



## AlzeCure gets late breaking abstract accepted on NeuroRestore's positive effect on mitochondrial function

AlzeCure Pharma AB (publ) (FN STO: ALZCUR), a pharmaceutical company that develops a broad portfolio of small molecule candidate drugs for diseases affecting the central nervous system, with projects in both Alzheimer's disease and pain, today announced that an abstract on its research platform NeuroRestore in mitochondrial function has been accepted for an oral presentation at AD/PD 2022, which this year will be held in Barcelona on March 15-20.

The poster, titled *A positive modulator of neurotrophin receptors improves cognition and mitochondrial function*, will be presented at the international conference on Alzheimer's and Parkinson's Diseases and related neurological disorders (AD/PD 2022) by Dr. Cristina Parrado-Fernández. Other authors include Dr. Johan Sandin, CSO at AlzeCure, Dr. Pontus Forsell, Head of Discovery and Dr. Gunnar Nordvall, Head of Chemistry.

The presentation includes study results demonstrating how the NeuroRestore compound, AC-0027136, was identified as a positive modulator of NGF/TrkA and BDNF/TrkB signaling in cell-based assays. New key preclinical data also demonstrate a dose-dependent positive effect of both neurotrophins and AC-0027136 on mitochondrial function. Furthermore, in vivo data showed that AC-0027136 can attenuate scopolamine-induced memory impairment subjects and significantly improve long-term memory in aged animals.

"Our findings demonstrate that AC-0027136 acts as a cognitive enhancer and also improves mitochondrial function, which could be of importance in neurodegenerative diseases characterized by reduced cognitive and mitochondrial function," said Johan Sandin, CSO at AlzeCure Pharma.

"It is very exciting to potentially broaden the scope for NeuroRestore to include the area of mitochondrial function, adding to cognition and Alzheimer's, which are areas with a great unmet medical need", said Martin Jönsson, CEO of AlzeCure Pharma AB.

The abstract and the poster will be available on AlzeCure's website after the presentation (https://www.alzecurepharma.se/en/publications).

For more information, please contact

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## About AlzeCure Pharma AB (publ)

AlzeCure® is a Swedish pharmaceutical company that develops new innovative drug therapies for the treatment of severe diseases and conditions that affect the central nervous system, such as Alzheimer's disease and pain – indications for which currently available treatment is very limited. The company is listed on Nasdaq First North Premier Growth Market and is developing several parallel drug candidates based on three research platforms: NeuroRestore®, Alzstatin® and Painless.

NeuroRestore consists of two symptomatic drug candidates where the unique mechanism of action allows for multiple indications, including Alzheimer's disease, as well as cognitive disorders associated with traumatic brain injury, sleep apnea and Parkinson's disease. The Alzstatin platform focuses on developing disease-modifying and preventive drug candidates for early treatment of Alzheimer's disease and comprises two drug candidates. Painless is the company's research platform in the field of pain and contains two projects: ACD440, which is a drug candidate in the clinical development phase for the treatment of neuropathic pain, and TrkA-NAM, which targets severe pain in conditions such as osteoarthritis. AlzeCure aims to pursue its own projects through preclinical research and development through an early clinical phase, and is continually working on business development to find suitable outlicensing solutions with other pharmaceutical companies.

FNCA Sweden AB, +46(0)8 528 00 399 **info@fnca.se**, is the company's Certified Adviser. For more information, please visit **www.alzecurepharma.se**.

## **About NeuroRestore**

NeuroRestore is a platform of symptom-relieving drug candidates for disease states in which cognitive ability is impaired, e.g. Alzheimer's Disease, sleep apnea, traumatic brain injury and Parkinson's disease. NeuroRestore stimulates several important signaling pathways in the brain, which among other things leads to improved cognition. In preclinical studies with NeuroRestore we have been able to show that our drug candidates enhance communication between the nerve cells and improve cognitive ability. NeuroRestore stimulates specific signaling pathways in the central nervous system known as neurotrophins, the most well-known being NGF (Nerve Growth Factor) and BDNF (Brain Derived Neurotrophic Factor). The levels of NGF and BDNF are disturbed in several disease states and the signaling is reduced. The impaired function impairs communication between the synapses, i.e. the contact surfaces of the nerve endings, as well as reducing the possibility of survival for the nerve cells, which gives rise to the cognitive impairments. Neurotrophins play a crucial role for the function of nerve cells, and a disturbed function of BDNF has a strong genetic link to impaired cognitive ability in several different diseases, such as Alzheimer's, Parkinson's disease, traumatic brain injury and sleep disorders. There is also a link between BDNF signaling and depression, something that has been further strengthened in recent years.

## About mitochondria

Mitochondria are membrane-bound cell organelles that generate most of the chemical energy needed to power the cell's biochemical reactions and therefore known as the "powerhouse" of the cell. Chemical energy produced by the mitochondria is stored in a small molecule called adenosine triphosphate (ATP). The most prominent roles of mitochondria are to produce the energy currency of the cell, ATP (i.e., phosphorylation of ADP), through respiration and to regulate cellular metabolism. Many neurodegenerative diseases, such as Alzheimer's disease, demonstrate abnormal mitochondrial morphology and biochemical dysfunction. Neurons are particularly dependent on mitochondria because of their high energy demands.



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