MIAMIND®

Miamind® is a product by Bottneuro

Custom-made, personalized tES and EEG caps

Miamind® Neurostimulator

The Miamind® Neurostimulator is a modern non-invasive transcranial electrical stimulation (tES) and electroencephalography (EEG) device which allows for precise and multifocal brain stimulation on up to 32 electrode channels. The custom-made medical device applies defined currents, in specific frequencies for defined amounts of time. The device is specifically customized to an individual patient. To address individual brain anatomy and ensure perfect fit for optimal electrode positioning, the device is 3D printed based on a patient's anatomy derived from MRI scans. Treatment progress can be monitored by measuring brain activity via EEG before and after each session.

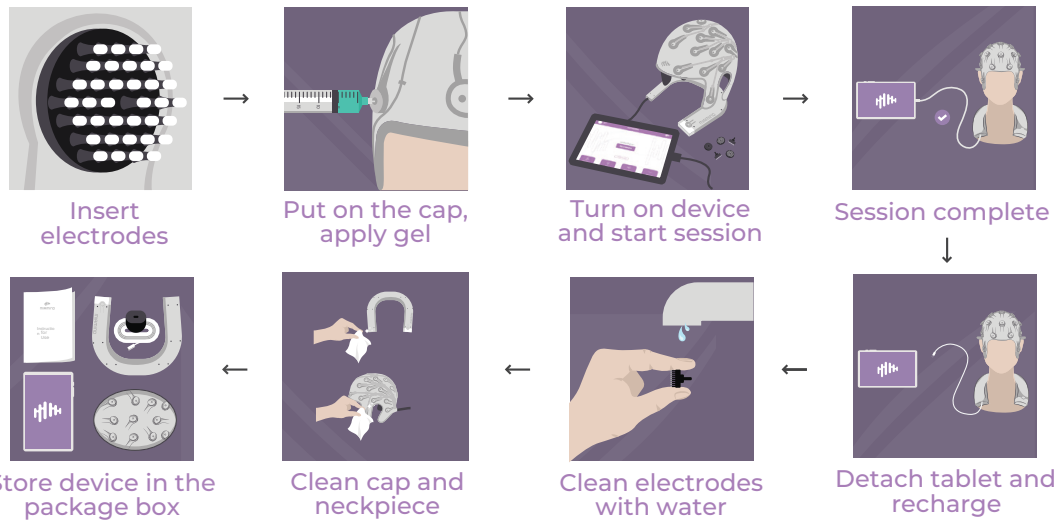
Miamind® Neurostimulator Cap – 3D printed and customized to your own anatomy.

Miamind® Neurostimulator Neckpiece – main control unit of Miamind® Neurostimulator.

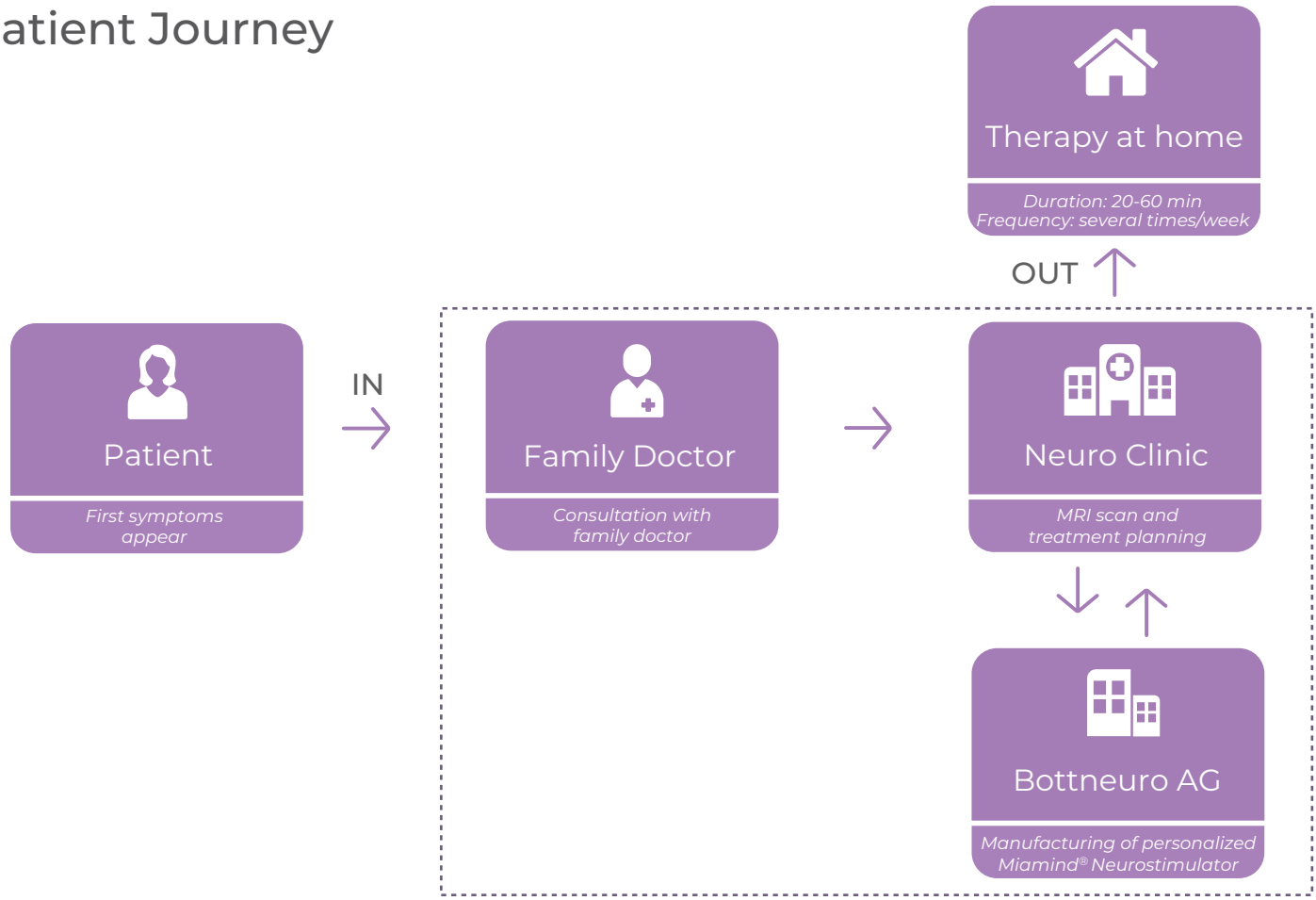
Miamind® Neurostimulator Tablet App – it is used for therapy monitoring and data transfer.

