

MANUS NEURODYNAMICA LIMITED

£600k grant funding from Innovate UK

To validate the NeuroMotor Pen™ for screening of dementias and cognitive impairment

Edinburgh, UK – 20 April 2021: Manus Neurodynamica Limited (“Manus”), which develops and markets products and technologies for neuromotor assessment, has received £600,000 grant funding from Innovate UK, to optimise and validate the NeuroMotor Pen™ (NMP) for screening of dementias and cognitive impairment, over a two-year project.

Only around 68% of over 65s, estimated to have dementia have been diagnosed. Early identification can hugely increase the chance of maintaining functional abilities and defer the point of escalation, where additional care and support is required at home or in a care facility.

New screening technologies are required. It is increasingly recognised that Parkinson’s, and other movement disorders such as myoclonus, paratonia and dyskinesia occur frequently in Alzheimer’s dementia (AD). An easily performed objective test of fine motor skill could aid in the diagnosis and management of those with suspected or established dementia.

The NMP may provide this test. The handheld device with sensor technologies with decision support software enables users to non-invasively record and analyse parameters of minute limb and hand motion during drawing and writing movements. These parameters are used as ‘digital biomarkers’ to provide objective information about decline in cognition and motor skill with higher accuracy than clinical ratings scales with electronic record keeping.

Over two years, Manus will carry out the project to optimise and validate NMP for screening of dementias. The main objectives cover a breadth of areas, from fine tuning existing signal processing algorithms to extract digital biomarkers for AD, to completing clinical validation in 200 patients with early AD. The project will also span data pipeline optimisation, inclusion of other clinical data points and rating scales for integration with NMP biomarkers, along with preparing for clinical deployment and creating budget impact analysis of NMP implementation in the early identification of AD.

Finally, the project will engage with 100 citizens living with AD and their supporters to determine the usability and acceptability of NMP in the referral and differential diagnosis of dementia and its management and its suitability for remote assessment.

This anticipated project output will be a validated triage test in primary care that is low cost and easy to use and designed to scale.

Dr Rutger Zietsma, CEO of Manus commented: *“We are extremely pleased to be working at the forefront of this technology, aiming to provide results at primary care level, to help streamline the care pathway and ensure all patients will receive a timely diagnosis and supported earlier to develop long term cognition and positive mental habits. This two-year project will help determine and validate the NMP for screening of dementias, as we set to roll-out our NMP later this year, initially applied in diagnosing Parkinson’s in the UK and Benelux markets, while also progressing work to secure regulatory approval to start selling in US.”*

Enquiries:

Manus Neurodynamica Ltd

Dr Rutger Zietsma, Chief Executive Officer

0131 563 5465

r.c.zietsma@manusneuro.com

Walbrook PR (PR advisors to Manus) +44 20 7933 8780 or lifesciences@walbrookpr.com

Lianne Cawthorne / Anna Dunphy

+44 7584 391 303 / +44 7876 741 001

Notes to Editors

About Manus Neurodynamica - www.manusneuro.com

Dr Rutger Zietsma founded Manus in August 2008. The Company's main activity is designing, patenting and marketing innovative technologies used in medical devices and personal care products which have the capability to improve people's health and wellbeing. The Company implements quality procedures to medical standards.

Its principal product is a sensory pen designed for use in the diagnosis and monitoring of neuromotor impairments. The pen particularly focuses on patients with Parkinson's disease and uses limb and hand motion to diagnose patients quickly and non-invasively. It has applications across not just diagnosis but also screening, monitoring, rehabilitation and drug development for a number of different movement disorders.

About NeuroMotor Pen™

NeuroMotor Pen™ (NMP) is a unique, patented and CE-marked system that combines sensor technologies built into a digital pen with software and an analytical engine with Decision Support System. The interface enables users to record non-invasively and analyse parameters of minute limb and hand motion. This enables quantification of fine motor skill. These parameters are used as 'digital biomarkers' to provide objective information about movement abnormalities. NMP can be used to support diagnosis and monitoring of Parkinson's Disease and other neuromotor impairments. It has the potential to be a quick, inexpensive, non-invasive, and objective aid to diagnosis that can provide a low cost alternative to brain scans.