



Biotech Daily

Monday February 13, 2023

Daily news on ASX-listed biotechnology companies

- * **ASX, BIOTECH DOWN: RESONANCE UP 10%; IMUGENE DOWN 10%**
- * **LUMITRON \$29m RAISING TO 'REVOLUTIONIZE X-RAYS'**
- * **PHARMAXIS H1 REVENUE UP 7.5% TO \$9.2m, LOSS DOWN 45% TO \$4.9m**
- * **TRAJAN PAYS \$600k FOR SIERRA'S HD EXAMINER**
- * **EXOPHARM NOTES, RIGHTS FOR \$2.1m**
- * **ANTISENSE 2nd ATL1102 DYSPERLINOPATHY MOUSE STUDY**
- * **EMYRIA SECURES CLINICAL-GRADE MDMA**
- * **USCOM UNMARKETABLE PARCEL FACILITY**
- * **HYDRIX REQUESTS 'REGULATORY APPROVAL STATUS' TRADING HALT**
- * **ZELIRA REQUESTS 'TRIAL FUNDING' TRADING HALT**
- * **MEDIBIO REQUESTS 'CAPITAL RAISING' TRADING HALT**
- * **FMR (FIDELITY) BELOW 5% IN NANOSONICS**
- * **AUSTRALIAN ETHICAL REDUCES TO 9.6% OF COGSTATE**
- * **ALLAN GRAY TAKES 14.8% OF STARPHARMA**
- * **BLACKROCK SELLS IMRICOR 5.7% HOLDING**

MARKET REPORT

The Australian stock market fell 0.76 percent on Monday February 13, 2023, with the ASX200 down 56.6 points to 7,433.7 points. Thirteen of the Biotech Daily Top 40 stocks were up, 17 fell, nine traded unchanged and one was untraded.

Resonance was the best, up 0.6 cents or 10 percent to 6.6 cents, with 1.1 million shares traded. Antisense and Genetic Signatures climbed more than six percent; Polynovo and Proteomics improved four percent or more; Patrys and Pharmaxis were up more than three percent; Clinuvel, Oncosil and Volpara rose more than two percent; Nanosonics was up 1.6 percent; with CSL, Neuren and Pro Medicus up by less than one percent.

Imugene led the falls, down 1.5 cents or 10.3 percent to 13 cents, with 40.7 million shares traded. Cynata lost 8.8 percent; Actinogen, Compumedics, Mesoblast, Next Science, Nova Eye and Opthea were down more than five percent; Medical Developments, Prescient and Telix fell more than four percent; Emvision was down 3.4 percent; Resmed shed 2.1 percent; Avita, Immutep, Orthocell and Paradigm were down more than one percent; with Cochlear and Starpharma down by less than one percent.

LUMITRON TECHNOLOGIES

Lumitron says it hopes to raise at least \$US20 million (\$A29 million) to further develop and commercialize its “revolutionary x-ray and laser technology”.

Lumitron executive chair Maurie Stang told Biotech Daily that by colliding an electron beam with a laser (light amplification by stimulated emission of radiation) the Hyperview keV (kilovolt energy voltage) would be able to provide 1,000 times the magnification of current systems with one hundredth the amount of radiation.

Mr Stang said that one component of the Hyperview keV, the electron beam would be able to undertake “flash radiotherapy reducing six to 12 weeks of radiotherapy to less than one second, substantially sparing healthy tissue and destroying cancers”.

Mr Stang said the Hyperview keV was a subset of the MeV (megavolt energy voltage) and the systems were able to provide resolution at the cellular level; be used for intervention or treatment and provide a very low dose of radiation to the patient.

Mr Stang said that the capital raising at \$US15 a share was expected to be completed by April 2023, the first Hyperview keV were hoped to be delivered to universities for research purposes by July 2024 and the first commercial rollout of the Hyperview keV was expected to begin, pending US Food and Drug Administration approval, within three years.

He said the company’s aim was to be able to image breast and prostate cancers and treat them so that “no one will have a mastectomy or prostate out, again”.

“It will also change biotech research,” Mr Stang said.

He said that current x-rays had millimeter-scale resolution, limited to dense tissues and bone, with no capability to clinically image soft tissues or organs, but the Hyperview would image at micron-scale providing high fidelity images of anything in the body, including organs and soft tissue at the same resolution as a synchrotron image.

Mr Stang said the Hyperview keV would have the imaging power of a synchrotron in a machine comparable in size to a computed tomography (CT) scanner.

Mr Stang said that the price per unit would be comparable with high-end CT scanners which are believed to cost \$US2 million to \$US3 million each.

Mr Stang said the funds would be primarily used to extend commercialization and build a factory to manufacture the imaging equipment to FDA and EU medical standards.

He said the keV would be used for medical imaging and intervention and the MeV would image turbine parts and complex human implants.

In a slide deck, Lumitron quoted General Electric Global Research head of x-ray source research Dr Bogdan Neculaes saying: “The progress at Lumitron is truly ground breaking.” “All ingredients for success are there -and they will be hard to match anywhere else in the world,” Dr Neculaes said.

