



Biotech Daily

Thursday May 18, 2023

Daily news on ASX-listed biotechnology companies

- * **ASX, BIOTECH UP: IMMUTEP UP 33%; ORTHOCELL DOWN 4%**
- * **4D MEDICAL: HARRY S TRUMAN HOSPITAL APPROVES XV LVAS SCANS**
- * **IMUGENE: ONCARLYTICS, ARTEMIS 'ANTI-TUMOR ACTIVITY', IN MICE**
- * **SERVATUS IBS LIVE BIO-THERAPEUTIC PHASE I EFFICACY**
- * **PREVATEX PREVOTELLA COPRI FOR DOG GUT DISEASE**
- * **NOXOPHARM SOFRA 'BASED ON OLIGO-NUCLEOTIDES'**
- * **IMPEDIMED REQUESTS 'CAPITAL RAISING' TRADING HALT**
- * **UBS REDUCES TO 7% IN OPTHEA**
- * **PERENNIAL TAKES 14% OF MEDADVISOR**
- * **W WHITNEY GEORGE TAKES 41% OF RHINOMED**
- * **PERENNIAL REDUCES TO 8% IN LUMOS**
- * **M-D DR IAN DIXON DILUTED TO 6% OF EXOPHARM**

MARKET REPORT

The Australian stock market was up 0.52 percent on Thursday May 18, 2023, with the ASX200 up 37.6 points to 7,236.8 points. Eighteen of the Biotech Daily Top 40 stocks were up, eight fell, 12 traded unchanged and two were untraded.

Immutep was the best for the second day in a row, up nine cents or 33.3 percent to 36 cents, with 19.9 million shares traded. Medical Developments improved 10.6 percent; Oncosil and Opthea were up more than nine percent; Kazia climbed 8.6 percent; Cynata, Mesoblast, Starpharma and Uscom were up more than three percent; Cyclopharm and Prescient rose more than two percent; Avita, Neuren, Polynovo and Volpara were up more than one percent; with Cochlear, Nanosonics, Pro Medicus and Telix up by less than one percent.

Orthocell led the falls, down 1.5 cents or 4.2 percent to 34.5 cents, with 360,449 shares traded. Both Clinuvel and Emvision lost three percent; Dimerix and Nova Eye shed more than two percent; Antisense, Pharmaxis and Proteomics were down more than one percent; with CSL and Resmed down by less than one percent.

4D MEDICAL

4D Medical says the Harry S Truman Hospital has granted its x-ray velocimetry lung ventilation analysis software (XV LVAS) “authority to operate” status.

Earlier this month, 4D Medical said it had completed its first commercial XV LVAS scan with the US Department of Veterans Affairs at the Harry S Truman Memorial Veterans Hospital in Columbia, Missouri (BD: May 1, 2023).

Today, the company said that authority to operate (ATO) was a formal authorization granted to an information system or technology infrastructure to operate within the US Department of Veteran Affairs’ network.

4D Medical said it required an authority to operate at each Department of Veterans Affairs site where it sought to deliver scans through its automated software as a service platform. The company said that the approval was “an important milestone” and once it had approval at two sites it would be eligible to apply for a national authority to operate, which would provide the company with an authorization at all 171 major clinical centres within the Department of Veterans Affairs network.

4D managing-director Prof Andreas Fouras said the authority to operate status had been “hard fought, but we now feel confident that we are in position to expand on this success”. “I am excited by the prospect of National ATO, which will accelerate our top-down efforts to deliver our technology across the [Department of Veterans Affairs],” Prof Fouras said. “I feel strongly that XV technology is the best way to provide every veteran with access to rich information on the effects of toxic exposures on their lungs, without the burden of an expensive and invasive biopsy, and today’s announcement takes us one step closer to this prospect,” Prof Fouras said.

4D Medical was up six cents or seven percent to 92 cents with 3.3 million shares traded.

IMUGENE

Imugene says it that its CF-33-CD19t Oncarlytics technology combined with Eureka Therapeutic’s Artemis T-cells enhance “anti-tumor activity” for liver cancer, in mice.

