

Attgeno announces positive results from Supernitro Phase II study

Today Attgeno AB announces top-line data from their Phase IIa trial, evaluating their new drug Supernitro in patients with pulmonary hypertension. The primary endpoint of the study was achieved, and the results align with continued clinical development. The positive results include a significant and dose-dependent reduction in resistance to blood flow through the pulmonary circulation. No unexpected safety signals were observed.

The clinical study included patients at Sahlgrenska University Hospital in Gothenburg and Örebro University Hospital. The researchers studied central hemodynamics, including the calculation of pulmonary vascular resistance (PVR). The primary endpoint of the placebo-controlled study was to assess the effect on PVR at different doses of the patented drug candidate Supernitro (PDNO) and thereby determine if it effectively can dilate blood vessels in the lungs, acting as a pulmonary vasodilator. Secondary endpoints included evaluating whether Supernitro selectively dilates pulmonary vessels more than those in the rest of the body and assessing safety and tolerability. The study was conducted in 12 patients with postoperative acute pulmonary hypertension (APH), a potentially life-threatening condition.

Coordinating investigator, **Professor Sven-Erik Ricksten** at Sahlgrenska University Hospital, comments:

"I am pleased to confirm that PDNO is a potent pulmonary vasodilator in patients undergoing heart surgery. Currently, lung-selective vasodilation can only be achieved by inhaling vasodilating substances, which is cumbersome and inefficacious for many patients. Developing an effective intravenous drug like Supernitro would simplify treatment and increase availability for critically ill APH patients."

An important positive outcome among the secondary endpoints was a dose-related significant reduction in pulmonary versus systemic vascular resistance, the so-called PVR/SVR ratio, in 11 of 12 patients, confirming lung-selective action. Data evaluation is ongoing, and the full results from the study will later be presented at a scientific meeting.

*"I am very pleased with the results so far," says **Christofer Adding, Attgeno's Chief Medical Officer**, and continues, "we can now take the next step in our journey to help patients with the severe condition of acute pulmonary hypertension. Even though "Attgeno's lead indication is the APH segment, we are in addition exploring other indications where targeted delivery of NO is vital.*

*"Attgeno has a unique platform for development of new nitric oxide (NO)-donating molecules", says **Claes Frostell, Professor** of Anesthesiology at Karolinska Institutet and inventor of inhaled NO, and explains "NO is a gaseous signaling substance naturally produced in the body, but levels of NO decrease with age and disease. Supernitro has an ultra- short half-life, and when injected into the blood it releases the majority of its bound NO in the first organ it encounters. This has the potential to revolutionize treatment of a number of diseases with huge unmet medical need."*

Attgeno is a Swedish biotech company partly financed by Sweden's Innovation Agency Vinnova.

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About Attgeno

Attgeno AB is a privately-owned Swedish biotechnology company focusing on the development and commercialization of innovative and effective nitric oxide-donating drugs. Attgeno's leading drug candidate Supernitro (PDNO) is currently in clinical development. For more information, please visit Attgeno's website, www.attgeno.com.

About Supernitro (PDNO)

Supernitro is intended to be administered as an intravenous infusion. With an ultra-short half-life, the active component, nitric oxide (NO), is released ultra-rapidly after Supernitro is administered into the bloodstream. The result is that most of the NO provided by Supernitro is released during the short passage through the pulmonary circulation, where it reacts with the lung's blood vessels and causes them to dilate. By releasing NO in the lungs, Supernitro compensates for the deficiency of this common phenomenon in various diseases, including pulmonary hypertension.

About Pulmonary Hypertension

Pulmonary hypertension (PH) is a condition with elevated blood pressure in the pulmonary circulation. Symptoms of PH include shortness of breath, fainting, fatigue, chest pain, leg swelling, and rapid heartbeats. The condition usually develops insidiously and has a progressive course with a poor prognosis but can also develop acutely in response to several severe disease conditions, known as acute pulmonary hypertension (APH).

The causes of PH involve narrowing and constriction of blood vessels connected to and within the lungs. This leads to an increase in pulmonary vascular resistance (PVR), meaning that there is increased resistance for the heart to pump blood through the vessels in the pulmonary circulation, similar to the higher resistance and pressure required to get water to flow through a narrow pipe compared to a wide one. When the condition persists over a longer period, the affected blood vessels become stiffer and have thicker walls, a process known as fibrosis.