

## Investor News

### **NeuroSearch's associated company, NsGene announces the successful implantation of its novel and advanced biodelivery product, NsG0202 in six patients with Alzheimer's disease**

NsGene A/S, 25% owned by NeuroSearch, today announced that its EC (encapsulated cell) biodelivery product, NsG0202, has now been successfully implanted in a total of six patients with Alzheimer's disease as part of an ongoing Phase Ib clinical trial.

In March 2008, NsGene implanted NsG0202 in three patients suffering from Alzheimer's disease. Based on a very positive outcome of a safety review of these patients, three additional Alzheimer's patients have now been successfully implanted. Besides safety and tolerability, indications of therapeutic effects will also be evaluated in the Phase Ib trial to guide also the continued clinical development of the product.

NsG0202 consists of an implantable EC biodelivery device, containing genetically modified cells that secrete nerve growth factor (NGF) to the surrounding brain tissue. NGF has shown to have neuroprotective and regenerative effects when delivered to diseased neurons in relevant areas of the brain. Therefore, NsG0202 represents a unique and entirely new disease-modifying therapeutic concept, aiming at treating the progressive dementia associated with Alzheimer's disease.

The EC biodelivery approach may constitute a breakthrough in the treatment of severe neurological disorders, such as Alzheimer's disease, Parkinson's disease, and epilepsy. NsG0202 is the first in NsGene's pipeline of EC biodelivery products to have entered clinical phase to be studied on patients, and more are expected to follow over the coming years.

Lars U. Wahlberg, Executive Vice President and COO, NsGene comments:

*"This is yet another highly significant milestone for NsGene and for our EC biodelivery platform and pipeline in particular. The successful implantation of multiple regenerative implants in patients suffering from Alzheimer's disease demonstrates that the EC biodelivery devices can be implanted with both precision and safety, paving the way for the potential launch of a novel treatment to fill a great medical need in the area of Alzheimer's disease."*

Flemming Pedersen, CEO of NeuroSearch comments:

*"We are very encouraged by NsGene's strong progress. In our view, the EC biodelivery product NsG0202 clearly represents one of the most promising Alzheimer's drugs in development with a potential to become one of the first disease modifying treatments for this disease, which remains one of the largest challenges as well as opportunities for the pharmaceutical industry."*

For further information, please see attached press release from NsGene. .

#### **Contact persons:**

Flemming Pedersen, CEO, telephone: +45 4460 8214 or +45 2148 0118

Hanne Leth Hillman, Vice President, Director of IR & Corporate Communications, telephone: + 45 4460 8212 or +45 4017 5103

NeuroSearch (NEUR) is a Scandinavian biopharmaceutical company listed on Nasdaq OMX Copenhagen. The company's core business covers the development of novel drugs, based on a broad and well-established drug discovery platform focusing on ion channels and CNS disorders. A substantial share of its activities is partner financed through a broad alliance with GlaxoSmithKline (GSK) and collaborations with, among others, Abbott and Astellas. NeuroSearch's drug pipeline comprises 14 clinical (Phase I-III) development programmes: ACR16 for Huntington's disease (Phase III), tesofensine for obesity and in Type 2 diabetes (Phase III in preparation), NS2359 for depression (Phase II) and ADHD (Phase II) in partnership with GSK, ABT-894 for ADHD (Phase II) and pain (Phase II) in partnership with Abbott, ACR16 for schizophrenia (Phase I) in partnership with Astellas, ACR325 for Parkinson's disease (Phase II in preparation) and bipolar disorder (Phase II in preparation), ABT-107 and ABT-560 for the treatment of various CNS disorders – both (Phase I) in collaboration with Abbott, NSD-644 for pain (Phase I) in partnership with GSK, ACR343 for Parkinson's disease (Phase I) and NSD-788 for anxiety/depression (Phase I). In addition, NeuroSearch has a broad portfolio of preclinical drug candidates and holds equity interests in several biotech companies.

Copenhagen, Denmark, November 3, 2008

**PRESS RELEASE - FOR IMMEDIATE RELEASE**

**NsGene's advanced encapsulated cell biodelivery product for Alzheimer's disease treatment now successfully implanted in six patients**

Today the Danish biotechnology company, NsGene A/S, announced that its encapsulated cell (EC) biodelivery product, NsG0202, has now been successfully implanted in a total of six patients with Alzheimer's disease (AD) at Karolinska University Hospital in Stockholm as part of an ongoing Phase Ib clinical trial.

