ATH434 protects brain cells and improves motor function in Parkinsonian disorder

Oral presentation at the American Academy of Neurology

MELBOURNE, AUSTRALIA AND SAN FRANCISCO, USA – 21st April 2021: Alterity Therapeutics (ASX: ATH, NASDAQ: ATHE) ("Alterity" or "the Company") today announced an oral presentation of expanded animal data to support the commercialisation of its lead compound ATH434 in clinical development for the treatment of Parkinsonian disorders, at the American Academy of Neurology (AAN) virtual annual meeting.

The AAN conference, held this week, is the world's preeminent clinical and scientific conference in the neurology space. The presentation titled *ATH434 Preserves Dopaminergic Neurons, Reduces α-synuclein Oligomerization, and Improves Motor Function in a Transgenic Murine Multiple System Atrophy Model* [1] will be delivered on 21st April.

The data to be presented further strengthens the evidence that ATH434 is neuroprotective in brain regions implicated in Parkinsonian disorders. The data, from 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 function. The new data indicate that ATH434 preserves neurons not only in the substantia nigra, a main area of pathology in Parkinson's disease, but also in the striatum, a region of the brain that integrates information from the cortex and substantia nigra to achieve fine motor control. Impaired motor performance is a cardinal symptom of Parkinsonian disorders.

Alterity's Chief Executive Officer, Dr David Stamler, said: "These new data are very encouraging and provide a strong rationale for the disease-modifying potential of ATH434."

The improvement in motor performance associated with ATH434 was shown on a task that is specifically designed to assess coordination and balance in animals. The establishment of a clear correlation between the preservation of neurons and motor performance with ATH434 is a significant advance and provides important further data to support clinical development.

The study also showed that ATH434 led to reductions in glial cell inclusions, comprised of aggregated α-synuclein, and in levels of the toxic form of α-synuclein, both of which are pathological features of MSA, Alterity's first clinical indication for ATH434.

The study was conducted independently in the laboratory of Dr. Nadia Stefanova, Professor of Translational Neurodegeneration Research at the Medical University of Innsbruck, and builds on extensive prior experience with animal models of Parkinson's disease and MSA from this prestigious research centre.

Dr Stamler continued: "We are pleased to see the exceptional work of Dr. Stefanova's team presented at this year's AAN Conference."

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[1] Authors: Antonio Heras-Garvin[1], Violetta Refolo[1], Margaret Bradbury[2], David Stamler[3], Nadia Stefanova[1]

Authorization & Additional information
This announcement was authorized by David Stamler, CEO of Alterity Therapeutics Limited.

Contact:
Investor Relations
Greig King, WE Communications
E: WE-AUAlterity@we-worldwide.com / info@alteritytherapeutics.com

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 website at www.alteritytherapeutics.com.

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, 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 thedifficulties 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 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.