

PRESS RELEASE

May 16, 2016

Nanologica and Alcyone Lifesciences to Collaborate via Licensing Agreement

Nanologica enters into a License and Collaboration Agreement with Alcyone Lifesciences to develop Abela – a treatment for motor neuron disorders including ALS.

Nanologica today announced that it has entered into a License and Collaboration Agreement with Alcyone Lifesciences to develop a novel therapeutic platform named Abela; 'to breathe' in Hebrew. The partners want to combine Nanologica's NLAB Silica™ with Alcyone's proprietary drug delivery platform technology. The goal is to develop and commercialize through partnership with biopharma a treatment of certain motor neuron disorders, including Amyotrophic Lateral Sclerosis (ALS), based on targeted and sustained delivery of trophic factors in combination with embryonic stem cell derived cells. The role of trophic factors is to rescue degenerating neurons or to support survival of transplanted stem cells in patients with ALS or other motor neuron disorders.

"We are excited to kick off the Abela program with Alcyone Lifesciences. The collaboration offers a novel approach to treat ALS patients. We're very satisfied with the match, not only scientifically but also culturally. The Alcyone team has, in a very inspiring way, repeatedly demonstrated an ability to think outside the box when it comes to therapeutic delivery, which is needed when taking on such a challenge as ALS," said Nanologica CEO Andreas Bhagwani.

According to the License and Collaboration Agreement, Alcyone will operate the Abela program and will be responsible for further development and financing of the program through collaboration with biopharma.

ALS is a fatal neurodegenerative disease that affects nerve cells in the brain and spinal cord. It usually starts with loss of control of limbs or difficulties in swallowing related to muscle weakness. Most patients suffer a rapid decline in motor function and die within 2-5 years due to inability to breathe in most cases. There is currently no cure for ALS. Only one drug has been approved for the treatment of ALS, with a limited clinical benefit of slowing down the progression of disease. There are currently more than 70 000 ALS patients^{1,2} in the United States and Europe alone who would benefit from a new therapy.

"It is the science that excites us. Alcyone's objective is to help to solve some of the most important and challenging problems in CNS medicine. We believe the key to potential success of this therapy is a delivery system like Alcyone's platform technology that delivers in a targeted manner the trophic factors encapsulated in Nanologica's nanoporous material and that provides a specific level of active molecules exactly where they are needed over a prolonged time. That is where we believe a combined approach can potentially make a difference clinically. The Alcyone team is delighted to work with Andreas Bhagwani, Adam Feiler and the rest of the talented Nanologica team, as well as Professor Elena N Kozlova at Uppsala University" says PJ Anand, Founder & CEO of Alcyone Lifesciences.

In previous work, Nanologica in collaboration with Professor Elena N Kozlova (Uppsala University) demonstrated sustained delivery of trophic factors for survival and functional differentiation of stem cells by using nanoporous silica particles.

Abela is a joint effort between Nanologica and Alcyone Lifesciences to fulfill the vision of delivering trophic factors in combination with embryonic stem cell-derived cells in a precise and slow-release manner, to combat motor neuron loss leading to progression of motor neuron disorders including ALS.

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About Nanologica

Nanologica develops nanoporous silica for applications in life science. The company focuses on two business areas: drug delivery and chromatography, a technology used for the separation and purification of products on the market and in development. Nanologica's core competency is to apply its unique know-how in the field of material science for developing nanoporous silica particles with unique characteristics. Based in Södertälje, Sweden, Nanologica has 19 employees from ten nationalities of which ten are PhDs. For more information, please visit www.nanologica.com.

About Alcyone

Alcyone Lifesciences, based in Lowell, Massachusetts, USA is a privately-held neuroscience medical device company focused on development of novel treatment modalities for chronic neurological conditions. The Company's patented technology platform is based on a uniquely engineered amalgamation of microfabrication technologies along with advanced biomedical engineering with core product focus on targeted CNS therapy and hydrocephalus. Alcyone's team of scientists, physicians and advisers includes recognized leaders in the field of neurology and neurosurgery. For more information, please visit www.alcyonels.com.

References

1. Chiò et. al.; *Global Epidemiology of Amyotrophic Lateral Sclerosis: a Systematic Review of the Published Literature*; Neuroepidemiology, 2013; 41(2); 118-130
2. Borlongan et. al.; *Epidemiological Survey-Based Formulae to Approximate Incidence and Prevalence of Neurological Disorders in the United States: a Meta-Analysis*; PLoS ONE, 2013; 8(10): e78490