PRESS RELEASE
13 August 2024 08:00:00 CEST

New scientific article on NeuroRestore ACD856 and its improved cognition and disease modification of Alzheimer's disease

AlzeCure Pharma AB (publ) (FN STO: ALZCUR), a pharmaceutical company that develops candidate drugs for diseases affecting the nervous system, focusing on Alzheimer's disease and pain, today announced that a scientific article has been published on the underlying biological mechanisms behind the NeuroRestore platform and the interesting opportunities this entails in the further development of the clinical drug candidate ACD856.

The article, titled *Positive allosteric modulators of Trk-receptors for the treatment of Alzheimer's disease*, was published online in the journal Pharmaceuticals and was written by Pontus Forsell, PhD and Head of Discovery and Research at AlzeCure Pharma. Co-authors are Cristina Parrado Fernández, Boel Nilsson, Johan Sandin, Gunnar Nordvall and Märta Segerdahl.

The published review article focuses on describing the history, biology and concept behind the development of a new class of pharmaceutical substances, so-called positive allosteric modulators of Trk receptors (Trk-PAMs). Trk-PAMs are a class of drug substances being developed in parallel by AlzeCure and Eisai. Both companies have reported promising preclinical and clinical results. Several attempts to develop Trk-PAMs have been made in the past, but so far only AlzeCure and Eisai have identified good enough substances for clinical trials. ACD856 and the other Trk-PAM substances in the NeuroRestore platform stimulate several important signaling systems and signaling substances in the brain such as BDNF (Brain Derived Neurotrophic Factor) and NGF (Nerve Growth Factor), which can lead to improved cognition.

Previous preclinical studies have shown that AlzeCure's drug candidates strengthen communication between nerve cells and improve cognitive ability, including learning and memory functions. Preclinical results from AlzeCure also show neuroprotective, anti-inflammatory and disease-modifying effects in various models with Trk-PAM substances. The unique pharmacological mechanism of NeuroRestore also enables several indications, such as Alzheimer's and Parkinson's disease, but also depression. ACD856 is a first-in-class drug candidate for Alzheimer's disease and is now being prepared for upcoming phase II clinical studies in patients.

"The publication shows the exciting development possibilities for Trk-PAM substances such as ACD856, as well as the pharmacological mechanism behind them. With the positive Phase I clinical data we have previously obtained, we see very interesting further development paths for ACD856. Substances such as Trk-PAMs may well be a future complement to anti-amyloid treatments, such as Donanemab and Lecanemab, for patients with Alzheimer's disease," said Pontus Forsell, Head of Discovery and Research at AlzeCure Pharma.

"There is a great medical need for effective and safe treatments for Alzheimer's disease. The new data we have published over the past year supporting both memory-enhancing and disease-modifying effects show very exciting potential in our project ACD856 and strengthen our out-licensing opportunities," said Martin Jönsson, CEO of AlzeCure Pharma.

The article is now available online via the following link: **https://www.mdpi.com/2889430**

PRESS RELEASE
13 August 2024 08:00:00 CEST

For more information, please contact

Martin Jönsson, CEO
Tel: +46 707 86 94 43
martin.jonsson@alzecurepharma.com

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 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. Preclinical studies with NeuroRestore have shown that AlzeCure's drug candidates enhance communication between the nerve cells and improve cognitive ability. The NeuroRestore substances are so called Trk-PAMs which stimulate 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. In addition to cognitive-enhancing effects, new preclinical data also show that NeuroRestore substances have a positive effect on mitochondrial function and cell survival, which could indicate potential disease-modifying effects. The leading drug candidate in the platform, ACD856, has recently completed clinical phase I studies and demonstrated positive effects there that support continued development of the program.

PRESS RELEASE
13 August 2024 08:00:00 CEST

About Alzheimer's disease

Alzheimer's disease is the most common form of dementia, affecting approximately 55 million people worldwide. Alzheimer's disease is a lethal disorder that also has a large impact on both relatives and the society. Today, preventive and disease modifying treatments are missing. The main risk factors to develop Alzheimer's are age and genetic causes. Even though the disease can start as early as between 40 and 65 years of age, it is most common after 65 years. Significant investments in Alzheimer research are being made because of the significant unmet medical need and the large cost of this disease for healthcare and society. The total global costs for dementia related diseases are estimated to about 1,300 billion USD globally in 2019. Given the lack of both effective symptomatic treatments and disease modifying treatments, the need for new effective therapies is acute. The few approved drugs on the market today have only a limited symptomatic effect and can produce dose limiting side effects. A disease modifying treatment for Alzheimer's disease is estimated to reach more than $15 billion in annual sales. In Sweden, approximately 100,000 people suffer from Alzheimer's disease with a healthcare cost of about SEK 63 billion yearly, which is more than for cancer and cardiovascular diseases combined.

Image Attachments

Martin Jönsson CEO And Pontus Forsell Head Of D&R AlzeCure Pharma

Attachments

New scientific article on NeuroRestore ACD856 and its improved cognition and disease modification of Alzheimer's disease