Collaboration with World-class Teams at Walter Reed & UNSW Extended to 2025

- Collaboration with the Walter Reed Army Institute of Research (**WRAIR**) and UNSW Sydney (**UNSW**) extended from February 2023 through to January 2025
- World-leading scientific teams to evaluate the efficacy of Nyrada's brain injury drug candidate to reduce secondary brain damage following a traumatic brain injury (**TBI**)
- ~5.5 million people suffer a severe TBI each year[1], making TBI a serious and life-threatening condition with significant unmet clinical need
- Collaboration aligns with WRAIR's mission to develop ground-breaking solutions to mitigate the impact of TBIs which affect 1 in 25 US military service members

Sydney, 18 January 2023: Nyrada Inc (ASX: NYR), a preclinical stage, drug development company specialising in novel small molecule drugs to treat cardiovascular and neurological diseases, is pleased to announce a two-year extension to the collaboration between Nyrada, WRAIR and UNSW, to January 2025.

Amendments to the Collaborative Research and Development Agreement between the parties (**Revised CRADA**) will enable testing of Nyrada's brain injury drug candidate in a rodent model of penetrating traumatic brain injury, (**PTBI**) which mimics the serious head injuries suffered by military service members. The study will measure the degree to which intravenous administration of Nyrada's drug leads to a reduction in injury size following a PTBI.

This work builds on the studies already completed under the existing CRADA, which included an extensive pilot study run by WRAIR and UNSW to elucidate the most suitable model for testing Nyrada's brain injury drug.

By utilising a specialised MRI technique called fractional anisotropy (**FA**), the team at UNSW were able to quantify the sizes of the primary and secondary injury volumes in the WRAIR PTBI and controlled cortical impact (**CCI**) models. It was determined that the PTBI model was more consistent in producing a quantifiable secondary injury measurement compared to the CCI model using the FA method of assessment.

[1] National Academies of Sciences, Engineering, and Medicine 2022. Traumatic Brain Injury: A Roadmap for Accelerating Progress. Washington, DC: The National Academies Press

This data formed the basis of the design for the TBI efficacy study and informed on the number of animals required to appropriately power the efficacy study. Given the magnitude of the study design and the additional resources required to complete the efficacy study, it was necessary to extend the term of the CRADA.

Key Terms of the Revised CRADA:

- The TBI efficacy study will be undertaken in 1H CY2023 with the results expected in 2H CY2023.

- All work under the existing CRADA has been completed as part of an in-kind non-financial arrangement between Nyrada and WRAIR. Pursuant to the terms of the Revised CRADA, Nyrada will provide WRAIR with sufficient drug quantities to complete the study, and US$150,000 to cover key costs associated with the work. In exchange, the studies will be undertaken by WRAIR personnel at WRAIR's specialist TBI research facility in the US.

- WRAIR and Nyrada will continue to work together to pursue non-dilutive funding opportunities to further progress the Company's Brain Injury Program.

"Military service members continue to be impacted by TBI and WRAIR remains focused on discovering drug treatments with the potential to minimise secondary brain damage following TBI. The extension of WRAIR's collaboration with Nyrada and UNSW will enable the continuation of this invaluable work," **said Dr Deborah Shear, Director of the Brain Trauma Neuroprotection Branch of WRAIR.**

"We have strong relationships with the teams at WRAIR and UNSW and are delighted to continue our work together in advancing the development of Nyrada's brain injury drug candidate as a possible treatment for TBI, that can be administered in the days following injury. This is an exciting time for the Company with our Phase I study to start in the first half of this year," **said Nyrada CEO, James Bonnar.**

TBI affects 2.8 million people in the US each year.[2] Globally, it is estimated that 55 million people are living with the effects of medically treated TBI.[1]

For military service members, TBI is typically caused in combat by blast and penetrating ballistic (bullets and shrapnel) injuries. Over 200,000 service members in the US military (over 4.2% or 1 in 25 of all service members) were diagnosed with TBI between 2000 and 2011. In the wider community, TBIs are predominantly caused by a fall, or a motor vehicle accident. Crucially, no treatments exist for TBIs beyond neurosurgery and physical rehabilitation. TBI is a serious and life-threatening condition that represents significant unmet clinical need.

[2] Brain Injury Alliance (Connecticut): https://biact.org/understanding-brain-injury/facts-statistics/

Nyrada recently revealed the biological target of its Brain Injury Program as a class of proteins known as the "Canonical" Transient Receptor Potential, or TRPC ion channels. Nyrada's brain injury drug candidate is a potent blocker of three subtypes of the channel – TRPC3, TRPC6 and TRPC7, which are present in high levels in brain tissue. By targeting these channels, Nyrada's brain injury drug candidate is able to interrupt the sustained entry of calcium into the cells and thereby reduce secondary brain injury.

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About the Walter Reed Army Institute of Research (WRAIR)

The Brain Trauma Neuroprotection (BTN) Branch is part of the Center for Military Psychiatry and Neuroscience at WRAIR. The primary mission of the BTN program is to develop ground-breaking solutions to mitigate the effects of TBI at the point of injury to reduce morbidity and mortality. Providing field-based options for diagnostics, preventive strategies, and treatments are critical to Soldiers. Since 1893, the Walter Reed Army Institute of Research (WRAIR) has been a leader in solving the most significant threats to Soldier readiness and lethality such as disease and battle injury. WRAIR's broad research capabilities at its Washington, D.C., area and expeditionary laboratories function in concert to afford Soldiers the best medical protection and support possible before, during, and after deployment by addressing both longstanding and emerging threats. Though WRAIR's research is focused on Soldier health, its products have important civilian applications, saving countless lives around the world.

About the Translational Neuroscience Facility

The Translational Neuroscience Facility (TNF) is a core neuroscience research platform in the School of Biomedical Sciences, Faculty of Medicine & Health at UNSW. The TNF broadly supports neuroscience research and advanced translational research training directed towards the treatment of neurological disorders.

About Nyrada Inc

Nyrada is a preclinical stage, drug discovery and development company, specialising in novel small molecule drugs to treat cardiovascular and neurological diseases. The Company has two main programs, each targeting market sectors of significant size and considerable unmet clinical need. These are a cholesterol lowering drug and a drug to treat brain injury, specifically traumatic brain injury and stroke. Nyrada Inc. ARBN 625 401 818 is a company incorporated in the state of Delaware, USA, and the liability of its stockholders is limited.

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Forward-Looking Statements

This announcement may contain forward-looking statements. You can identify these statements by the fact they use words such as “aim”, “anticipate”, “assume”, “believe”, “continue”, “could”, “estimate”, “expect”, “intend”, “may”, “plan”, “predict”, “project”, “plan”, “should”, “target”, “will” or “would” or the negative of such terms or other similar expressions. Forward-looking statements are based on estimates, projections, and assumptions made by Nyrada about circumstances and events that have not yet taken place. Although Nyrada believes the forward-looking statements to be reasonable, they are not certain. Forward-looking statements involve known and unknown risks, uncertainties, and other factors that are in some cases beyond the Company’s control (including but not limited to the COVID-19 pandemic) that could cause the actual results, performance, or achievements to differ materially from those expressed or implied by the forward-looking statement.