

New data showing the potential of the NeuroRestore project in depression presented at ECNP 2021 conference

AlzeCure Pharma AB (publ) (FN STO: ALZCUR), a pharmaceutical company that develops a broad portfolio of candidate drugs for diseases affecting the central nervous system, with projects in both Alzheimer's disease and pain, today announced that the company's presentation and poster regarding the research platform in neurology, NeuroRestore, its connection to BDNF/TrkB signaling and potential therapeutic role in depression, as presented at the European College of Neuropsychopharmacology (ECNP) 2021 on 2-5 October in Lisbon, Portugal, are now available in its entirety on the company's website.

The abstract, titled *Characterization of positive allosteric modulators of TrkB for the treatment of depression*, was presented by Johan Sandin, Chief Scientific Officer, and contains new data showing how substances from the NeuroRestore platform affect relevant signaling pathways in the brain and have effects in various preclinical models that link to depression.

These substances stimulate signaling through the receptors for the neurotrophin BDNF, so-called TrkB receptors. This biological system has been linked to depression, and the support for this hypothesis has been further strengthened in recent times and new scientific findings indicate that many of the classic antidepressant drugs available today actually mediate their effect via BDNF/TrkB*. In addition, the substances also show a positive effect on cognitive ability, such as memory and learning - functions that can also be affected in depression.

"NeuroRestore, with the primary candidate drug ACD856, acts as a BDNF/NGF signaling enhancer and can be used in various types of cognitive impairments in which the same signal pathway is reduced. We have previously seen that NeuroRestore compounds have had significant effects in preclinical models of depression and it is very exciting that we, with these findings, get further scientific support for the effect," said Johan Sandin, CSO at AlzeCure Pharma.

"The findings we have seen with our substances indicate that there are also great opportunities for the NeuroRestore platform in other cognitive disorders outside Alzheimer's. Depression is an area with great medical needs and affects people at a young age," said Martin Jönsson, CEO of AlzeCure Pharma.

The authors of the abstract include Johan Sandin, Chief Scientific Officer at AlzeCure, Dr. Pontus Forsell, Head of Discovery, Dr. Gunnar Nordvall, Head of Chemistry and Magnus Halldin, Head of DMPK & Safety at AlzeCure.

The presentation, the poster and the abstract are available on AlzeCure's website: (<https://www.alzecurepharma.se/en/presentations-and-interviews/>).

*) Casarotto et al., 2021, Antidepressant drugs act by directly binding to TRKB neurotrophin receptors, Cell 184, 1299-1313, March 4, 2021, [https://www.cell.com/cell/pdf/S0092-8674\(21\)00077-5.pdf](https://www.cell.com/cell/pdf/S0092-8674(21)00077-5.pdf)

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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 to 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 Alzheimer's disease

Alzheimer's disease is the most common form of dementia, affecting approximately 50 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 is estimated to about 1,000 billion USD. 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 Johan Sandin CSO AlzeCure Pharma

Attachments

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