

# **Biotech Daily**

## Tuesday August 20, 2024

# Daily news on ASX-listed biotechnology companies

- \* ASX UP, BIOTECH DOWN: PARADIGM UP 6.5%; SYNTARA DOWN 9%
- \* QUEENSLAND UNI PROTEIN TARGET FOR BLADDER CANCER
- \* IMMUTEP TO PRESENT EFTI HEAD, NECK CANCER DATA
- \* INOVIQ: 'NEURO-NET ISOLATES PARKINSON'S BRAIN EXOSOMES'
- \* NYRADA 4th PRE-CLINICAL STUDY SHOWS NYR-BIO3 IS SAFE
- \* CURVEBEAM'S ARUN SINGH, SUSMITA SINGH DILUTED TO 11%
- \* RADIOPHARM APPOINTS DR DIMITRIS VOLIOTIS CMO
- \* RICHARD LEGGE REPLACES EPSILON CO SEC MARCELO MORA

#### MARKET REPORT

The Australian stock market was up 0.22 percent on Tuesday August 20, 2024, with the ASX200 up 17.3 points to 7997.7 points.

Eleven of the Biotech Daily Top 40 companies were up, 21 fell, seven traded unchanged and one was untraded. All three Big Caps were up.

Paradigm was the best, up 1.5 cents or 6.5 percent to 24.5 cents, with 2.05 million shares traded.

Curvebeam climbed 5.4 percent; Proteomics and SDI were up more than three percent; Medadvisor rose 2.25 percent; Alcidion, Avita, Cyclopharm, Micro-X, Nanosonics and Telix were up one percent or more; with Cochlear, CSL and Resmed up by less than one percent.

Syntara led the falls, down 0.3 cents or 9.4 percent to 2.9 cents, with 2.35 million shares traded.

Amplia lost 7.1 percent; 4D Medical, Aroa, Mesoblast, Nova Eye and Opthea fell more than four percent; Emvision was down 3.7 percent; Clarity and Cynata shed more than two percent; Clinuvel, Dimerix, Genetic Signatures, Immutep, Impedimed, Medical Developments, Neuren, Orthocell, Polynovo and Resonance were down more than one percent; with Pro Medicus down by less than one percent.

## THE UNIVERSITY OF QUEENSLAND

The University of Queensland says the protein 'TGF-beta' is the "mechanism that bladder cancer uses to suppress the immune system's natural killer (NK) cells".

The University said that bladder cancer suppressed NK cells by releasing TGF-beta and blocking the protein "may offer a new therapy for some of the worst types of the cancer". The University said NK cells attacked cancer cells and were the focus of emerging cancer treatments, such as antibody-based immunotherapies, whose side-effects were generally less severe than chemotherapy or radiotherapy.

The University of Queensland said that the research paper, titled 'TGF-beta signalling limits effector function capacity of NK cell anti-tumour immunity in human bladder cancer' was published in the Lancet journal Ebiomedicine, with the full article available at: https://www.thelancet.com/journals/ebiom/article/PIIS2352-3964(24)00211-1/fulltext.

The research paper said TGF-beta, or transforming growth factor-beta, was "a pleiotropic cytokine known for its immune-suppressive and tissue residency-inducing effects". The University of Queensland said the research was led by its Translational Research Institute, which conducted tests using patient samples discovery and "could lead to new bladder cancer therapies within three to five years".

The University said that doctoral candidate Joshua Wong had discovered the protein. The research paper said the studies used single cell RNA sequencing and highdimensional flow cytometry to assess the physical and biochemical characteristics of tumor-infiltrating NK cells in patients with bladder cancer, with further in-vitro and in-vivo models of the disease used to validate the findings.

The paper said that NK cells in bladder cancer tumors showed reduced expression of a critical Fc receptor involved in antibody-dependent cellular-mediated cytotoxicity and that TGF-beta was upregulated in the tumor-infiltrating NK cells.

The research said it concluded that by treating a humanized mouse model of bladder cancer with a TGF-beta inhibitor it found increased antibody-dependent cellular-mediated cytotoxicity activity compared to mice treated only with antibodies.

The University of Queensland research lead Prof Guimaraes said that for the Translational Research Institute, the studies were "all about unlocking the power of immunotherapy".

# <u>IMMUTEP</u>

Immutep says it will present detailed results from the randomized cohort A of its TACTI-003 combination trial of efti and pembrolizumab for head and neck cancer.

Immutep said it would present 'a late-breaking abstract' of its phase IIb trial of efti for head and neck cancer at the European Society for Medical Oncology (ESMO) in September. Last year, the company said it had enrolled the 171-patient, Tacti-003, phase IIb trial of eftilagimod alpha, or efti, with the anti-programmed cell death-1 therapy pembrolizumab, marketed as Keytruda, for head and neck squamous cell carcinoma (BD: Nov 9, 2023) Earlier this year, the company said the trial showed efti with Keytruda led to "overall response rates that exceed Keytruda monotherapy" with 58 of 118 evaluable patients in cohort A, with PD-L1 expression, having a 32.8 percent overall response in the 60 patients treated with Keytruda alone. (BD: Jun 27, 2024).

