



# Biotech Daily

Thursday July 13, 2023

*Daily news on ASX-listed biotechnology companies*

- \* **ASX, BIOTECH UP: MEDICAL DEVELOPMENTS UP 10.5%; ATOMO DOWN 27%**
- \* **BIONICS INSTITUTE: PROF ORTIZ CATALAN DEVELOPS BIONIC HAND**
- \* **WENTWORTH, SYDNEY UNI 99-YEAR LEASE FOR \$500m BIO-FACILITY**
- \* **OPTISCAN RIGHTS OFFER RAISES \$16.7m**
- \* **ADALTA PLACES \$1.87m SHORTFALL; TOTAL \$3.15m**
- \* **ATOMO PLACES \$1.25m; SHARE PLAN FOR \$2.75m**
- \* **RACE RECEIVES \$1.7m FEDERAL R&D TAX INCENTIVE**
- \* **INCANNEX MARIJUANA, HCQ IHL-675A ARTHRITIS TRIAL APPROVED**
- \* **MEMPHASYS GRANTED 2 AUSTRALIAN FELIX PATENTS**
- \* **LUMOS APPOINTS CEO DOUG WARD M-D**

## MARKET REPORT

The Australian stock market climbed 1.56 percent on Thursday July 13, 2023, with the ASX200 up 111.2 points to 7,246.9 points. Twenty-two of the Biotech Daily Top 40 stocks were up, 11 fell, six traded unchanged and one was untraded.

Medical Developments was the best, up 11.5 cents or 10.45 percent to \$1.215, with 223,087 shares traded.

Imugene improved 9.9 percent, Avita was up 7.1 percent; Emvision climbed 5.5 percent; Cynata and Nanosonics were up four percent or more; Kazia, Mesoblast, Neuren and Polynovo were up more than three percent; Cochlear, Genetic Signatures, Impedimed and Orthocell rose more than two percent; Opthea, Paradigm, Prescient, Pro Medicus, Starpharma and Telix were up more than one percent; with 4D Medical, Clinuvel, CSL and Volpara up by less than one percent.

Atomo led the falls, down 1.4 cents or 26.9 percent to 3.8 cents, with 7.4 million shares traded. Actinogen lost 7.7 percent; Pharmaxis fell 5.6 percent; Next Science and Resonance retreated more than two percent; with SDI and Resmed down by less than one percent.

## BIONICS INSTITUTE

Melbourne's Bionics Institute says Prof Max Ortiz Catalan has led a study that attached a functional bionic hand to a patient with an above-the-elbow amputation.

Last week, the Institute said it had appointed Prof Max Ortiz Catalan as its head of neural prosthetic research to further develop bionic limb technology (BD: Jun 29, 2023).

Today, the Bionics Institute said that Prof Catalan's team had developed a technique, that was the "first documented case" of a patient whose body was surgically modified to incorporate implanted sensors connected to a bionic hand via a skeletal implant.

Bionics said the technique allowed the patients to have intuitive movement all fingers, including sensory awareness.

The research, titled 'Improved control of a prosthetic limb by surgically creating electro-neuromuscular constructs with implanted electrodes' was conducted at Sweden's University of Gothenburg and published in Science Translational Medicine, with an abstract available at: <https://www.science.org/doi/10.1126/scitranslmed.abg3665>.

Prof Ortiz Catalan said that "prosthetic limb options are commonly attached to the body by a socket that compresses the residual limb - a process which is mechanically unstable and can cause discomfort".

"Our work uses osseointegration, where a titanium implant is placed within the residual bone and becomes strongly anchored to the patient's skeleton ... [allowing] comfortable and more efficient mechanical connection of the prosthesis to the body," he said.

"A major problem in patients with higher amputation levels, such as above the elbow, is that not many muscles remain to command the many robotic joints needed to truly restore the function of an arm and hand," Prof Ortiz Catalan said.

"In this study, we enhanced the nerve and muscle connections that would normally be found in the arm by taking the patient's peripheral nerves that were severed by the amputation, splitting them, and then reconnecting them to different muscle targets in which we also placed implanted electrodes," Prof Ortiz Catalan said.

The Bionics Institute said that "the bionic reconstruction integrating biological and artificial components allows the artificial intelligence decoder in the prosthesis to gain access to the neural information related to motor control".

"When the patient tries to move their hand, the signal is recorded and AI algorithms tell the bionic limb what to do, like a biological one would," the Institute said.

## WENTWORTH CAPITAL, UNIVERSITY OF SYDNEY

Wentworth says it will lease the University of Sydney's Medical Foundation Building to develop a \$500 million 'Biomed, Science and Innovation' campus facility.

Wentworth said the 99-year lease would cover the 30,000 square meters of floor space at the site adjacent to the University's Camperdown campus and complement the new Sydney Biomedical Accelerator by providing space for leading companies to locate close to the community there, but did not disclose the commercial terms of the lease.

Wentworth Capital said that on completion in 2027, the facility would be home to more than 1,200 biomedical researchers and clinician scientists, including more than 800 University of Sydney laboratory researchers and doctoral students, 300 clinical researchers from Sydney Local Health District, and 100 industry researchers.

Wentworth chief executive officer Alastair Nash said the "scale of the site has allowed the design team to incorporate space for small start-ups as well as large private sector companies creating a campus environment that promotes collaboration and idea sharing which is so powerful in this sector".

