Alterity Therapeutics Presents New Analysis of ATH434 Phase 2 Trial Data in Late Breaking Science Session of the American Academy of Neurology

- ATH434 reduced functional decline vs placebo at Week 52 on MuSyCA, a newly described MSA composite scale -

- Effects seen on both daily function and neurological examination, consistent with previously reported activity on modified UMSARS Part I -

- Presentation reinforces ATH434's clinical profile ahead of Phase 3 engagement with regulators -

MELBOURNE, AUSTRALIA AND SAN FRANCISCO, USA – 22 April 2026: Alterity Therapeutics (ASX: ATH, NASDAQ: ATHE) ("Alterity" or "the Company"), a biotechnology company dedicated to developing disease modifying treatments for neurodegenerative diseases, today announced the presentation of new data analyses from the Phase 2 trial of ATH434, demonstrating clinical efficacy in patients with Multiple System Atrophy (MSA). The analysis was delivered in an oral presentation during a Late Breaking Science Session at the American Academy of Neurology (AAN) Annual Meeting taking place in Chicago, IL, USA.

The presentation, entitled, "ATH434 Demonstrates Disease-Modifying Signal in Multiple System Atrophy Using the MuSyCA Composite Scale," described an analysis from the ATH434-201 Phase 2 clinical trial in MSA utilizing the MSA Combined Outcome Assessment (MuSyCA). The MuSyCA is a newly developed scale that includes 11 items from both the UMSARS[1] I (activities of daily living/functional assessment) and UMSARS II (motor exam) with highest standardized effect sizes across four MSA cohorts and is intended to improve detection of disease progression in clinical trials.[2]

Assessment of the ATH434-201 trial showed meaningful results utilizing MuSyCA. MuSyCA demonstrated robust sensitivity to disease progression with placebo participants worsening by approximately +9.7 points over 52 weeks, confirming the scale is sensitive to change over the study period. Consistent with prior data, ATH434 slowed disease progression on the MuSyCA assessment with a treatment effect of −1.9 (75 mg dose) to −4.0 points (50 mg dose, p=0.034, relative treatment effect 41%) at Week 52. In contrast, when utilizing a MMRM[3] statistical analysis, ATH434 slowed disease progression on the modified UMSARS I versus placebo by -3.1 points at 75 mg (relative treatment effect of 35%) and -4.7 points at 50 mg (relative treatment effect of 53%, p=0.029).

David Stamler, M.D., Chief Executive Officer of Alterity, commented, "In this rapidly progressive disease, ATH434 shows consistent evidence of efficacy by slowing functional decline on the newly

described MuSyCA scale, which reinforces the efficacy observed on the established UMSARS Part I scale. In aggregate, these data reinforce the potential of ATH434 as a disease-modifying therapy for MSA."

MuSyCA represents a new framework for MSA outcome assessment by integrating patient-reported function with clinical assessment, with a pathway to incorporate neurofilament light chain (NfL), imaging, and objective performance tests as a comprehensive platform for detecting clinically meaningful changes over time. It is being developed by the NIH-funded "Clinical Trial Readiness for MSA Study Group" in a collaborative effort with four academic centers in the US and Europe, patient advocacy groups, and pharmaceutical companies.

The presentation and poster are available on the Alterity Therapeutics website here.

About ATH434

Alterity's lead candidate, ATH434, is an oral agent designed to reduce iron accumulation and inhibit abnormal protein aggregation associated with neurodegeneration. ATH434 has been shown to reduce α-synuclein pathology and preserve neuronal function by restoring normal iron balance in the brain in preclinical models. 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). Positive results from the randomized, double-blind, placebo-controlled Phase 2 clinical trial in patients with MSA demonstrated robust clinical efficacy, target engagement as indicated by key biomarkers, and a favorable safety profile. Positive data from a second Phase 2 open-label biomarker trial in patients with more advanced MSA reinforced these results. ATH434 has been granted Fast Track Designation by the U.S. Food and Drug Administration (FDA), and Orphan Drug Designation by the FDA and the European Commission for the treatment of MSA.

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 up to 50,000 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.[4]

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 is focused on developing disease modifying therapies in Multiple System Atrophy (MSA) and related Parkinsonian disorders. Alterity is preparing to initiate a Phase 3 pivotal trial in MSA, a rare and rapidly progressive disease. ATH434, the Company's lead asset, has demonstrated clinically meaningful efficacy in a randomized, double-blind, placebo-controlled Phase 2 clinical trial in participants with MSA. Alterity has further reported positive data in its open label Phase 2 clinical trial in participants with advanced MSA. In addition, Alterity has a broad drug discovery platform generating patentable chemical compounds to treat the underlying pathology of neurological diseases. The Company is based in Melbourne, Australia, and San Francisco, California, USA. For further information please visit the Company's website at https://alteritytx.com.

References:

[1] UMSARS: Unified Multiple System Atrophy Rating Scale, Parts I & II

[2] For the MuSyCa MSA Combined Outcome assessment: UMSARS I items were swallowing, handwriting, utensils, dressing, hygiene, walking; UMSARS I items were speech, leg agility, arising from chair, body sway, gait

[3] Mixed Models for Repeated Measures (MMRM) with fixed effects for treatment group (3 levels), visit (4 levels), treatment visit interaction, and sex. Covariates: age, baseline CSF NfL, baseline orthostatic hypotension, baseline outcome score. Unstructured covariance; missing data not imputed (mITT).

[4] Multiple System Atrophy | National Institute of Neurological Disorders and Stroke (nih.gov)

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, 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.