

POSITIVE CAR-EXOSOME *IN VITRO* TUMOUR KILLING DEMONSTRATED IN OVARIAN CANCER CELLS

- INOVIQ's CAR-exosomes demonstrated strong *in vitro* tumour-killing activity in ovarian cancer cell lines
- CA125- and EGFR-targeting CAR-exosomes eliminated up to 90% of ovarian cancer cells within 48 hours
- Data reinforces potential of INOVIQ's off-the-shelf CAR-exosome platform for multiple hard-to-treat solid tumours including TNBC, NSCLC and ovarian cancer
- INOVIQ is progressing manufacturing readiness, including GMP cell sourcing, CDMO selection and CAR-exosome optimisation
- New dual-action CAR-exosomes data in TNBC cells expected Q4 CY2026

Melbourne, Australia, 25 June 2026: INOVIQ Limited (ASX:IIQ) (INOVIQ or the Company), a biotechnology company developing next-generation exosome-based diagnostics and therapeutics to improve cancer detection and treatment, is pleased to announce positive *in vitro* proof-of-concept (PoC) data demonstrating tumour killing activity by its CAR-exosome platform in ovarian cancer cell lines. These findings further support the potential of our CAR-exosomes as next-generation, off-the-shelf, cell-free therapeutics for hard-to-treat solid tumours.

The study evaluated the *in vitro* efficacy of INOVIQ's CAR-exosomes, derived from engineered immune cells, across three ovarian cancer cell lines. Results demonstrated rapid tumour cell killing, with CA125-targeting CAR-exosomes achieving more than 90% killing in OVCAR-3 and Caov-3 ovarian cell lines within 48 hours. In addition, EGFR-targeting CAR-exosomes eliminated over 80% of tumour cells in the same models. Encouragingly, in the highly aggressive and treatment resistant SK-OV-3 cell line, both CAR-exosome approaches achieved approximately 50% tumour cell killing (see Abstract).

These data reinforce the broad potential of INOVIQ's CAR-exosome platform, which has now demonstrated positive *In vitro* tumour killing activity across multiple hard-to-treat cancers, including triple negative breast cancer (TNBC), non-small cell lung cancer (NSCLC) and ovarian cancer.¹

CSO Dr Rebecca Lim commented: *"These positive ovarian cancer results further strengthen the evidence supporting the therapeutic potential of our CAR-exosome platform across multiple solid tumours. Importantly, we have now demonstrated tumour-killing activity in TNBC, NSCLC and ovarian cancer models using different tumour-targeting approaches. Our focus is now on advancing a differentiated next-generation CAR-exosome product with enhanced anti-tumour activity and scalable manufacturing capabilities to support progression toward first-in-human studies targeted for 2028. Unlike living cell therapies, CAR-exosomes are an off-the-shelf, cell-free therapeutic approach that may offer advantages in manufacturing, safety and tumour penetration, particularly in solid tumours where current cell therapies face significant challenges."*

CEO Dr Leearne Hinch added: *"Our CAR-exosome platform continues to generate promising preclinical proof-of-concept data across multiple tumour types, supporting its potential as an off-the-shelf, cell-free therapeutic platform for treatment of hard-to-treat solid tumours. These new CAR-exosome results, together with our EXO-OC™ blood test for the detection of ovarian cancer, reinforce INOVIQ's integrated approach to combining earlier ovarian cancer detection with more effective treatment to improve patient outcomes and help save women's lives."*

INOVIQ is advancing its CAR-exosome program through preclinical and manufacturing development activities to support future clinical trials. Following positive proof-of-concept data across TNBC, NSCLC and ovarian cancer models, the Company is advancing key workstreams including GMP-compliant cell sourcing, selection of manufacturing partners (CDMOs) and optimisation of next-generation dual-action CAR-exosomes designed to target tumour cells and overcome the hostile tumour microenvironment. New *in vitro* tumour-killing data from dual-action CAR-exosomes in TNBC is expected in Q4 CY2026.

Authorised for release by the INOVIQ Limited Board of Directors.

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.

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 is developing chimeric antigen receptor (CAR)-exosomes, a next-generation cell-free therapy derived from modified immune cells to target and kill solid tumours. **CAR-exosomes** inherit the tumour-targeting and cytotoxic capabilities of their parent cells with potential manufacturing, safety and efficacy advantages over autologous cell therapies. 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 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, HER2²) 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.

