

## INOVIQ'S CAR-EXOSOMES DELIVER POSITIVE *IN VIVO* EFFICACY AND SAFETY RESULTS IN BREAST CANCER

- **Superior Tumour Inhibition** – INOVIQ's CAR-NK-EV therapeutic candidate achieved 61.5% tumour reduction over 28 days, outperforming unmodified NK-EVs
- **100% Survival** – All mice treated with CAR-NK-EVs survived the study period, compared to 66.7% for controls
- **Excellent Safety Profile** – CAR-NK-EV treatment was well tolerated, with no observable adverse effects
- **Precision Targeting** – CAR-NK-EVs showed reduced non-specific liver accumulation
- **Valuable IP** – New patent application filed to protect INOVIQ's core CAR-EV technology

INOVIQ Limited (ASX: IIQ) (**INOVIQ** or the **Company**) is pleased to announce positive *in vivo* proof-of-concept (PoC) data demonstrating the therapeutic potential of its proprietary Epidermal Growth Factor Receptor (EGFR)-targeted chimeric antigen receptor (CAR)-Natural Killer (NK)-extracellular vesicles (EVs or exosomes) in a triple-negative breast cancer (TNBC) mouse model. These results highlight the promise of CAR-EVs as next-generation, off-the-shelf, cell-free therapeutics for hard-to-treat solid tumours and further validates INOVIQ's EXO-ACE™ manufacturing platform for large-scale production of therapeutic EVs.

The *in vivo* study, conducted by accredited CRO GemPharmatech Co Ltd, evaluated the efficacy, safety and biodistribution of INOVIQ's CAR-NK-EV candidate compared with unmodified NK-EVs (without tumour targeting CAR) and vehicle controls (n=6 per group).

Bioluminescence imaging over 28 days showed that CAR-NK-EVs achieved excellent antitumor efficacy, reducing tumour burden by 61.5% compared to 24.5% for unmodified NK-EVs ( $p < 0.05$ ). All mice treated with CAR-NK-EVs survived the 28-day study period (100%), versus 83.3% for unmodified NK-EVs and 66.7% for vehicle controls.

CAR-NK-EV treatment was well tolerated, with stable body weight and no observable adverse effects, supporting a favourable preliminary safety profile for repeat dosing. Biodistribution analysis showed significantly reduced non-specific liver accumulation of CAR-NK-EVs compared to unmodified NK-EVs ( $p < 0.05$ ), confirming superior tumour targeting specificity.

**INOVIQ CSO Professor Greg Rice commented:** *"This study provides robust proof-of-concept evidence supporting the therapeutic potential of our CAR-NK-EVs for precise targeting of EGFR-positive triple-negative breast cancer. Building on these findings, we will progress further preclinical work evaluating therapeutic dose, safety and manufacturing. These efforts are critical for clinical translation of our CAR-EV platform and advancing the field of exosome-based immunotherapy."*

**INOVIQ CEO Dr Leearne Hinch added:** *"These results validate our CAR-EV platform and demonstrate its potential to target and destroy solid tumours. The combination of potent anti-tumour activity, excellent safety, precision targeting and scalability positions our CAR-EV platform as a next-generation, off-the-shelf, cell-free therapeutic approach. We are accelerating preclinical and manufacturing development with additional data readouts expected in 2026, supporting our path toward first in human (FIH) studies in 2028 and value creation for patients, clinicians and shareholders."*

INOVIQ has filed a new provisional patent application covering innovations in precision CAR-targeting and EV purification, further strengthening our intellectual property portfolio and protecting our core CAR-EV technology.

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*Authorised for release by Company Secretary, Mark Edwards.*

## FURTHER INFORMATION

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## ABOUT INOVIQ LTD

INOVIQ Ltd (ASX: IIQ) is a leader in exosome technology advancing next-generation diagnostics and therapeutics that transform cancer care. Our product portfolio includes commercial-stage exosome isolation products, clinical-stage diagnostics for ovarian and breast cancers, and a cutting-edge preclinical CAR-exosome therapeutic program for solid tumours. INOVIQ is shaping the future of cancer detection and treatment to improve patient outcomes. For more information on INOVIQ, visit [www.inoviq.com](http://www.inoviq.com).

## INOVIQ'S CAR-EXOSOME THERAPEUTICS PROGRAM

**Exosomes** are nanoscale extracellular vesicles (EVs) secreted by cells that play key roles in intercellular communication, immune regulation and disease modulation.

INOVIQ's exosome therapeutics program harnesses exosomes released from chimeric antigen receptor (CAR)-engineered immune cells, such as T-lymphocytes and Natural Killer (NK) cells. Our **CAR-exosomes** (CAR-EVs) inherit the tumour-targeting specificity and cytotoxic functions of their parent CAR-T/NK cells, enabling selective recognition and destruction of cancer cells. CAR-EVs offer potential scalable manufacturing, safety, and efficacy advantages over autologous cell therapies for treating solid tumours.

INOVIQ is shaping the future of cancer care, targeting aggressive solid tumours with our off-the-shelf cell-free therapeutic platform. Our lead candidate is an Epidermal Growth Factor Receptor (**EGFR**)-targeted **CAR-NK exosome therapy** in preclinical development for **triple-negative breast cancer** (TNBC)—a highly aggressive subtype representing 10–20% of the over 2.3 million breast cancer cases worldwide. TNBC lacks common therapeutic targets (ER, PR, HER2<sup>1</sup>) and has limited treatment options, high recurrence and poor prognosis. INOVIQ's EGFR-CAR-NK-EVs aim to deliver targeted cancer-killing activity against EGFR-expressing TNBC and other solid tumours to improve treatment outcomes and survival.

<sup>1</sup> ER = Estrogen Receptor; PR = Progesterone Receptor; HER2 = Human Epidermal Growth Factor Receptor 2