

New data independently confirms and extends laboratory findings and expands safety profile of ATH434

MELBOURNE, AUSTRALIA AND SAN FRANCISCO, USA – 4th August 2020: Alterity Therapeutics (ASX: ATH, NASDAQ: ATHE) ("Alterity" or "the Company") today announced that new clinical and experimental pharmacology data for its lead drug candidate ATH434 (formerly PBT434) has been selected for presentation at the 2020 International Congress of Parkinson's Disease and Movement Disorders (MDS 2020) and the American Neurological Association's 2020 Annual Meeting (ANA 2020).

New animal data from the laboratory of Dr. Nadia Stefanova, Professor of Translational Neurodegeneration Research at the Medical University of Innsbruck, will be presented at ANA 2020. The new data, from an experiment testing ATH434 in an animal model of Multiple System Atrophy (MSA), independently confirm and extend previous findings demonstrating that ATH434 reduces α -synuclein pathology, preserves neurons, and improves motor performance.

ATH434, which is an orally bioavailable, brain penetrant, small molecule inhibitor of α -synuclein aggregation, is being developed for the treatment of MSA, a Parkinsonian disorder. Alpha-synuclein aggregation is implicated in the pathology of MSA and Parkinson's disease.

Professor Gregor Wenning, Chair of the Division of Neurobiology at Medical University of Innsbruck and Co-Founding Director of the European MSA Study Group, said: "There is a great need for new treatments of this devastating condition. The exceptional work from Dr. Stefanova's team demonstrates the effectiveness of ATH434 in a disease-predictive animal model. I look forward to the continued progress of ATH434 into patient studies."

Alterity will also present cardiac safety data from its Phase 1 Study of ATH434, marking the first time such information will be shared with an international group of clinicians and researchers in the field of neurological disorders. The new safety data, which focuses on evaluating electrical activity in the heart as measured by the QT interval, reinforces previous safety findings from the Phase 1 clinical study – namely, that ATH434 was generally well tolerated at all doses and had an adverse event profile comparable to placebo in adult and older adult volunteers. The data to be presented indicates that there is no evidence of cardiac liability at clinically tested doses.

Alterity's Chief Medical Officer, Dr David Stamler, said: "Drug-induced QT prolongation can pose a significant risk for patients, so a clean bill of health on this safety measure is important as we advance to Phase 2. In searching for new treatments to modify disease progression, we need to develop agents that are as safe as possible."

When paired with favorable pharmacokinetic and safety data previously reported, the new animal and clinical data support the continued development of ATH434 for MSA. The company announced last month that following discussion with the US Food and Drug Administration, it had established a development pathway for ATH434 in MSA and is intending to pursue a global development strategy.

Due to global restrictions in the wake of COVID-19, this year both conferences will be held in a virtual format with MDS 2020 being held 12-16th September, and ANA 2020 to be held 4-9th October.

Authorization & Additional information

This announcement was authorized by Geoffrey Kempler, CEO and Chairman of Alterity Therapeutics Limited.

Contact:

Investor Relations

Rebecca Wilson, WE Communications E: WE-AUAlterity@we-worldwide.com Tp: +61 3 8866 1216

About Alterity Therapeutics Limited and ATH434

Alterity's lead candidate, ATH434 (formerly PBT434), is the first of a new generation of small molecules designed to inhibit the aggregation of pathological proteins implicated in neurodegeneration. ATH434 has been shown to reduce abnormal accumulation of α -synuclein and tau proteins in animal models of disease by redistributing labile iron in the brain. In this way, it has potential to treat Parkinson's disease and atypical forms of Parkinsonism such as Multiple System Atrophy (MSA) and Progressive Supranuclear Palsy (PSP).

ATH434 has been granted Orphan designation for the treatment of MSA by the US FDA and the European Commission.

For further information please visit the Company's web site at <u>www.alteritytherapeutics.com</u>.

About Multiple System Atrophy

Multiple System Atrophy (MSA) is a rare and rapidly progressive neurological disorder affecting adults. It has no known cause. In addition to presenting with motor symptoms like those in Parkinson's disease, individuals with MSA may also experience loss of ability to coordinate voluntary movements and impaired regulation of involuntary body functions such as blood pressure, bowel and bladder control. Most of these symptoms are not addressed by available drugs for patients with Parkinson's disease. As the condition progresses, daily activities become increasingly difficult and complications such as increased difficulty swallowing, vocal cord paralysis, progressive immobility, and poor balance become more prominent. Symptoms tend to appear after age 50 and rapidly advance, leading to profound disability.

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 (formerly PBT434), 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 patent protection for the Company's intellectual property or trade secrets, including, but not limited to, the intellectual property relating to ATH434.

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 updated 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.