

# INOVIQ TO WORK WITH PETER MAC TO VALIDATE CAR-EXOSOME THERAPY

- INOVIQ's CAR-exosome therapy in development to treat solid tumours
- Peter Mac engaged to undertake in vitro and in vivo studies to further validate INOVIQ's CAR-exosome therapy for TNBC
- Master Services Agreement executed to enable multiple projects under Statements of Work

INOVIQ Limited (ASX: IIQ) is pleased to announce that it has engaged the Peter MacCallum Cancer Centre (Peter Mac) to further the *in vitro* and *in vivo* validation of its CAR-exosome therapy to treat solid tumours.

INOVIQ has signed a Master Service Agreement (MSA) with Peter Mac to provide contract research services under separate Statements of Work (SOW) to undertake various *in vitro* and *in vivo* studies to support the development of INOVIQ's CAR exosome therapy.

SOW #1 involves *in vitro* studies to evaluate the tumour killing activity of CAR-T and CAR-NK derived exosomes in Triple Negative Breast Cancer (TNBC) cells. This work is expected to be completed in Q3 CY25. INOVIQ will pay agreed costs for the work undertaken and related reagent and consumable expenditure. Additional *in vivo* studies are planned under future SOWs to evaluate the safety, dosing and efficacy of CAR-exosomes in mouse models of TNBC. Initial *in vivo* studies are expected to be completed in Q4 CY25.

Professor Phillip K Darcy PhD, Co-leader of the Cancer Immunology program and Group Leader of the Cancer Immunotherapy Laboratory at the Peter MacCallum Cancer Centre and INOVIQ MSAB member said: "My team has expertise in the preclinical development and clinical translation of novel immunotherapies for cancer, including CAR-T therapies. CAR-exosomes are a next-gen acellular therapy with potential safety and efficacy advantages over cell therapies for treatment of solid tumours. My lab is excited to add our expertise and capabilities in immunotherapy to support the preclinical development of INOVIQ's CAR-exosome therapy for triple negative breast cancer."

**CEO Dr Leearne Hinch said:** "This collaboration with Professor Darcy and his team at the Cancer Immunotherapy Laboratory is an important step forward in our mission to revolutionize cancer treatment. Their cell therapy expertise and access to world-class infrastructure will accelerate the development of our CAR-exosome therapy for breast cancer. Achieving in vivo efficacy in a TNBC mouse model will be a major milestone for our CAR-exosome program, paving the way for formal Investigational New Drug (IND) enabling studies and bringing us closer to Phase I clinical studies."

INOVIQ will host an online Investor Briefing on our **CAR-exosome therapeutic program** at 2:00pm AEDT on Thursday, 3<sup>rd</sup> April 2025. Shareholders and potential investors can access the event via the registration link: <u>Investor Briefing Registration Link</u>.

- Overview of CAR-exosomes, how they work, their potential advantages over cell therapy, supporting data and our development plans by Prof Greg Rice
- Insights on the potential of CAR-exosomes by Advisory Board member Prof Phil Darcy
- Introduction to new CCO Dr Emma Ball
- Summary and Q&A

A link to the recorded briefing will be included on the company website via click here.



## INOVIQ

Authorised by the Company Secretary, Mark Edwards.

**Further Information** 

**Dr Leearne Hinch**Chief Executive Officer

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## **ABOUT INOVIQ LTD**

INOVIQ Ltd (ASX:IIQ) is a biotechnology company pioneering next-generation diagnostics and therapeutics for cancer. INOVIQ has commercialised its fast, efficient and scalable EXO-NET exosome isolation technology for biomarker discovery and diagnostics development, and the hTERT test as an adjunct test for bladder cancer. The company is advancing clinical-stage diagnostics for detection and monitoring of ovarian and breast cancers, and early-stage exosome therapeutics for solid tumours. For more information on INOVIQ, visit <a href="https://www.inovig.com">www.inovig.com</a>.

### ABOUT THE CANCER IMMUNOTHERAPY LABORATORY AT PETER MAC

The Cancer Immunotherapy Laboratory at the Peter MacCallum Cancer Centre is led by Professor Phillip K Darcy PhD FAHMS. The Darcy lab focuses on developing novel T cell-based immunotherapy approaches for cancer in preclinical mouse models and translating this into patients. Specifically, the lab is focused on the development of gene modified mouse and human T cells expressing chimeric antigen receptors (CARs) that can effectively target and eradicate cancer in mice. A Phase I clinical trial leading from this work was recently completed at the Peter MacCallum Cancer Centre in patients with acute myeloid leukaemia, which represented a first in Australia using this approach, with another trial using this approach underway in solid cancers. The laboratory is also focused on development of combined immune based therapies for cancer.

The Darcy laboratory is involved in developing novel strategies for effectively harnessing the immune system against cancer. The goal of the Darcy laboratory is to develop effective immunotherapies for cancer. There is considerable power in the many billions of circulating blood cells that comprise the immune system. One focus is to turn this disease-fighting capacity against cancer cells by using anticancer genes to endow immune cells with the ability to recognize and destroy tumour cells. Studies in the lab are divided into: (1) Strategies to enhance endogenous anti-tumour immunity, (2) Combination therapies, where gene-modified immune cells are combined with reagents to overcome the tumour induced immunosuppressive microenvironment to produce the optimal anti-tumour treatment, (3) Cell selection, in which the relative anti-tumour effect of different gene-modified immune cells are examined in vivo, and (4) Clinical translation, in which final preparations of genes and cells are made ready for use in clinical trials.

# ABOUT EXOSOMES AND INOVIQ'S CAR-EXOSOME THERAPEUTICS PROGRAM

Exosomes are small vesicles released by all cell types, including immune cells such as T-lymphocyte (T)-cells and Natural Killer (NK)-cells. INOVIQ's exosome therapeutics program utilises exosomes released from CAR-T and CAR-NK cells. CAR-T and CAR-NK cells are genetically engineered immune cells that express a chimeric antigen receptor (CAR). These receptors enable CAR-T/NK cells to specifically recognize and bind to cancer cells based on surface antigens and release their cytotoxic effects.

Exosomes released by CAR-T/NK cells (CAR-exosomes) have enormous potential as cell-free therapeutics, with potential manufacturing, safety and efficacy advantages over autologous cell



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therapies for the treatment of solid tumours. Utilising exosome producing cells that grow indefinitely (immortalised cells) are expected to improve manufacturing efficiency and lower therapy costs.

CAR-exosomes inherit the same tumour-targeting and cytotoxic capabilities of their parent CAR-T/NK cells, specifically targeting and killing cancer cells. Additionally, exosomes can be engineered and loaded with drug cargo, such as chemotherapeutics and RNA therapeutics to target and deliver effective treatments direct to target cells.

