

# Biotech Daily

Wednesday September 24, 2025

Daily news on ASX-listed biotechnology companies

- \* ASX, BIOTECH DOWN: ATOMO UP 23%; ACTINOGEN DOWN 9%
- \* WEHI: 'T-FOLLICULAR HELPER CELLS COULD IMPROVE TREATMENTS'
- \* MONASH UNI: 'SWITCHING OFF CAMKK2 PREVENTS OBESITY, IN MICE'
- \* RACE: SOUTH KOREA PHASE I RC220, DOXORUBICIN TUMOR TRIAL
- \* EMVISION READY FOR AMBULANCE STROKE STUDY
- \* MICRO-X WINS \$2.5m US AIRPORT SECURITY CONTRACT EXTENSION
- \* SYNTARA RECEIVES \$5.6m FEDERAL R&D TAX INCENTIVE
- \* HYDRIX PLEADS SCHULTZ, 'REVIEWS' TO ASX 69% QUERY
- \* ATOMO PLEADS SCHULTZ, '\$300k HIV TESTS' TO ASX 36% QUERY
- \* EMVISION M-D SCOTT KIRKLAND DILUTED BELOW 5%

#### MARKET REPORT

The Australian stock market fell 0.92 percent on Wednesday September 24, 2025, with the ASX200 down 81.4 points to 8,764.5 points.

Twelve of the Biotech Daily Top 40 companies were up, 21 fell and seven traded unchanged.

Atomo was the best (see below), up 0.5 cents or 22.7 percent to 2.7 cents, with 12.8 million shares traded. Resonance rose 8.8 percent; Botanix, Cynata and Genetic Signatures climbed more than seven percent; Prescient was up 4.9 percent; 4D Medical, Impedimed, Micro-X, Optiscan and Starpharma rose more than two percent; Alcidion was up 1.1 percent; with Resmed up by 0.4 percent.

Actinogen led the falls, down 0.3 cents or 8.8 percent to 3.1 cents, with 3.7 million shares traded. Avita lost 6.9 percent; Telix shed 5.6 percent; EBR fell 4.1 percent; Amplia, Imugene and Pro Medicus were down more than three percent; Dimerix, Immutep, Imricor, Medadvisor, Nanosonics and Polynovo shed two percent or more; Clarity, Clinuvel, CSL, Cyclopharm, Emvision, Orthocell, Paradigm and SDI were down more than one percent; with Cochlear, Mesoblast and Neuren down by less than one percent.

## THE WALTER AND ELIZA HALL INSTITUTE OF MEDICAL RESEARCH

The Walter and Eliza Hall Institute says T-follicular helper (Tfh) cells tailor their instructions to the immune system depending on the pathogen they encounter. The Institute said that understanding how T-follicular helper cells adapted their behavior depending on the type of infection, paved the way for better vaccines and advancing research into immune-related diseases.

WEHI said the findings "shed light on the molecular 'instruction manual' that guides antibody production and long-term immunity, offering new tools to improve vaccine design and develop targeted therapies for immune-related conditions and other major health challenges, including cancer".

The Institute said the study identified signalling molecules that shaped the cell's function, allowing "to track and fine-tune immune responses in health and disease ... [which] could lead to more effective vaccines and targeted therapies for autoimmune diseases, allergies and cancers, by resetting or enhancing Tfh cell activity".

The research, titled 'Divergent cytokine and transcriptional signatures control functional T follicular helper cell heterogeneity' was published in Nature Immunology, with the full article available at: https://www.nature.com/articles/s41590-025-02258-9.

WEHI said that T-follicular helper cells were part of the immune response and "essential for generating strong antibody responses" and were activated in all vaccines, "but until now the way they adapt to different immune challenges had not been fully mapped". WEHI said that Tfh cells were "uniquely flexible", able to interpret cues from their environment and deliver instructions to B-cells, which produced the antibodies.

The Institute said the flexibility allowed the immune system to respond precisely to a wide range of threats, from viruses to parasites and bacteria.

WEHI said that cytokines were "central to this adaptability ... that help Tfh cells 'read' the immune environment ... like a control panel, guiding the cells to deliver the right instructions depending on the type of infection or immune challenge".

Lead author and WEHI Immunology division head Prof Joanna Groom said T-follicular helper cells were induced during all infection and vaccine responses, "but the information they pass on changes depending on the context".

"This is fundamental research that ... doesn't just answer questions, it opens up new possibilities for improving human health across a wide range of conditions," she said. WEHI said the study provided a comprehensive resource for researchers to track and manipulate T-follicular helper cell responses, including molecular bio-markers that could be used to monitor immune activity in infections, vaccinations and diseases.