Today, the company said the presentation was titled 'Primary Results from TACTI-003: A Randomized Phase IIb Trial Comparing Eftilagimod Alpha (soluble LAG-3) Plus Pembrolizumab Versus Pembrolizumab Alone in First-Line Recurrent or Metastatic Head and Neck Squamous Cell Carcinoma with CPS ≥1'.

Immutep fell half a cent or 1.4 percent to 35 cents with 3.1 million shares traded.

#### <u>INOVIQ</u>

Inoviq says further analysis shows its Neuro-Net is "effective in isolating brain-derived exosomes from blood samples of patients with Parkinson's disease".

Earlier this year, Inoviq said "its Neuro-Net technology could isolate brain-derived exosomes in Alzheimer's disease" (BD: Jun 12, 2024).

At that time, the company said Neuro-Net captured exosomes secreted from various brain cells and that exosomes provided a "'fingerprint' of the health or disease status of the parent cell and can cross the 'blood-brain barrier', making them promising candidates as diagnostics for neurological diseases".

Today, Inoviq said Neuro-Net could identify "a fingerprint of differentially expressed proteins compared to normal health individuals".

The company said Neuro-Net enriched "known protein biomarkers of neuro-degenerative diseases by five-to-eight-fold compared to measuring them directly from blood, greatly increasing the potential for earlier detection of the onset of Parkinson's disease".

Inoviq said analysis of Neuro-Net-captured exosomes was conducted by the Walter and Eliza Hall Institute of Medical Research and found more than 200 proteins that were either decreased or increased in Parkinson's disease patient, compared to healthy individuals. Inoviq chief executive officer Dr Leearne Hinch said Neuro-Net had been "validated to capture brain-derived exosomes and identify blood-based exosomal protein biomarkers in both Alzheimer's disease and Parkinson's disease".

"These biomarkers can be used to develop potential exosome-based blood tests for earlier detection and/or treatment selection of [Alzheimer's disease] and [Parkinson's disease]," Dr Hinch said. "The next milestones for Neuro-Net includes additional clinical validation data and collaborations with academia and industry in neurological diseases." Inoviq chair David Williams said Neuro-Net was "a next generation specialty product for isolation of brain-derived exosomes".

"Neuro-Net expands Inoviq's exosome capabilities and partnering opportunities to develop novel diagnostics for neurological conditions such as brain cancer, neuro-psychiatric disorders and neuro-degenerative diseases," Mr Williams said.

"Inoviq is engaging with academia, diagnostic and biopharma companies to use our Exo-Net and Neuro-Net products for developing early detection or companion diagnostic tests for cancer and neurological conditions," Mr Williams said.

Inoviq was up 2.5 cents or 4.5 percent to 58 cents.

#### NYRADA INC

Nyrada says its fourth of nine pre-clinical studies shows that NYR-BI03 is safe and welltolerated in a respiratory study of rats.

Earlier this year, Nyrada said two studies of NYR-BIO3 for brain injury had shown safety in-vitro, and "a significant neuro-protective signal", in mice (BD: Feb 28; July 16, 2024). Earlier this month, the company said it had completed its third pre-clinical study of NYR-BIO3 for brain injury, which supported its "safety and tolerability" (BD: Aug 6, 2024). Today, Nyrada said respiratory rate and other measures of respiratory function were evaluated and "dose-response relationships were identified to assess how different levels of exposure affect the respiratory system".

The company said the remaining studies, including in-vitro micro-nucleus, in-vivo micronucleus, a dog cardio-vascular safety study, 14-day dog toxicology and 14-day rat toxicology studies would be analysed and reported as they became available. Nyrada said it hoped to submit an ethics application for its first in-human trial this year.

Nyrada was up 0.3 cents or 5.45 percent to 5.8 cents with 3.5 million shares traded.

#### CURVEBEAM A.I.

The Philadelphia, Pennsylvania-based Arun and Susmita Singh say their 41,082,279 share-holding in Curvebeam has been diluted from 12.83 percent to 11.28 percent. Mr Singh is an executive director and head of the US division of Curvebeam as well as its chief operating and technology officer.

Last week, Curvebeam said it had raised \$7.9 million at 18 cents a share in a \$2.0 million placement and \$5.9 million one-for-six, institutional rights offer, with a further \$2.0 million placement and \$3.6 million retail rights offer to go (BD: Aug 14, 2024).

Curvebeam was up one cent or 5.4 percent to 19.5 cents.

#### RADIOPHARM THERANOSTICS

Radiopharm says it has appointed the New Jersey-based Dr Dimitris Voliotis as its chief medical officer.

Radiopharm said Dr Voliotis had been head of clinical development for Convergent Therapeutics and Zentalis Pharmaceuticals, had been oncology consultant for Magnesia Partners Consulting and spent 13 years "in a range of development roles" with Bayer AG and Eisai Inc.

The company said Dr Voliotis had "designed and executed multiple registrational [cancer] trials" as well as overseeing investigational new drug applications, resulting in approvals for four drugs in eight cancer indications.

According to his Linkedin page, Dr Voliotis' held a Doctor of Medicine from Germany's University of Cologne.

Radiopharm fell 0.3 cents or 7.9 percent to 3.5 cents with 4.1 million shares traded.

#### EPSILON HEALTHCARE

Epsilon says it has appointed accounting firm Ure Lynam and Co's Richard Legge as its company secretary, replacing Marcelo Mora, effective immediately. Epsilon was in a suspension and last traded at 2.4 cents.