The NsG0202 product consists of an implantable EC biodelivery device containing human cells genetically modified to secrete nerve growth factor (NGF) to the surrounding brain. When delivered directly to these cells at the base of the brain, NGF has been shown to have neuroprotective and regenerative effects on brain cells that die in AD. The NsG0202 product represents a unique and new disease-modifying therapeutic concept, aimed at treating the progressive dementia associated with AD.

The clinical development was started in the spring of 2008 when NsG0202 was implanted in three patients suffering from AD. Based on the recent favourable safety review of these patients, three additional patients have now been successfully implanted in a dose-escalation step. In these patients, four NGF secreting implants were placed at precise anatomical locations using MRI-guided, stereotactic neurosurgery. Both the novel EC biodelivery product and the implantation procedure were very well tolerated by all patients. Besides safety and tolerability, indications of therapeutic effects will also be evaluated in this phase Ib trial to help guide the continued clinical development of the product.

*"This is yet another highly significant milestone for NsGene and for our EC biodelivery platform and pipeline in particular" says Lars U. Wahlberg, Exec. Vice President and COO, NsGene. He continues: "The successful implantation of multiple regenerative implants in patients suffering from Alzheimer's disease demonstrates that the EC biodelivery devices can be implanted with both precision and safety, paving the way for the potential launch of a novel treatment to fill a great medical need in the area of Alzheimer's disease."*

The phase Ib study is being performed in close collaboration with principal investigator Assoc. Prof. Maria Eriksson Jönhagen and Prof. Åke Seiger at the Department of Geriatrics and Prof. Bengt Linderöth and Dr. Göran Lind at the Department of Neurosurgery, Karolinska University Hospital, Stockholm, Sweden. All patients are now enrolled in the study, which will be completed by the end of 2009.

A successful outcome will support future multicenter studies aimed at demonstrating efficacy of NsG0202 in the treatment of Alzheimer's disease.

The NsG0202 product for AD is the first in NsGene's pipeline of EC biodelivery products entering clinical development for neurological disorders over the next two years. Based on the proprietary EC biodelivery technology platform, the development of multiple novel EC biodelivery products is possible. The biodelivery implants are aimed at restoring brain function and not only at alleviating symptoms. Therefore, this technology has the potential of transforming the treatment of degenerative disorders of the central nervous system, including AD, Parkinson's disease, and intractable epilepsy.

**For further information please contact:**

- Lars U. Wahlberg, Executive Vice president and COO, NsGene A/S, Phone: +45 44 60 89 13, Mobile phone: +45 2360 3198, E-mail: [luw@nsgene.dk](mailto:luw@nsgene.dk)
- Maria Eriksdotter Jönhagen, MD, Associate Professor, Dept. of Geriatrics, Karolinska University Hospital, Huddinge, Phone: +46-8-58586449, mobile phone: +46-70-560 8907, E-mail: [maria.eriksdotter.jonhagen@ki.se](mailto:maria.eriksdotter.jonhagen@ki.se)
- Bengt Linderöth, Professor, Dept. of Neurosurgery, Karolinska University Hospital - Solna, Phone: +46-51772592, E-mail: [bengt.linderoth@karolinska.se](mailto:bengt.linderoth@karolinska.se)
- Åke Seiger, Professor, Karolinska Institute, mobile phone: +46 73 9177407.

**Background on EC biodelivery**

EC biodelivery is a strongly and broadly patented technology platform capable of cell-based biodelivery of biological compounds to the peripheral or central nervous system providing a controlled, site-specific, and safe delivery of a variety of therapeutic substances. For central nervous system (CNS) indications, one or multiple EC biodelivery devices can be implanted in defined regions of the brain to deliver any proteins, including growth factors, antibodies, and neuropeptides, across the blood-brain-barrier. The proprietary EC biodelivery system consists of a catheter-like device containing, in its active portion, a genetically modified human cell line enclosed behind an immunoprotective semi-permeable hollow fiber membrane. The membrane allows for the influx of nutrients and the outflow of the therapeutic factor(s) but prevents the direct contact of the therapeutic cells with the host tissue and immune system. The encapsulated cells provide long-term factor secretion from the implanted device.

**Background on NsGene**

NsGene A/S ([www.nsgene.dk](http://www.nsgene.dk)) is a privately held Danish biotechnology company founded in December 1999 as a spin-off from NeuroSearch A/S. NsGene develops novel biologicals for the treatment of neurological diseases. Based on the EC biodelivery platform, NsGene develops EC biodelivery products for neurological diseases

including Alzheimer's disease, Parkinson's disease, and intractable epilepsy. In addition hereto, a number of EC biodelivery products for other indications are under investigation. Today, NsGene employs 30 people at its research facility located near Copenhagen in the Medicon Valley Region. For more information, please see [www.nsgene.dk](http://www.nsgene.dk).