Co-author Lennard Dalit said that the research "opens the door to designing better vaccines, especially for complex infections like parasites and bacteria, where current vaccines are less effective".

"By understanding how Tfh cells work, we can start to take control of immune responses: resetting them when they go awry, or enhancing them when we need stronger protection," Mr Dalit said.

WEHI said that the study integrated multiple infection models established with Monash University, alongside insights from human tissue samples provided through a collaboration with the University of Melbourne.

The Institute said the tissue samples included tonsil, adenoid and blood from multiple cohorts, allowing researchers to track Tfh cells across different tissue types and timepoints, including during Covid infection and recovery and following vaccination. WEHI said the researchers identified bio-markers that could be detected in both lymphoid organs and peripheral blood, offering proof-of-principle that Tfh cell behavior could be monitored in clinical settings.

# MONASH UNIVERSITY, MONASH INSTITUTE OF PHARMACEUTICAL SCIENCES

Monash University says 'switching off' the CaMKK2 enzyme in immune cells that drive inflammation prevents diet-induced obesity, diabetes and fatty liver disease, in mice. Monash University said that with the Houston, Texas-based Baylor College of Medicine, it found that calcium/calmodulin-dependent protein kinase kinase 2 (CaMKK2) helped regulate how cells use energy and controlled inflammation driven by macrophages. Monash said that macrophages were "a type of immune cell which lives in almost every tissue and sends signals to other cells to turn inflammation on or off".

The University said that mice were genetically altered so their macrophages lacked CaMKK2, which protected the mice "against the harmful effects of a high-fat diet, including obesity and other metabolic diseases".

The research, titled 'Myeloid-specific CAMKK2 deficiency protects against diet-induced obesity and insulin resistance by rewiring metabolic gene expression and enhancing energy expenditure', was published in Molecular Metabolism and was available at: <a href="https://www.sciencedirect.com/science/article/pii/S2212877825001577?via%3Dihub">https://www.sciencedirect.com/science/article/pii/S2212877825001577?via%3Dihub</a>. Lead author and Monash Institute of Pharmaceutical Sciences (MIPS) researcher, Dr John Scott said the discovery showed that CaMKK2 was "a key player in how macrophages affect metabolism and inflammation".

"Obesity is linked to ongoing, low-level inflammation in key organs that control metabolism, like the liver, fat tissue and muscles, and this kind of inflammation plays a role in conditions such as insulin resistance and type 2 diabetes," Dr Scott said. "It's widely accepted that a big driver of this process is the buildup of macrophages in these organs because when the body is under stress, such as from a high-fat diet, inflammatory macrophages switch to a faster but less efficient way of making energy," Dr Scott said.

"Our findings show that when the CaMKK2 gene is removed from certain immune cells, in this case, macrophages, fat tissue shifts its activity in a healthier direction," Dr Scott said. "In short, we've identified that CaMKK2 has direct control of regulating immune cell and whole-body metabolism, making it a promising new therapeutic target for treating obesity and related metabolic disorders." Dr Scott said.

#### **RACE ONCOLOGY**

Race says the Republic of Korea Ministry of Food and Drug Safety has approved its up-to 53 patient, phase I trial of RC220 bisantrene alone and with doxorubicin for solid tumors. In March, Race said it had Australia ethics approval for the up-to 53 patient, phase I, safety, tolerability and pharmaco-kinetics trial of RC220 bisantrene alone and with doxorubicin for solid tumors, including a dose escalation stage one, dosing patients with an intra-venous infusion of RC2230 bisantrene alone on day-1, followed by a combination of RC220 and doxorubicin on a 21-day cycle (BD: Mar 14, 2025).

Today, Race said that the South Korean approval followed a review of the RC220 data package that included dossier modules covering non-clinical pharmacology and toxicology, chemistry, manufacturing and controls for the active pharmaceutical ingredient drug substance and the RC220 drug product, specifications and analytical methods, together with the clinical trial protocol.

The company said that the approval enabled activation of the three trial sites at the Samsung Medical Centre, Asan Medical Centre, and EWHA Woman's University Medical Centre.

Race said that a fourth site Severance Hospital was expected to be activated next month. Race was up 38 cents or 12.7 percent to \$3.38 with 1.1 million shares traded.

### **EMVISION MEDICAL DEVICES**

Emvision says it expects recruitment to begin next week in its pre-hospital mobile stroke unit study evaluating the company's First Responder Brain Scanner.

Emvision said that a mobile stroke unit (MSU) was a "specially equipped ambulance" with a computed tomography (CT) scanner and the study was with the Australian Stroke Alliance, Ambulance Victoria and the Royal Melbourne Hospital.

