sharpen his research skills.

Starpharma was up one cent or 0.85 percent to \$1.19.

CYNATA THERAPEUTICS

Fidelity International Limited says it has increased its substantial holding in Cynata from 4,607,153 shares (5.07%) to 9,506,625 shares (10.00%).

The Bermuda-based Fidelity named the Luxemburg-based Brown Brothers Harriman, the Luxemburg-based Clearstream Banking and Tokyo-based Master Trust Bank of Japan as custodians of the shares.

The company said it acquired 825,152 shares on-market between May 9, and May 21, 2018 for an average price of \$1.35 a share and acquired 4,074,320 shares in a recent placement for \$5,215,129 or \$1.28 a share.

Cynata was up 1.5 cents or 1.1 percent to \$1.425.

MEMPHASYS

Memphasys says it has appointed Marjan Mikel as a non-executive director, replacing the John Periera.

Memphasys said Mr Mikel previously worked at "general manager and executive board level" for the New Jersey-based Merck Inc and the New York-based Searle Pharmacia and was a director of the Tokyo-based IMS Consulting and Services Japan, as well as being a founder and involved in the sale of Resmed joint venture Healthy Sleep Solutions. According to Mr Mikel's Linkedin page, he held a Bachelor of Science and a Graduate Diploma of Education from the University of Sydney and a Masters of Commerce from the University of New South Wales.

Memphasys said thanked Mr Pereira for his services and wish him well. Memphasys was untraded at 0.1 cents.

MEDIBIO

Medibio says it has appointed Melanie Leydin as company secretary, replacing former secretary Robert Lees, effective from today.

Medibio said Ms Leydin had more than 25 years of experience in the accounting profession and 13 years of experience as a company secretary for ASX listed companies. The company said it "acknowledges and appreciates the contribution Mr Lees has made over the past six years".

Medibio was unchanged at 15 cents.