

Surrey University leading on alternative ADHD treatment

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A multisite clinical trial has launched in the United States to investigate whether non-pharmaceutical methods can be used to treat attention deficit hyperactivity disorder (ADHD) in children ages 7-12. This trial is currently recruiting new patients and seeking FDA clearance.

The trial uses a wearable device – Novostim 2 – developed by Innosphere Engineering Ltd. The company anticipates FDA clearance by Q3 of 2025 and has already received approval for sales in Israel.

The novel treatment builds upon years of research into non-invasive brain stimulation techniques led by the University of Surrey's Professor Roi Cohen Kadosh. The research team carried out multiple studies in which children with ADHD were treated with transcranial Random Noise Stimulation (tRNS) coupled with cognitive training (CT).

tRNS is a non-invasive technique that delivers a weak and painless electrical signal to the brain to enhance activity in regions associated with attention. In the studies, children who received tRNS and CT experienced significant improvements in their ADHD symptoms, working memory, and processing speed, along with changes in their brain activity, which could be linked to the improvement of their symptoms in the long-term.

Two clinical trials have been completed using Novostim 2 at Hadassah Medical Center in children aged 7-12, which showed significant improvement in ADHD symptoms, including a 43% reduction in ADHD symptom severity and overall symptom alleviation.

The trial, over a two-week period, involves 20-minute treatment sessions in which Novostim 2 is used to deliver tRNS over specific regions in the brain associated with ADHD and during which participants engage in attention-based digital games.

For more information on the latest trial, visit ADHDtrial.com

Professor Roi Cohen Kadosh, Head of the School of Psychology at the University of Surrey, said:

“We were thrilled by the success of the previous clinical trials, which brought us one step closer to providing a safe and effective non-pharmaceutical option for children with ADHD. The device's ability to modulate brain activity and enhance cognitive functions may hold the key to long-lasting benefits, potentially reshaping the landscape of ADHD treatment. By harnessing the power of psychology, neuroscience, and technology, we can empower young patients to improve their focus, attention and overall wellbeing. The need continues to grow, and I hope to see this technology become available to many children and their families soon.”

Rami Shacour, co-Founder and CEO of Innosphere, adds:

“For decades, stimulant medications have been the cornerstone of ADHD treatment. At Innosphere, we're parents first, driven by a mission to give families more personalized, effective options for their children. With Novostim 2, we're redefining what's possible in ADHD care. We're thrilled to announce sales approval in Israel and eagerly anticipate FDA clearance this year. This is just the beginning, as we explore Novostim 2's potential to complement existing therapies and transform lives.”

Image: Professor **Roi Cohen Kadosh**