“There are multiple opportunities for significant commercial impact where Lumitron x-ray and gamma-ray systems are used for imaging and inspection,” Dr Neculaes said.

Mr Stang said that although the company was based in Irvine, California, “its immune-therapies and contrast agents are being substantially done in Australia”.

Mr Stang said that company’s chief technology officer and co-founder was Dr Chris Barty, who previously worked for the US National Ignition Facility at the Lawrence Livermore National Laboratory.

He said that Nanosonics chair and Origin Energy director Steve Sargent was a director of Lumitron, along with former 3M executive Dr Paul Rosso and Imed Radiology Network chief medical officer Dr Ron Shnier.

The capital raising is being conducted by the New York-based Jefferies.

Australian investors can contact the Sydney office +61 2 9364 2822.

Lumitron is a Delaware-based public unlisted.

PHARMAXIS

Pharmaxis says revenue for the six months to December 31, 2022 was up 7.5 percent to \$9,153,000 with loss down 44.75 percent to \$4,876,000.

Pharmaxis said that most of the revenue came from two payments of \$US2.5 million each, totaling \$A7.2 million for the sale of its Orbital high payload dry powder inhaler to Aptar Pharma last year (BD: Aug 16, 2022).

The company said that sales of its Bronchitol mannitol powder for cystic fibrosis and Aridol mannitol lung function test for asthma for the six months to December 31, 2022 fell from \$4,945,000 to \$728,000 and \$851,000 to \$553,000, respectively.

The company said severe acute respiratory syndrome coronavirus-2 (Sars-Cov-2) had affected sales and a Pharmaxis executive told Biotech Daily that large consignments of Bronchitol were expected to be shipped to Russia and the US by April 2023.

The company said its diluted loss per share fell 50 percent to 0.01 cents, and its net tangible assets per share was up 300 percent from 0.5 cents to 2.0 cents at December 31, 2022, and it had cash and cash equivalents of \$16,450,000 at December 31, 2022 compared to \$20,866,000 at December 31, 2021.

Pharmaxis was up 0.2 cents or 3.6 percent to 5.7 cents with 1.4 million shares traded.

TRAJAN GROUP

Trajan says it has bought all aspects of Sierra Analytics' HD Examiner software business for \$US430,000 (\$A622,414).

Trajan said the software was used in hydrogen deuterium exchange mass spectrometry (HDX-MS) and enabled the analysis of the protein structural information generated by the mass spectrometer.

The company said HD Examiner revenues were about \$US350,000 for the year to June 30, 2022, of which it retained 35 percent as the exclusive distributor.

Trajan chief executive officer Stephen Tomisich said "bringing ownership of HD Examiner into the Trajan family allows us to invest in the future development and enhancement of this powerful analytical platform".

"Together with our growing number of leading collaborators in the field of HDX-MS we expect to target several areas of the package to enable broader adoption of the technique along with enhancing the depth and value of protein structural information that can be revealed," said Mr Tomisich.

Trajan was up five cents or 2.8 percent to \$1.86.

EXOPHARM

Exopharm says it hopes to raise \$2.1 million through the issue of \$600,000 in convertible notes, with a one-for-one \$1.5 million rights issue at one cent a share.

Exopharm said it had mandates with Alto Capital and Canary Capital for the capital raising and to place any shortfall.

The company said the convertible notes would convert at a 20 percent discount to the rights issue price subject to the completion of the issue, and would be for up-to 12 months, with no interest.

The company said the joint lead managers Alto Capital and Canary Capital would receive five percent on funds raised in the rights offer and the placement of any shortfall.

Exopharm said that subject to raising the full target amount Alto Capital and Canary Capital would receive 3,000,000 options exercisable at 1.0 cents each within three-years.

Exopharm fell 4.8 cents or 73.85 percent to 1.7 cents with 34.6 million shares traded.

ANTISENSE THERAPEUTICS

Antisense says it has begun a second mouse study on the effects of an antisense oligonucleotide (ASO) for recessive limb girdle muscular dystrophy-2 (LGMR2). Earlier this month, Antisense said a mouse study combining an antisense oligo-nucleotide targeting CD49d with a dystrophin exon-skipping restoration drug improved muscle function (BD: Feb 1, 2023).

At that time, the company said it had filed a patent application to IP (intellectual property) Australia, titled 'Combination Compositions and Methods for Treatment of Muscular Dystrophy protecting the combination of ATL1102 with the dystrophin restoration exon-skipping drugs.

Today, the company said the second study of an antisense oligo-nucleotide targeting CD49d, the mouse of equivalent of ATL1102, would "assess longer duration treatment effects on key disease progression endpoints including reduction in muscle adipose (fat) levels" in the mouse model of dysferlin deficiency.

Antisense said that LGMDR2 was also known as dysferlinopathy and the second study was in collaboration with the Murdoch Children's Research Institute at Melbourne's Royal Children's Hospital and the Seattle, Washington-based Jain Foundation.

