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INOVIQ EXOSOME PLATFORM VALIDATED FOR PARKINSON'S DISEASE EV ISOLATION

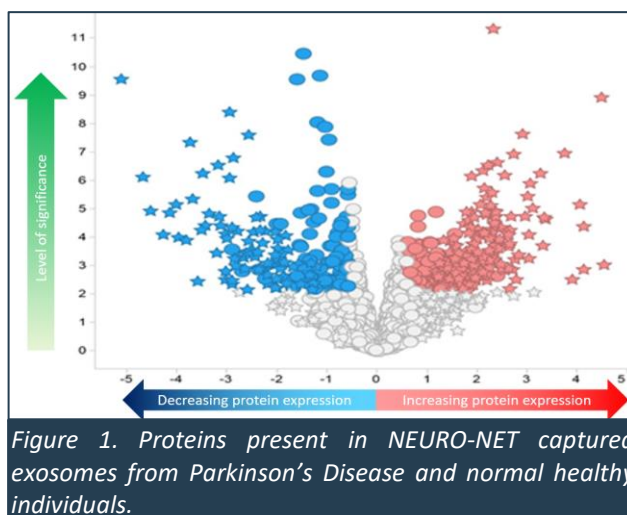
INOVIQ Limited (ASX:IIQ or **INOVIQ**) is pleased to announce that it has further validated its NEURO-NET™ technology for isolation of brain-derived exosomes in Parkinson's Disease (PD).

On June 24th this year, INOVIQ reported that its NEURO-NET product successfully isolated brain-derived exosomes from blood and identified a unique exosome protein fingerprint that differentiates Alzheimer's disease (AD) from normal healthy blood samples.

NEURO-NET has now been shown to be effective in isolating brain-derived exosomes from blood samples of patients with Parkinson's Disease and identifying a fingerprint of differentially expressed proteins compared to normal healthy individuals.

Initial analytical and clinical validation studies in PD showed:

- NEURO-NET enriches known protein biomarkers of neurodegenerative diseases by 5-8-fold compared to measuring them directly from blood, greatly increasing the potential for earlier detection of the onset of Parkinson's disease.
- Analysis of NEURO-NET-captured exosomes, conducted by the Walter & Elisa Hall Institute, identified more than 200 proteins that were either decreased (blue) or increased (red) in PD patients when compared to normal healthy individuals (Fig 1, 10 cases and 10 controls).



CEO Leearne Hinch said: "NEURO-NET has now 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 AD and PD. The next milestones for NEURO-NET include additional clinical validation data and collaborations with academia and industry in neurological diseases."

Chairman David Williams said: "NEURO-NET is 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, neuropsychiatric disorders and neurodegenerative diseases. 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."

Authorised for release by the Company Secretary, Mark Edwards.

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FURTHER INFORMATION

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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 www.inoviq.com.

ABOUT BRAIN-DERIVED EXOSOMES, APPLICATIONS AND NEURO-NET

Brain-derived exosomes are extracellular vesicles (EV) secreted by various cell types from the central nervous system such as neurons, microglia, oligodendrocytes and astrocytes. These exosomes carry nucleic acids, proteins and lipids from the parent cell that can play critical roles in intercellular communication, disease development and progression. Exosomes provide a “fingerprint” of the health or disease status of the cell or tissue of origin and can cross the “blood-brain barrier”, making them promising candidates for both diagnostic and therapeutic purposes. Potential **applications** for brain-derived exosomes include as **diagnostic tools** and **cell-free therapeutics** for *neuropsychiatric diseases, neurodegenerative conditions and brain cancer*.

NEURO-NET is a magnetic bead-based exosome isolation system designed using multiple antibodies to capture surface proteins found on brain-derived exosomes. NEURO-NET is suitable for isolation of exosomes from blood, saliva, cerebrospinal fluid and cell culture media. NEURO-NET has been initially validated to identify key differential biomarkers of both Alzheimer’s Disease and Parkinson’s Disease in plasma samples compared to normal healthy controls. Disease-induced changes in brain-derived exosome content may provide novel and informative biomarkers for early detection, prognosis and monitoring of neurological diseases.

ABOUT PARKINSON’S DISEASE

Parkinson’s disease is a progressive neurological disorder that primarily affects movement. Parkinson’s is the second most common neurodegenerative disorder and affected about 8.5 million people globally in 2019 according to The World Health Organization (WHO).¹ Diagnosis is based on medical history, motor-related symptoms and a neurological examination. There are currently no blood or laboratory tests to diagnose non-genetic cases of Parkinson’s. Novel and informative brain-derived exosomal biomarkers hold potential to develop blood-based tests for PD to aid earlier detection and treatment. There is currently no cure, but the most effective treatment for Parkinson’s is levodopa/carbidopa to manage symptoms.

¹ [Global Trends in the Incidence, Prevalence, and Years Lived With Disability of Parkinson's Disease in 204 Countries/Territories From 1990 to 2019 - PMC \(nih.gov\)](https://pubmed.ncbi.nlm.nih.gov/32111111/)