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BREAKTHROUGH EXOSOME THERAPY TO TARGET AND KILL BREAST CANCER

INOVIQ Limited (ASX:IIQ or **INOVIQ**) is pleased to announce that it has successfully produced and isolated engineered exosomes (EEVs) that target and kill breast cancer cells *in vitro*.

In a proof-of-concept study, a breast cancer targeting protein (a chimeric antigen receptor, CAR) was expressed in exosomes released by immune cells. The modified exosomes were isolated and concentrated from immune cell-conditioned media using INOVIQ's proprietary EXO-ACE™ technology (ASX: 20/3/24). EXO-ACE recovered more than 80% of exosomes from cell-conditioned media with over 95% purity. When treated with these exosomes, 75% of breast cancer cells underwent cell death within 72 hours. Based on these excellent results, INOVIQ will now progress its exosome therapeutics program, initially focusing on immune-cell derived exosome therapeutics for metastatic breast and ovarian cancers.

Proof-of-concept data supporting INOVIQ's exosome therapeutic program is in summary:

- ✓ **Engineering of Chimeric Antigen Receptors for targeted delivery of therapeutic EEV to cancer cells**
- ✓ **Loading of tumour suppressing mRNA** into exosomes for delivery of RNA therapeutics
- ✓ **Isolation of CAR-exosomes** using proprietary large-scale EXO-ACE technology that delivered **over 80% recovery and 95% purity** of EEV
- ✓ **In vitro efficacy** showing over **75% breast cancer cell death** of CAR-exosome treated cells within 72 hours.

Additionally, exosomes can be engineered and loaded with drug cargo, such as RNA therapeutics, to target and deliver effective treatments for neurological diseases across the blood-brain barrier.

CEO Leearne Hinch said: *"INOVIQ has established core capabilities in-house to engineer, load and produce exosomes for therapeutic applications. These data highlight the potential of immune-cell derived exosomes as an effective cancer therapy and the potential for RNA drug-loaded exosome therapeutics. The Company is scaling its exosome production capacity using its EXO-ACE technology to isolate exosomes and advancing its immune cell-derived exosome program towards key preclinical in vitro and in vivo milestones for cancer starting in CY24. Preclinical in vivo data are expected to support discussions with pharmaceutical companies for potential partnered exosome therapeutic opportunities."*

Chairman David Willams said: *"Exosomes are small vesicles released by all cells, including immune cells such as T-cells and Natural Killer (NK)-cells. INOVIQ's exosome therapeutics program utilises exosomes released from CAR-T and CAR-NK cells (genetically engineered immune cells) that express a chimeric antigen receptor (CAR). These receptors enable CAR-T/NK cells to specifically recognise and bind to cancer cells and release their cytotoxic effects. Exosomes released by immune cells have enormous potential as off-the-shelf therapeutics, with potential manufacturing, safety and efficacy advantages over autologous (patient-derived) cell therapies for treatment of solid tumours. I see enormous potential in INOVIQ's exosome platform given its established best-in-class, revenue-generating research tools, exosome diagnostics pipeline for cancer screening and therapeutic selection and expansion into high-value exosome therapeutics for cancer."*

Authorised for release by the Company Secretary, Mark Edwards.

FURTHER INFORMATION

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ABOUT INOVIQ LTD

INOVIQ Ltd (ASX:IIQ) is a biotechnology company developing 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 www.inoviq.com.

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