## OPTISCAN

Optiscan says its one-for-three, pro rata entitlement offer has raised \$8,784,701 and it has placed the \$7,914,115 shortfall to its underwriters, for a total of \$16,698,816.

In May, Optiscan said it hoped to raise up-to \$16,698,816 in an entitlement at eight cents a share (BD: May 30, 2023).

Today, the company said that substantial holders Peters Investments and Orchid Capital would underwrite \$6,950,000 and \$2,863,733 of the rights offer, respectively.

Optiscan said it would liaise with the underwriters to determine the allocation of the remaining shortfall in accordance with the terms of the joint underwriting agreement.

The company said it was now well-positioned to undertake research and development, improve image capture capability and advance its artificial intelligence and telepathology services solutions.

Optiscan was up 0.1 cents or 1.2 percent to 8.3 cents.

## ADALTA

Adalta says it has placed \$1.87 million of its rights offer shortfall, taking the total raised to \$3.15 million.

In April, Adalta said it hoped to raise \$3.15 million in a non-renounceable, two-for-five, rights offer at 2.5 cents a share (BD: Apr 28, 2023).

In May, the company said the offer raised \$1,282,591 with commitments from Platinum Asset Management, managing-director Dr Timothy Oldham and others for a further \$1,871,167 (BD: May 25, 2023).

Today, Adalta said the funds would be used to begin a phase I extension study of lead fibrosis asset AD-214, inform phase II study design and progress "partnering discussions". Adalta was unchanged at three cents with 1.2 million shares traded.

## ATOMO DIAGNOSTICS

Atomo says it has raised \$1.25 million in a placement at 3.6 cents a share, with a share plan at the same price for \$2.75 million more.

Atomo said the placement was at a 30.8 percent discount to the last closing price prior to the placement, on July 10, 2023

The company said that share plan had a binding commitment for up-to \$1.0 million of shortfall should it raise less than \$1 million, ensuring a minimum of \$2.25 million to be raised by the placement and share plan in total.

Atomo said proceeds would be used to expand and accelerate sales, marketing, business development and product registration, with a focus on the US.

The company said the share plan price would be the lower of 3.6 cents or a 2.5 percent discount to the 5-day volume weighted average price to the closing date of the plan.

Atomo said the plan had a record date of July 12, would open July 18 and close on August 1, 2023, with Bell Potter Securities the lead manager and bookrunner.

Atomo fell 1.4 cents or 26.9 percent to 3.8 cents with 7.4 million shares traded.

## RACE ONCOLOGY

Race says it has received \$1,657,956 from the Australian Taxation Office under the Federal Government Research and Development Tax Incentive program.

Race said the incentive related to expenditure for the year to June 30, 2022.

Race was up 6.5 cents or 4.4 percent to \$1.53.

## INCANNEX

Incannex says it has ethics approval for a 128-patient, placebo-controlled phase II trial of its cannabidiol (CBD) and hydroxychloroquine (HCQ) IHL-675A for rheumatoid arthritis. Incannex said the phase II trial followed a successful phase I trial where its combination cannabidiol and hydroxychloroquine IHL-675A was observed to be “well tolerated, with no adverse events of concern reported to date” (BD: Oct 13, 2022).

In May, the company said IHL-675A had the same number of adverse events as the CBD Epidiolex but more than HCQ, with treatment emergent adverse events including abdominal pain, dizziness, fatigue, frequent bowel movements, headache and somnolence, with all events minor “with the exception of one incidence of moderate severity abdominal cramps which resolved soon after on-set” (BD: May 2, 2023).

Today, Incannex said it would dose patients with on-going pain and reduced function while on stable treatment for rheumatoid arthritis, randomized into four arms of either IHL-675A, cannabidiol alone, hydroxychloroquine alone or placebo.

Incannex said the primary endpoint was pain and function relative to baseline after 24 weeks, with patients to record their pain and function each day.

The company said that Melbourne’s Emertius Research would be the lead site for the trial, with Adelaide’s Avance Clinical managing the trial.

Incannex said the trial would establish the safety and efficacy of IHL-675A in rheumatoid arthritis and would be critical for future regulatory applications, including for a US Food and Drug Administration new drug application.

Incannex was up 0.5 cents or 4.35 percent to 12 cents with 2.1 million shares traded.

## MEMPHASYS

Memphasys says the Australian Patent Office has granted two patents relating to its Felix sperm separation system.

Memphasys said the first patent was titled ‘Electrophoresis device’ and the second patent was titled ‘Sperm separation by electrophoresis’, and both would protect its intellectual property until October 20, 2037.

The company said both patents had been granted in China, Japan and the US, with European Union approval pending.

Memphasys was untraded at 1.6 cents.

## LUMOS DIAGNOSTICS

Lumos says it has appointed its chief executive officer Doug Ward to the board as ITS managing director.

Lumos said Mr Ward was appointed chief executive officer in June 2022 and had more than 30 years’ experience as an executive in diagnostics and healthcare, having joined from his previous role at Hologic.

The company said Mr Ward had played a key role in the restructuring and refocusing of Lumos, as well as managing Febridx through the recent US Food and Drug Administration clearance following its rejection last year.

Lumos fell 0.3 cents or 4.5 percent to 6.4 cents with 22.2 million shares traded.