Alterity Therapeutics Announces Presentation of Data from the bioMUSE Natural History Study at the American Autonomic Society Annual Meeting

MELBOURNE, AUSTRALIA AND SAN FRANCISCO, USA – 7 November 2022: Alterity Therapeutics (ASX: ATH, NASDAQ: ATHE) ("Alterity" or "the Company"), a biotechnology company dedicated to developing disease modifying treatments for neurodegenerative diseases, today announced a poster presentation from the ongoing Biomarkers of Progression in Multiple System Atrophy (bioMUSE) natural history study was given at the American Autonomic Society (AAS) 2022 Annual Conference held November 2-5, 2022.

Multiple System Atrophy (MSA) is a progressive neurodegenerative disease that presents with motor and prominent autonomic symptoms. Major sources of disability in MSA result from motor symptoms characteristic of Parkinson's disease and impaired ability to maintain normal blood pressure, bowel function and bladder control. Problems with urination are a common symptom experienced in MSA and can occur at any time during the disease process. The poster, entitled, *Urinary Symptom Profile in Early Multiple System Atrophy*, evaluates for the first time patient reported urinary symptoms utilizing the Urinary Symptom Profile (USP) in early MSA. The USP is a questionnaire that comprehensively assesses stress incontinence, overactive bladder, and urinary obstruction signs and their severity.

"It is important to characterize the impact of urinary symptoms in early MSA, as they can have a profound negative impact on quality of life, even at this stage of illness," said David Stamler, M.D., Chief Executive Officer, Alterity. "The USP is a validated rating scale, and the study results suggest that the USP can be used for comprehensive evaluation of urinary complaints in a group of patients similar to those we are studying in Phase 2. BioMuse continues to generate important insights on the symptoms and challenges faced in MSA."

For the study, the USP was applied to a cohort of early MSA participants (n=16). In addition to completing the USP questionnaire, all participants completed a neurologic examination and were assessed using rating scales for MSA. The USP score was then correlated with the rating scales. In early MSA, the most severe urinary symptoms observed were an overactive bladder, specifically urgency and frequency.

About ATH434

Alterity's lead candidate, ATH434, is an oral agent designed to inhibit the aggregation of pathological proteins implicated in neurodegeneration. ATH434 has been shown preclinically to reduce α-synuclein pathology and preserve nerve cells by restoring normal iron balance in the brain. As an iron chaperone, it has excellent potential to treat Parkinson's disease as well as various Parkinsonian disorders such as Multiple System Atrophy (MSA). ATH434 successfully completed Phase 1 studies demonstrating the agent is well tolerated and achieved brain levels

comparable to efficacious levels in animal models of MSA. ATH434 has been granted Orphan designation for the treatment of MSA by the U.S. FDA and the European Commission.

About bioMUSE

Biomarkers of progression in Multiple System Atrophy (bioMUSE) is an ongoing, natural history study that aims to track the progression of individuals with MSA, a Parkinsonian disorder without approved therapy. The study is being conducted in collaboration with Vanderbilt University Medical Center in the U.S. under the direction of Daniel Claassen, MD, Associate Professor of Neurology and Principal Investigator. Natural history studies are important for characterizing disease progression in selected patient populations. The study has provided rich data for optimizing the design of Alterity's Phase 2 clinical trial and will be expanded to include a total of 20 individuals with MSA. The ongoing study will continue to provide vital information on early stage MSA individuals, inform the selection of biomarkers suitable to evaluate target engagement and preliminary efficacy, and deliver clinical data to characterize disease progression in a population that mirrors those to be enrolled in the Phase 2 clinical trial.

About Multiple System Atrophy

Multiple System Atrophy (MSA) is a rare, neurodegenerative disease characterized by failure of the autonomic nervous system and impaired movement. The symptoms reflect the progressive loss of function and death of different types of nerve cells in the brain and spinal cord. It is a rapidly progressive disease and causes profound disability. MSA is a Parkinsonian disorder characterized by a variable combination of slowed movement and/or rigidity, autonomic instability that affects involuntary functions such as blood pressure maintenance and bladder control, and impaired balance and/or coordination that predisposes to falls. A pathological hallmark of MSA is the accumulation of the protein α-synuclein within glia, the support cells of the central nervous system, and neuron loss in multiple brain regions. MSA affects approximately 15,000 individuals in the U.S., and while some of the symptoms of MSA can be treated with medications, currently there are no drugs that are able to slow disease progression and there is no cure.[1]

[1]National Institute of Health: Neurological Disorders and Stroke, Multiple System Atrophy Fact Sheet

About Alterity Therapeutics Limited

Alterity Therapeutics is a clinical stage biotechnology company dedicated to creating an alternate future for people living with neurodegenerative diseases. The Company's lead asset, ATH434, has the potential to treat various Parkinsonian disorders. Alterity also has a broad drug discovery platform generating patentable chemical compounds to intercede in disease processes. The Company is based in Melbourne, Australia, and San Francisco, California, USA. For further information please visit the Company's web site at www.alteritytherapeutics.com.

Authorisation & Additional information

This announcement was authorized by David Stamler, CEO of Alterity Therapeutics Limited.

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Forward Looking Statements

This press release contains "forward-looking statements" within the meaning of section 27A of the Securities Act of 1933 and section 21E of the Securities Exchange Act of 1934. The Company has tried to identify such forward-looking statements by use of such words as "expects," "intends," "hopes," "anticipates," "believes," "could," "may," "evidences" and "estimates," and other similar expressions, but these words are not the exclusive means of identifying such statements.

Important factors that could cause actual results to differ materially from those indicated by such forward-looking statements are described in the sections titled "Risk Factors" in the Company's filings with the SEC, including its most recent Annual Report on Form 20-F as well as reports on Form 6-K, including, but not limited to the following: statements relating to the Company's drug development program, including, but not limited to the initiation, progress and outcomes of clinical trials of the Company's drug development program, including, but not limited to, ATH434, and any other statements that are not historical facts. Such statements involve risks and uncertainties, including, but not limited to, those risks and uncertainties relating to the difficulties or delays in financing, development, testing, regulatory approval, production and marketing of the Company's drug components, including, but not limited to, ATH434, uncertainties relating to the impact of the novel coronavirus (COVID-19) pandemic on the company's business, operations and employees, the ability of the Company to procure additional future sources of financing, unexpected adverse side effects or inadequate therapeutic efficacy of the Company's drug compounds, including, but not limited to, ATH434, that could slow or prevent products coming to market, the uncertainty of obtaining patent protection for the Company's intellectual property or trade secrets, the uncertainty of successfully enforcing the Company's patent rights and the uncertainty of the Company freedom to operate.

Any forward-looking statement made by us in this press release is based only on information currently available to us and speaks only as of the date on which it is made. We undertake no obligation to publicly update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.