Imugene said the data, presented at the American Society of Gene and Cell Therapy meeting in Los Angeles from May 16 to 20, 2023, investigated the Oncarlytics and Artemis T-cell combination against the primary liver cancer, hepatocellular carcinoma.

The poster said that Oncarlytics could target hepatocellular carcinoma cell lines HepG2 and Hep3B to express CD19t as an antigen for engineered T-cells in a multiplicities of infection, or dose, dependent manner.

The poster said that Eureka’s CD19 Artemis T-cells in combination with Oncarlytics “demonstrated greater in-vitro killing efficacy against MDA-MB-468, HepG2, and Hep3B tumor cell lines compared to Oncarlytics alone”.

“CD19t expression was detected in tumors following Oncarlytics infection in-vivo [and] combining CD19 Artemis T-cells and Oncarlytics demonstrated enhanced anti-tumor efficacy in-vivo against HepG2 hepatocellular carcinoma tumors”.

Imugene said hepatocellular carcinoma occurred most often in people with chronic liver diseases, such as cirrhosis from hepatitis B or C infection, with few systemic therapies available for patients with advanced disease, in addition to traditional treatments like ablation, surgical resection and liver transplantation.

The company said that the CD-19 targeting chimeric antigen reception T-cell (Car-T-cell) therapy had shown “impressive” clinical outcomes in blood cancers but that translating this therapy to solid-tumor cancers had met various challenges, including the immune-suppressive micro-environment.

Imugene was unchanged at 11.5 cents with 21.5 million shares traded.

SERVATUS

Servatus says a 34-patient, phase I trial of its live bio-therapeutic for irritable bowel syndrome (IBS) reduced constipation and improved patients' quality of life.

Servatus said that 16 patients reported reduced constipation, and 21 patients had an improved quality of life, in the non-randomized or controlled.

The company said the eight-week trial at Brisbane's Princess Alexandra Hospital was led by Prof Gerald Holtmann and treated adults suffering irritable bowel syndrome with constipation (IBSc).

The company said that irritable bowel syndrome affected 30 percent of Australians and symptoms included frequent abdominal pain, bloating or discomfort, and changes in appearance and frequency of bowel movements, with IBS-C including constipation with the abdominal discomfort or bloating.

The company said its live bio-therapeutics were combinations of strains of commensal bacteria that had been selected for their functionality relevant to mechanisms of disease.

Prof Holtmann said that the "composition of the gut microbiome and the metabolic properties of microbes in people with constipation are distinctly different from healthy subjects and new data point towards a role of gastro-intestinal bacteria for gastro-intestinal transit time, stool consistency and even gastro-intestinal inflammation".

"By treating IBS-C sufferers with live bio-therapeutics we were aiming to correct an underlying disturbance and improve the function of the gut bacteria," Prof Holtmann said.

Servatus chief executive officer Dr Wayne Finlayson said "the results of our phase I clinical trial are extremely promising as they have shown us how taking live bio-therapeutics can treat and importantly, reduce the symptoms of IBSc".

"We now look forward to advancing to further human clinical trials with the aim of providing sufferers with a safe, fast and effective treatment option," said Dr Finlayson.

Servatus said it would begin phase II trials of its biotherapeutics, again led by Prof Holtmann, with patient recruitment opening this year.

Servatus is a public unlisted company.

PREVATEX

Prevatex says it will begin a UK 120-dog trial of its *Prevotella copri* probiotic, PVX03A, for canine gastro-intestinal diseases, with Singapore's Treat Therapeutics.

Prevatex said that *Prevotella copri* was "a significant part of the healthy canine gut microbiome ... [and was] reduced in canine gastro-intestinal diseases and other health conditions ... [making it] a prime candidate for novel canine probiotic products.

The company previously said it was developing *Prevotella copri* to reduce food allergy risk in infants (BD: Mar 25, 2020; Nov 25, 2021).