Home Use

The Miamind® Neurostimulator can be used by patients in the comfort of their homes. After placing the device on the head to start the treatment, the tablet`s user-friendly app guides users through each session. This simplicity not only enhances the overall user experience but also encourages regular use, making neurostimulation therapy more effective.



Patient Journey

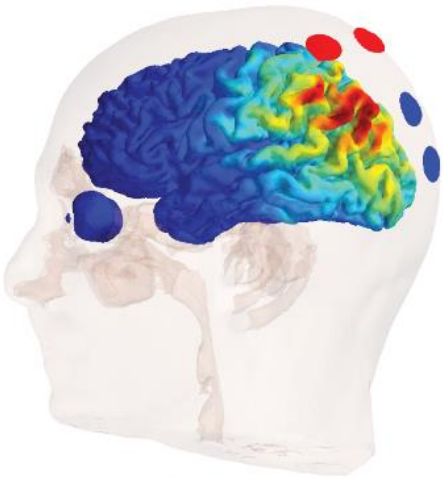


What is tES?

Transcranial Electrical Stimulation (tES) uses low electrical currents to modulate brain cells, potentially alleviating various conditions without surgery. It's like giving your brain a gentle electrical nudge using special pads or electrodes. The current is extremely weak and doesn't cause harm, aiming to restore healthy brain activity. tES includes several techniques, each with distinct effects. Some techniques involve providing a consistent flow of current, which can be beneficial for either boosting or reducing brain activity, addressing conditions like depression, trauma, and stroke recovery. Others utilize rhythmic patterns to synchronize brain activity, aiding in the restoration of disrupted brain oscillations which can be beneficial in conditions like Alzheimer's Disease.

Custom-made tES

Our custom-made approach for tES features personalized therapy plans and electrode positioning for precise tES targeting specific brain regions. Individual anatomy influences the distribution of electrical fields, impacting treatment effectiveness. By analyzing MRI images, we simulate field spread to optimize electrode placement and stimulation parameters, ensuring the desired effects while minimizing off-target stimulation.



Risk and side effects

tES has been extensively studied and is regarded as safe and generally well-tolerated. Side effects are generally mild to moderate and do not persist during stimulation.

- *Slight tingling, itching and burning sensation under the electrode*
- *Visual sensations*

Please refer to our Patient Brochure for further information.

What is EEG?

Electroencephalography (EEG), a non-invasive neuroimaging technique, records electrical activity from neurons via scalp electrodes, capturing brain activity patterns with high temporal resolution. It's valuable in clinical and research settings for assessing brain function, diagnosing disorders, and monitoring activity changes during tasks or conditions.

Custom-made EEG

Our EEG technology enables easy monitoring of brain activity patterns with up to 32 electrodes and an additional reference electrode. This clinical-grade EEG device allows repetitive, long-term remote tracking for various neurological conditions, aiding in their understanding, diagnosis, and treatment.