Ovarian cancer remains a major global health challenge, with more than 320,000 women diagnosed worldwide each year. Like TNBC, ovarian cancer is often aggressive and difficult to treat, particularly as most patients are diagnosed at a late stage when treatment options are limited. Current standard of care typically involves cytoreductive surgery followed by platinum-based chemotherapy, with selected patients receiving maintenance or targeted therapies. However, high rates of recurrence and treatment resistance continue to drive the need for new therapeutic approaches. INOVIQ's CA125- and EGFR-targeting CAR-exosomes are being developed to provide a targeted, off-the-shelf and cell-free approach to tumour killing in ovarian cancer.

ABSTRACT

Efficient and effective multi-antigen targeting of ovarian cancer cells by CAR-exosomes

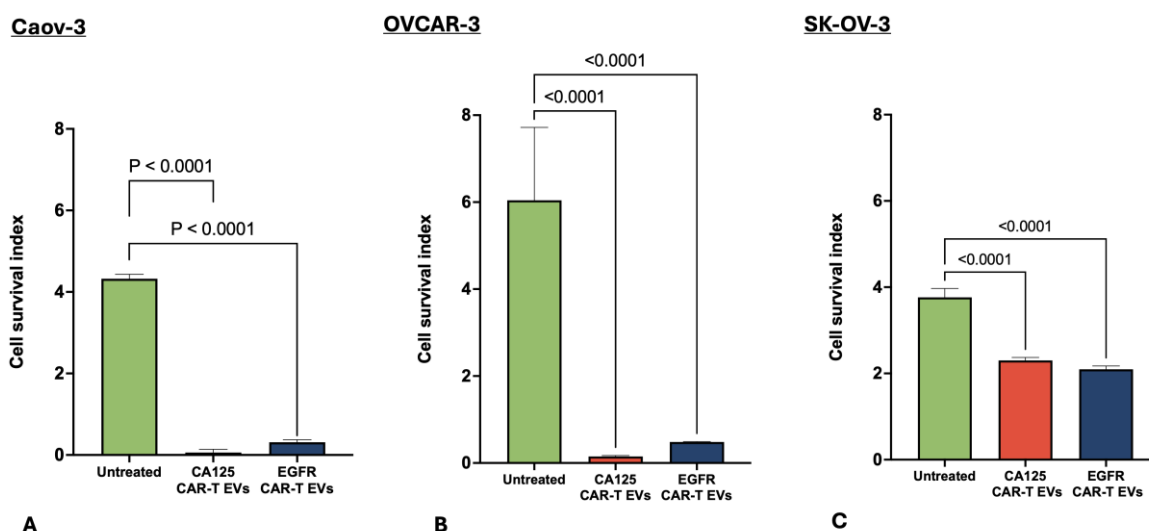
Study Objective: Evaluate the tumour killing potential of CA125- and EGFR-targeting CAR exosomes across three ovarian cancer cell lines that are commonly used in drug development. These included industry standard cell lines:

- OVCAR-3 and Caov-3 – Widely used cell line in drug development, derived from high-grade serous ovarian adenocarcinoma; and
- SK-OV-3 – Known for aggressive cancer behaviour and multidrug resistance.

Methods: CAR-exosomes were isolated from producer cell lines, quantified and characterised per standard IIQ methods. Cell banks of OVCAR-3, Caov-3 and SK-OV-3 were established, and ideal seeding densities were determined prior to commencing experiments. Each cell line was concurrently assessed for measurement of cell survival via xCELLigence, and tumour cell death was confirmed by Annexin/propidium iodide staining and flow cytometry. Ovarian cancer cell lines were either untreated or exposed to CAR-exosomes (2.5 million total particles per well) from producer cell lines that target either CA125 or EGFR. Statistical analysis was performed using Ordinary one-way ANOVA to compare differences between experimental groups within the same cell line. Experiments were performed in triplicate, and all effects were statistically significant.

Results: Following 48-hour exposure, CA125- and EGFR-targeting CAR-exosomes killed >90% of Caov-3 and OVCAR-3 cells (Figures A & B). In the more aggressive SK-OV-3 cell line (Figure C), both CA125- and EGFR-targeting CAR-exosomes were able to kill ~50% of the cancer cells *in vitro*. Across all cell lines, the CAR-exosomes outperformed unmodified EVs.

Conclusions: Targeting either CA125 or EGFR in Caov-3, OVCAR-3 and SK-OV-3 ovarian cancer cell lines resulted in similar killing in each cell line. It is encouraging that this was feasible in the aggressive SK-OV-3 cell line as well as the more commonly used Caov-3 and OVCAR cell lines. These results suggest that multi-targeting CAR-exosomes may address antigen heterogeneity and be feasible in highly aggressive cancers.



¹ CAR-Exosome PoC data (ASX 3/6/24, 16/12/24, 18/6/25, 22/9/25, 22/12/25)

² ER = Estrogen Receptor; PR = Progesterone Receptor; HER2 = Human Epidermal Growth Factor Receptor 2