The company said that the study was "a staged work-flow assessment and data collection study of its First Responder Brain Scanner in the Melbourne Mobile Stroke Unit, which was one of about 45 in the world and one of only two in Australia.

Emvision said that stage 1 of the study would evaluate the usability and workflow integration of its scanner in the ambulance in the hyperacute stroke phase; and stage 2 would use the production equivalent First Responder device, collecting Emvision scan data matched with radiological imaging (head CT) to support the evaluation of its artificial intelligence-enhanced stroke detection algorithms.

The company said stage 1 would enrol 10 suspected stroke patients.

Emvision said mobile stroke units were "excellent for patients, with the clinical benefits well established: faster diagnosis and treatment leading to better functional outcomes". The company said that due to size, cost, staffing requirements and complexity, a more scalable product was required to provide broad access to pre-hospital models of stroke care and its First Responder Brain Scanner sought to fill the unmet need.

Emvision chief executive officer Scott Kirkland said that with limited Mobile Stroke Units in operation, "this is a rare opportunity to evaluate the usability of our First Responder Brain Scanner and collect data in a world-class environment ... and the outcomes will generate critical workflow and patient data that will help refine our device and accelerate its substantial equivalence testing, clinical and commercial pathways".

Emvision fell three cents or 1.55 percent to \$1.91.

# MICRO-X

Micro-X says the US Department of Homeland Security has awarded an optional contract extension of up to \$2.5 million for its passenger self-screening checkpoint.

Micro-X said the award, to US subsidiary Micro-X Inc, for the self-screening checkpoint detection algorithms, was subject to milestones with \$400,000 immediately committed.

The company said that the extension takes its total contracted value with the US Department of Homeland Security to up to \$31.7 million, with contracted payments for the year to June 30, 2026 and onwards up to \$18.3 million.

Micro-X chief executive officer Kingsley Hall said the company welcomed the extension of work with the Department of Homeland Security.

"This funding will go towards the further advancement of our detection software, a critical element of an effective checkpoint," Mr Hall said. "We are focused on delivering a next generation airport security screening solution that not only improves the passenger experience but also helps the [Transportation Security Administration] stay ahead of evolving threats to keep the travelling public safe."

Micro-X said its US subsidiary began the passenger self-screening checkpoint portal work in November 2020 (BD: Nov 4, 2020).

Today, the company said there was one Micro-X Checkpoint and two baggage scanners being tested, with it contracted to supply an additional two Checkpoints for airport testing. Micro-X said the contract would accelerate the software and machine learning activities to improve threat detection and it was "a highly confidential and classified extension". Micro-X was up 0.2 cents or 2.6 percent to eight cents.

## **SYNTARA**

Syntara says it has received \$5,606,311 from the Australian Tax Office under the Federal Government Research and Development Tax Incentive program.

Syntara said the rebate related to research and development expenditure for the year to June 30, 2025.

Syntara was unchanged at 2.5 cents with 4.7 million shares traded.

# **HYDRIX**

Hydrix has told the ASX that it is not aware of any information it has not announced which, if known, could explain recent trading in its securities.

The ASX said the company's share price rose 69.2 percent from 1.3 cents on Monday September 22 to 2.2 cents on Tuesday September 23, 2025 and noted a "significant increase" in the trading volume.

Hydrix said it "undertakes on-going reviews of its assets and businesses, with a view to optimizing them, and capitalizing on opportunities to deliver value to shareholders".

"At this time, any information and associated discussions regarding any such opportunities remain embryonic and inconclusive," the company said.

Hydrix was up 0.1 cents or 5.6 percent to 1.9 cents.

# **ATOMO**

Atomo has told the ASX that it is not aware of any information it has not announced which, if known, could explain recent trading in its securities.

The ASX said the company's share price rose 36.4 percent from 2.2 cents on Tuesday September 23 to 3.0 cents on Wednesday September 24, 2025 and noted a "significant increase" in the trading volume.

Atomo said it had an order for 65,000 HIV Self Test Kits for Ukraine, funded by US AID but the estimated revenue was "below the company's materiality threshold of \$300,000 and hence [it did] not consider this to be material" and didn't announce it on the ASX. The company said it announced the purchase "through its investor relations channels". Atomo closed up 0.5 cents or 22.7 percent to 2.7 cents with 12.8 million shares traded.

# **EMVISION MEDICAL DEVICES**

Emvision managing-director Scott Kirkland says his 4,276,987 shares have been diluted below five percent through a placement.

Last week, Emvision said it expected to raise \$12.0 million at \$1.94 a share in a placement with a share plan for up-to \$1 million (BD: Sep 17, 2025).