Today, Prevatex said the study would investigate the safety, acceptability and ability of PVX03A to colonise the gut and restore a healthy microbiome, while also trying to improve the health of animals with gastro-intestinal diseases, with results expected by August.

Prevatex said it would feed PVX03A daily to the 120 dogs for 30 days and use faecal samples and health questionnaires to determine the dog's well-being and gut health.

The company said half the dogs would be selected for gastro-intestinal disease, with a focus on canine anal furunculosis, analogous to human Crohn's disease, with a subset of other conditions including diarrhoea and colitis, analogous to inflammatory bowel disease.

Prevatex said microbial analyses of the faecal samples would measure variety of bacteria in the gut, the size and distribution of bacterial populations, bacterial genus composition and abundance, and the abundance of *Prevotella copri*.

Prevatex is a private company.

[NOXOPHARM](#)

Noxopharm says its Sofra technology uses ultra-short nucleic acid sequences known as oligo-nucleotides that target specific inflammatory receptors to block inflammation. Noxopharm presented the research from Melbourne's Hudson Institute of Medical Research at the European Molecular Biology Organization's non-coding RNA medicine workshop in Poznan, Poland.

The company said the oligo-nucleotides targeted the immune and tumor cell 'Toll-like receptors' TLR7 and TLR8 and had a range of therapeutic applications.

Noxopharm said it was working with the Hudson Institute to progress research and commercial opportunities for an mRNA vaccine enhancer called SOF-VAC that aimed to make mRNA vaccines safer by reducing inflammation.

The company said it was also developing novel drugs for autoimmune diseases such as psoriasis and lupus.

Noxopharm fell 0.3 cents or 5.9 percent to 4.8 cents.

[IMPEDIMED](#)

Impedimed has requested a trading halt pending an announcement "in connection with a proposed capital raising".

Trading will resume on May 22, 2023 or on an earlier announcement.

Impedimed last traded at 15.5 cents.

[OPTHEA](#)

The UBS Group AG and related bodies corporate says they have reduced their holding in Opthea from 38,233,604 shares (8.18%) to 33,322,088 shares (7.13%).

UBS said that between March 17 and May 15, 2023 it bought and sold shares, in more than 500 separate transactions, with the single largest sale 268,456 shares for \$187,973 or 70.0 cents a share on May 5, 2023.

Opthea was up six cents or 9.5 percent to 69 cents.

[MEDADVISOR](#)

Perennial Value Management says it has increased its substantial shareholding in Medadvisor from 68,657,589 shares (12.62%) to 76,207,867 shares (14.00%).

The Sydney-based Perennial said that between January 18 and May 15, 2023 it bought and sold shares, with the single largest purchase 2,115,908 shares for \$445,318 or 21.05 cents a share on May 15.

Medadvisor was up half a cent or 2.4 percent to 21.5 cents.

[RHINOMED](#)

W Whitney George says he has increased his substantial holding in Rhinomed from 115,366,276 shares (40.38%) to 118,257,120 shares (41.39%).

The Darien, Connecticut-based Mr George said between March 29 and May 15, 2023 he bought 2,890,844 shares for \$US161,736 (\$AU243,211), or an average price of 8.4 Australian cents a share.

Rhinomed was up 0.1 cents or 1.25 percent to 8.1 cents.

LUMOS DIAGNOSTICS HOLDINGS

Sydney's Perennial Value Management says it has reduced its holding in Lumos from 25,128,631 shares (9.19%) to 23,228,631 shares (7.97%).

based Perennial said it sold 1,900,000 shares for \$33,041 or an average of 1.74 cents a share on April 19 and May 17, 2023.

Lumos fell 0.1 cents or 5.9 percent to 1.6 cents with 2.9 million shares traded.

EXOPHARM

Exopharm managing director Dr Ian Dixon says his 28,258,627-share substantial shareholding has been diluted from 11.90 percent to 6.43 percent.

In April, Exopharm said it had raised \$802,440 in a rights issue at one cent a share and allotted shares for convertible notes (BD: Mar 9; Apr 26, 2023).

Exopharm was unchanged at 1.1 cents with 1.4 million shares traded.