

BrainCool AB (publ) – the first patient can now be enrolled in the pivotal COTTIS 2 study

- BrainCool AB announces that all the criteria have been fulfilled to enroll the first patient in the pivotal and important clinical trial COTTIS 2, which is equivalent to a phase 3 clinical trial.
- The study uses the unique RhinoChill® System device during thrombectomy procedures, followed by continued post treatment cooling using the BrainCool™ System.
- If successful, the study will be the basis for an application for RhinoChill® System to obtain market approval and it is expected to change guidelines in treating patients affected by ischemic stroke.
- The market potential for RhinoChill® System is significant, as several million people suffer from stroke every year, of which close to 90% are ischemic strokes.
- The post treatment of stroke patients using BrainCool™ System also constitutes a large market potential for BrainCool.

The COTTIS 2 (Combination of Targeted temperature management and Thrombectomy after acute Ischemic Stroke) clinical trial intends to measure the outcome in acute stroke patients with large vessel occlusion treated with the combination of hypothermia and thrombectomy. It is a multicenter randomized clinical trial of a total of 400 patients. Professor Dr. Jürgen Bardutzky at the University Hospital of Freiburg is the principal investigator. The University Hospital of Freiburg has the main responsibility to lead the trial.

BrainCool's CEO Jon Berg comments:

- "This is a significant milestone for BrainCool. We now commence the COTTIS 2 study with the first patient expected to be enrolled and treated shortly. If successful, this study is expected to revolutionize stroke treatment globally".

BrainCool's Head of Clinical Studies Mohammad Fazel comments:

- "Thrombectomy treatment is a large and growing market and if combined with hypothermia, it can have significant positive effects for patients who have suffered a stroke as our first study COTTIS 1 have clearly showed. BrainCool's goal is that our treatment with RhinoChill® System will be classified as a medical indication. This would imply that our cooling protocol including RhinoChill® System, will be part of the official guidelines for stroke treatment."

With regards to the COTTIS 2 study, there is also a potential to affiliate additional hospitals to accelerate the inclusion rate. Hospitals in the US, Sweden, Austria and Asia as well other German hospitals have shown an interest in participating in the study. Two internal interim analyses are planned after 100 and 200 patients. The timetable for the clinical study is to be fully recruited by early 2026.

Professor Dr. Jürgen Bardutzky, Principal Investigator at the University Hospital of Freiburg, comments:

- "We are excited to start the COTTIS 2 clinical trial, evaluating a promising neuroprotection approach for ischemic stroke patients. The entire clinical team is proud to be part of this groundbreaking journey, demonstrating the efficacy of using RhinoChill® System for rapid cooling, followed by continued cooling with the BrainCool™ System. Results from the COTTIS 1 trial have generated significant excitement within the stroke community, with overwhelmingly positive feedback from leading stroke societies. If our expectations on COTTIS 2 are realized, it would significantly improve the lives of millions of future stroke patients."

About thrombectomy and the COTTIS studies

Thrombectomy is a procedure where the blood clot that occurs during a stroke is mechanically removed. Despite the well-established benefit of thrombectomy treatment for acute ischemic stroke due to large vessel occlusion, more than half of the patients treated with thrombectomy remain functionally dependent. After the clot is removed blood flow starts circulating again. At this point damage to the brain may occur, which can be permanent. If the brain is cooled down during the procedure, the risk of injury is reduced which means significant benefits in terms of a higher quality of life for the patient as well as substantial health economic gains.

Thus, new strategies such as additional neuroprotection using cooling has been explored, first to bridge time to reperfusion and second, to attenuate reperfusion injury. In the pilot study COTTIS 1, it was successfully demonstrated the feasibility and safety of immediately induced cooling to 35°C using the non-invasive transnasal product RhinoChill® System followed by surface cooling for six hours using BrainCool™ System. In COTTIS 1, 68 per cent of the patients exhibited a good outcome (independency) three months after treatment. Consequently, the current COTTIS 2 study is designed to further evaluate the efficacy of this cooling protocol in a multicenter, randomized, controlled, end-point-blinded study.

The COTTIS 2 study will compare the intervention group (hypothermia and thrombectomy treatment) with a control group (only thrombectomy treatment and best medical treatment including thrombolysis) to see if the addition of hypothermia to thrombectomy leads to a better outcome after 3 months without relevant complications.

COTTIS 2 is financed by grants from the European Union. BrainCool's product RhinoChill® System is the key medical device used in the study. COTTIS 2 has also received approval from the German medical agency BfArM as a non-CE trial under MDR (Medical Directive Regulation). BrainCool is the sponsor of the clinical trial. Professor Dr. Jürgen Bardutzky at the University Hospital of Freiburg is the principal investigator, and the University Hospital of Freiburg has the main responsibility to lead the clinical trial. Agreements have also been established with four more leading German hospitals that will participate in the clinical trial. The European Union, E&E CRO Consulting and The Center for Medical Data Services at the University of Vienna are also collaborators in the study.

About stroke

Globally, stroke is one of the leading causes of death and disability, resulting in great suffering and enormous economic consequences. In Europe and the United States, two million people suffer a stroke every year. Blood clots in the brain account for 87 percent of all strokes.

In Germany alone, more than 200,000 people suffered ischemic stroke and the trend is for the number of cases to increase. Approximately 20 percent of patients may currently be eligible for thrombectomy treatment. The time window for performing a thrombectomy has been extended from 6 hours to 24 hours and more doctors adopt the treatment technique. This implies that more thrombectomies can be performed, thus expanding the market for medical devices such as RhinoChill® System and BrainCool™ System.

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BrainCool AB (publ) is an innovative medical device company that develops, markets, and sells leading medical cooling systems for indications and areas with significant medical benefits within the healthcare sector. BrainCool AB (publ) is based in Lund, Sweden, and its share is listed on Nasdaq First North Growth Market, named "BRAIN".

Eminova Fondkommission AB is the company's Certified Adviser.

Attachments

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