Press Release
FOR IMMEDIATE RELEASE

CorTec's Brain Interchange™ BCI System Enables Stroke Patient to Control Computer with his Mind

The same fully implanted, wireless device supporting motor recovery after stroke now enables thought-controlled computer use without additional surgery or hardware.

Freiburg, Germany, April 29, 2026 - CorTec GmbH today announced that the first participant in the University of Washington's NIH-funded clinical trial of the Brain Interchange™ BCI system has successfully controlled a computer through thought alone — including a functional demonstration of the video game Pong — using the implanted device and cortical electrodes placed to support his motor recovery after stroke. This is the first reported instance worldwide in which a single fully implanted, wireless BCI system has demonstrated both brain stimulation for therapeutic stroke rehabilitation enhancement and thought-based computer control in the same patient using identical hardware.

During experimental brain-computer interface (BCI) sessions, the participant thinks of moving his arm, without any physical movement. The Brain Interchange™ implant records the corresponding cortical activity through its AirRay® electrodes placed on the brain surface and transmits it wirelessly to an external computer, where advanced algorithms decode the signals in real time and translate them into control commands. In a first demonstration, the participant was able to play the Pong video game through thought alone, within only about two hours after being introduced to the concept of controlling a computer with his mind.

A remarkable aspect of this study is that no modification to the implanted system was required. The Brain Interchange™ — the same fully implanted, wireless device delivering therapeutic cortical stimulation for stroke rehabilitation — performed the neural decoding using identical hardware and the same surgical placement.

"This is not a strategic pivot and not a new product," said **Dr. Frank Desiere, CEO of CorTec.** "It is empirical proof of what we have been building for more than a decade. The same implant that helped the first participant regain motor function after stroke now also enables him to control a computer through thought alone. We know of no other fully implanted, wireless BCI platform technology worldwide that has demonstrated this dual clinical capability in a single patient."

"Our wireless implant system delivers both therapeutic stimulation and real-time neural sensing and decoding using soft electrodes that are positioned on the brain surface," said **Dr. Martin Schuettler, CTO and Co-Founder of CorTec.** "Without the need of penetrating brain tissue, our technology enables long-term safety to the patient."

"For the first time, we are decoding real-time intent from a fully implanted BCI in an individual with stroke, and the signals are clear and consistent," said **Prof. Jeffrey Herron, Associate Professor of Neurological Surgery, University of Washington School of Medicine.** "The same capability could ultimately serve patients with a wide range of neurological conditions."

The demonstration took place after the first participant completed the rehabilitation program in an ongoing Early Feasibility Study (clinicaltrials.gov - ID NCT06506279), nine months post-device implantation. The study is co-led by Dr. Jeffrey G. Ojemann (University of Washington) and Dr. Steven C. Cramer (UCLA).

With this demonstration, Brain Interchange™ becomes the first fully implanted, wireless BCI system to deliver both therapeutic neuroplasticity induction and thought-based computer control in the same patient using identical hardware. As the clinical program continues to advance, CorTec is establishing Brain Interchange™ as a platform for a new generation of closed-loop neurotherapies, across stroke rehabilitation, BCI for paralysis, epilepsy, and treatment-resistant depression.

About Brain Interchange™

Brain Interchange™ is CorTec's proprietary brain-computer interface platform, a fully implantable, wireless, bidirectional closed-loop system designed for long-term neural sensing and adaptive cortical stimulation of the cortex and deep brain areas. The investigational device has demonstrated over 500 days of continuous, stable operation (*Nature Scientific Data*, 2025) and is currently the only BCI platform to hold an FDA Breakthrough Device Designation specifically for therapeutic motor rehabilitation after stroke. CorTec was granted TAP program participation by the US FDA for BCI-based stroke rehabilitation.

CorTec Clinical Program

The BCI demonstration of the Brain Interchange™ reported here is the first milestone towards advancing the Brain Interchange™ platform to the field of BCIs that help severely impaired patients to reintegrate into society by providing access to digital communication technology. It represents one of four pillars in CorTec's clinical strategy, all built on the same Brain Interchange™ platform: stroke rehabilitation (ongoing UW Medicine study), epilepsy management (ongoing study with Mayo Clinic), BCI for paralysis and severe communication impairment, and treatment of depression (planned study with University Hospital Freiburg).

Learn more at www.brain-interchange.com or follow the Brain Interchange on LinkedIn.

About CorTec

CorTec GmbH is a clinical-stage neurotechnology company founded in 2010 in Freiburg, Germany. CorTec is developing Brain Interchange™, a fully implantable bidirectional BCI platform currently in FDA-authorized clinical evaluation in the United States. This makes CorTec the first and only European company to reach this stage. In April 2026, the device received both FDA Breakthrough Device Designation and admission to the FDA's Total Product Life Cycle Advisory Program (TAP) for stroke motor rehabilitation.

Alongside its proprietary BCI platform, CorTec operates a revenue-generating contract development and manufacturing (CDMO) business for advanced implantable components, serving leading neurotechnology companies worldwide. This dual model supports CorTec's platform development while scaling Europe's most vertically integrated neurotechnology capability.

CorTec is backed by a syndicate of strategic investors including High-Tech Gründerfonds, KfW, K&SW Invest, LBBW Venture Capital, Mangold Invest, M-Invest and Santo Venture Capital GmbH.

Learn more at www.cortec-neuro.com or follow CorTec on LinkedIn.

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Forward-Looking Statements: This press release contains forward-looking statements regarding CorTec's clinical development, regulatory strategy, and potential future applications of the Brain Interchange™ platform. Actual results may differ materially from those expressed or implied. The FDA Breakthrough Device Designation does not change the requirements for marketing authorization and does not guarantee approval.

Regulatory Disclaimer: The Brain Interchange™ is an investigational device and is not approved for commercial use in any indication. The computer control demonstration reported here illustrates platform versatility and does not fall within the scope of CorTec's current FDA Breakthrough Device Designation, which covers therapeutic cortical stimulation for motor recovery after chronic ischemic stroke. CAUTION: Investigational device. Limited by Federal law to investigational use.