Antisense said if the study was successful it expected to be eligible to apply for additional market exclusivity protection in Europe and the US through orphan drug designation.

Antisense director of drug discovery and patents Prof George Tachas said the company looked "forward to the results of this follow-on study, which if positive could support advancement into a future clinical trial in patients with dysferlinopathy, a group in tremendous need of an effective therapy".

Antisense was up 0.6 cents or 6.7 percent to 9.6 cents with 2.2 million shares traded.

EMYRIA

Emyria says it has enough clinical-grade 3,4 methylene-dioxy-meth-amphetamine (MDMA) to support MDMA-assisted therapy for more than 70 patients.

Emyria said it had secured a supply of clinical-grade MDMA for an initial cohort from the Vancouver, British Columbia-based Pharmala Biotech, facilitated by the Mind Medicine organization, which would be available from July 1, 2023, following the Australian Therapeutic Goods Administration decision to down-schedule MDMA for the treatment of post-traumatic stress disorder (BD: Feb 3, 2023).

Today, Emyria said it was "establishing a network of research-oriented therapists and psychiatrists and is helping ready their sites and care teams to provide MDMA-assisted therapy.

Emyria managing-director Dr Michael Winlo said Emyria had "secured a short-term supply of patient-ready MDMA that can be provided within a comprehensive care model ... together with appropriately trained and reputable care providers".

Emyria was up half a cent or 2.1 percent to 24.5 cents with 4.3 million shares traded.

USCOM

Uscom says it has established an unmarketable parcels facility for holders of shares, worth less than \$500 at the record date of February 10, 2023.

Uscom said that 279 of its 794 shareholders, holding a total of 1,635,802 shares, would be eligible for the facility which would allow them to sell shares without brokerage or handling costs and allow the company to reduce administrative costs.

Uscom was untraded at 4.5 cents.

HYDRIX

Hydrix says it has requested a trading halt pending “an announcement ... in relation to the regulatory approval status of the [Angel Medical] Guardian device”.

Trading will commence on February 15, 2023 or on an earlier announcement.

Hydrix last traded at 5.85 cents.

ZELIRA THERAPEUTICS

Zelira says it has requested a trading halt pending “an announcement by the company in relation to Hope clinical trial funding”.

Last year, the company said “almost 70 percent” of 45-patients in its observational trial of its Hope marijuana for autism spectrum disorder had at least “moderate” therapeutic effects (BD: May 17, 2022).

In November 2020, Zelira said it and Emyria had a real-world data agreement for an up to 150-patient observational trial of Zelira’s Hope marijuana for autism (BD: Nov 9, 2020).

Trading will commence on February 15, 2023 or on an earlier announcement.

Zelira last traded at \$1.20.

MEDIBIO

Medibio says it has requested a trading halt pending an announcement “regarding a capital raising”.

Trading will resume on February 15, 2023 or on an earlier announcement.

Medibio last traded at 0.1 cents.

NANOSONICS

Fidelity Management and Research (FMR) says it has ceased its substantial holding in Nanosonics, down to 15,026,039 shares (4.97%).

FMR said that between December 15, 2022 and February 9, 2023 it sold 1,937,891 shares at prices ranging from \$4.23 to \$4.8879 a share.

Last year, FMR said it held 16,963,930 Nanosonics shares (5.62%) (BD Dec 16, 2022).

Nanosonics was up seven cents or 1.6 percent to \$4.52 with 632,283 shares traded.

COGSTATE

Australian Ethical Investment says it has reduced its holding in Cogstate from 18,487,247 shares (10.66%) to 16,691,357 shares (9.62%).

Australian Ethical said that it sold shares from January 25 to February 9, 2023, with the single largest sale 425,000 shares for \$852,036 or \$2.005 a share.

Cogstate fell four cents or 1.8 percent to \$2.14 with 1.4 million shares traded.

STARPHARMA HOLDINGS

Allan Gray says it has increased its substantial holding in Starpharma from 56,264,591 shares (13.78%) to 60,548,078 shares (14.81%).

The Sydney-based Allan Gray said that between September 9, 2022 and February 8, 2023 it bought 4,330,891 shares for \$2,526,966, or 58.35 cents a share, and sold 47,404 shares for \$24,176, or 51.0 cents a share.

Starpharma fell half a cent or 0.9 percent to 55.5 cents.

IMRICOR MEDICAL SYSTEMS

New York's Blackrock Group says it has ceased its substantial holding in Imricor, selling all 8,696,947 shares.

Last week, Blackrock said it had reduced its substantial holding in Imricor from 10,734,845 shares (7.09%) to 8,696,947 shares (5.74%) (BD: Feb 7, 2023).

Today, Blackrock said that between February 6, 2023 and February 8, 2023 it sold the 8,696,947 shares for 19.0 cents and 20.0 cents a share.

Imricor was up half a cent or 1.7 percent to 29.5 cents.