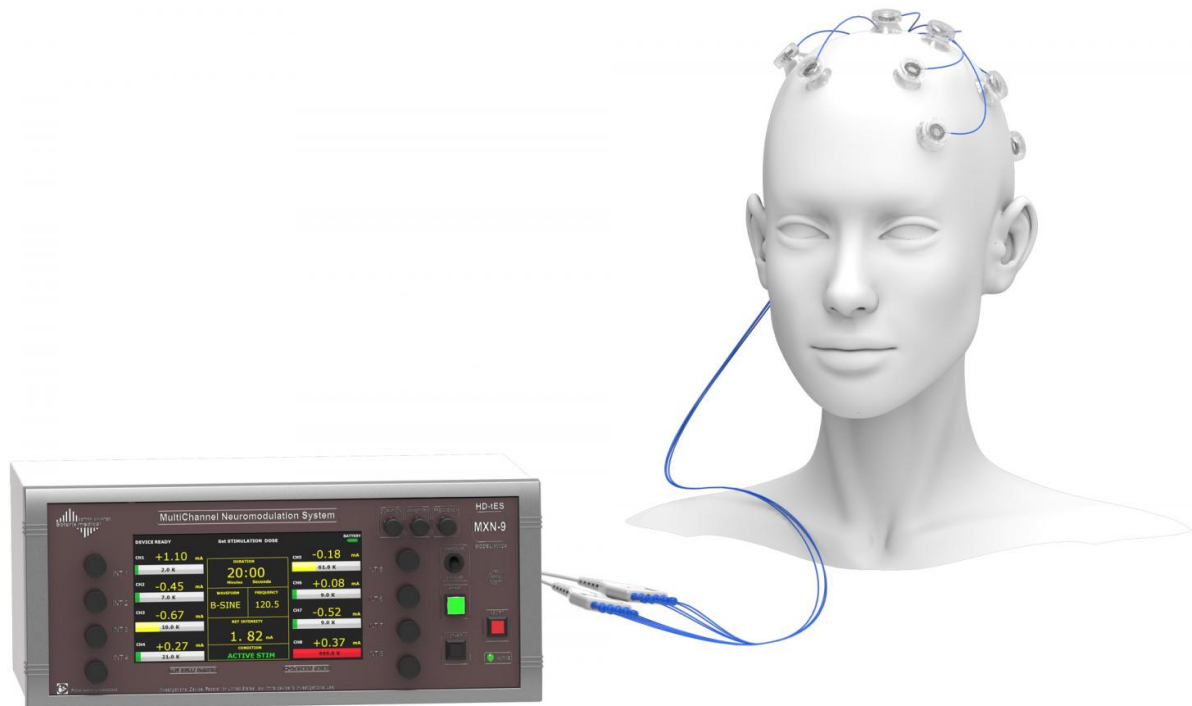


Revolutionary image-guided device targets brain regions associated with neuropsychiatric disorders

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EEG-Guided High-Definition tES (HD-tES) system. Credit: Soterix Medical Inc

The EEG-Guided High-Definition tES (HD-tES) system is a

breakthrough in allowing identification of brain regions associated with brain disease and then delivering low-intensity electrotherapy to those targeted regions. Many neuropsychiatric disorders, such as depression and chronic pain, can be associated with dysfunction in specific brain regions, but the specific brain regions will vary by symptoms and across patients. EEG-Guided HD-tES is a proprietary technology where electrodes embedded in a removal cap are used to detect brain activity (EEG), diagnose the brain target, and deliver mild electrotherapy (HD-tES). This news follows previous announcements of regulatory approval of Soterix Medical Inc. therapies in Europe (CE mark), Canada, and successful clinical trials from 32 medical centers including Harvard Medical School.

HD-tES, a technology developed by Dr. Marom Bikson and Dr. Lucas Parra at the City College of New York of CUNY, is the only method to deliver targeted low-intensity electrotherapy non-invasively. According to Professor Bikson "With HD-tES specific [brain](#) regions can be targeted with a low-intensity electrical current that is known to promote [brain plasticity](#). Brain plasticity is basis for facilitating lasting clinical benefit. With EEG-Guided HD-tES we have the first system that can automatically identify brain regions on an individual basis and deliver the therapy to those [brain regions](#)." According to Doug Adams, Director of Commercialization at CUNY, "HD-tES is a protected by a significant international patent portfolio based on technology developed in CUNY and exclusively commercialized by Soterix Medical Inc. This will improve patient care in a tangible way for a variety of patient populations by providing personalized electroceutical therapy."

Dr. Abhishek Datta, CTO of Soterix Medical Inc. explains, "Using exclusive technology licensed from CUNY, we have developed the first head-gear that incorporates research grade EEG brain monitoring with clinical grade non-invasive brain stimulation. Research grade EEG ensures reliable identification of brain targets while clinical grade HD-

tES is critical for reliable brain modulation. The number of EEG and HD-tES channels can scaled up to 64."

More information: www.soterixmedical.com/

Provided by The City University of New York

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