Openwater's Open-LIFU Device Supports Concierge Mental Health Research with TIESA

TIESA will use Open-LIFU in AI-guided, noninvasive research on neuromodulation for mental health conditions.

SAN FRANCISCO, CA, UNITED STATES, January 8, 2026 /EINPresswire.com/ -- Openwater, an open-source medical technology company delivering portable, hospital-grade diagnostic and therapeutic research devices, today announced that TIESA will use its Open-LIFU platform to support focused ultrasound (FUS) neuromodulation research for depression, anxiety, and other mental health conditions. The Austrian-based company is exploring closed-loop and AI-driven neurostimulation as part of its research programs evaluating non-pharmacologic mental health treatment.

Mental health conditions affect more than one billion people globally, according to the World Health Organization. With the goal to improve depression, anxiety, and trauma-related symptoms, TIESA aims to study and modulate the Default Mode Network (DMN) – the brain's internal voice of stress, trauma, and worry – using precise neuromodulation. TIESA expects to begin enrolling patients into Open-LIFU-based neuromodulation research programs in early 2026.

Patients participating in TIESA's research will undergo its personalized, data-driven clinical process. Open-LIFU will be used under research and clinical protocols to noninvasively stimulate the target brain regions. This approach is supported by research from the University of Arizona showing that transcranial FUS targeting the DMN has been associated with response rates of up to 60% and remission in 35% of participants after three weeks of treatment.

"The launch of our TIESA software marks an important step in the evolution of mental health care, emphasizing neuromodulation-based, personalized treatment models with no side effects," said Raphael Biancale, co-founder and CEO of TIESA. "Our goal is to deliver advanced, data-driven mental health treatments that address the root causes of mental health disorders and restore clarity and wellbeing."

Currently available for research use only, Open-LIFU is an adaptable, noninvasive system designed to deliver FUS to precise areas of the brain and body. Its modular architecture and open-source software allows clinicians and researchers to customize the device for various therapeutic hypotheses and research needs.

“What’s meaningful about this deployment is that Open-LIFU is being used as part of real-world research-driven care programs, not confined to a single lab or early feasibility study,” said Aaron Timm, CEO of Openwater. “By collaborating with organizations like TIESA, we’re showing how focused ultrasound platforms can be integrated into partner-led research programs for personalized neuromodulation, while building the evidence base needed to inform the future of mental health care.”

Open-LIFU is already in active use at academic and research institutions in the U.S. and internationally, including at Massachusetts Institute of Technology (MIT) and Hospital del Mar Research Institute in Barcelona. Early academic research has explored Open-LIFU’s potential in treating neurological diseases, cancer, and mental health disorders like anxiety and depression, but the device itself remains investigational and not cleared as a standalone treatment.

To learn more about Openwater and its open-source research devices, visit www.openwater.health.

About Openwater
Openwater is an AI-driven medical technology company founded by Dr. Mary Lou Jepsen to make hospital-grade care universally accessible. Backed by notable supporters including Khosla Ventures, Plum Alley, BOLD Capital Partners, Vitalik Buterin, Esther Dyson, and Peter Gabriel, Openwater employs open-source development and consumer electronics manufacturing to lower the cost and speed the delivery of noninvasive medical devices. The company collaborates with leading institutions worldwide to research, validate, and distribute these technologies, aiming to reach patients across borders and income levels. www.openwater.health

About TIESA
Software engineers, AI researchers, neuroscientists, and entrepreneurs at TIESA collaborate to merge neuroscience, technology, and spiritual insight in developing the Ego- Death machine—designed to help individuals overcome biases such as anxiety, fear, sadness, and loneliness, enabling a conscious life.

Alaina Chiappone
AM Public Relations for Openwater
email us here
Visit us on social media:
LinkedIn

in today's world. Please see our Editorial Guidelines for more information.