## Transcranial Pulse Stimulation (TPS): New horizons in non-invasive brain stimulation

Transcranial Pulse Stimulation (TPS) is an innovative treatment for patients with Alzheimer's dementia, utilizing low-energy acoustic pulse waves to target affected brain regions.

The NEUROLITH device, CE-approved since 2018, is designed for TPS treatment and delivers energy non-invasively, reaching depths of up to 8 centimetres. A standard TPS treatment protocol involves six sessions within two weeks, with each session lasting approximately 30 minutes. Follow-up sessions are tailored individually, typically scheduled 4 to 8 weeks after the initial treatment series. The TPS application is visually monitored, enabling real-time tracking of targeted brain areas, ensuring accuracy and safety.

Clinical studies have shown significant cognitive improvements in patients with Alzheimer's dementia undergoing TPS therapy. Additionally, ongoing research is exploring the broader therapeutic applications of TPS for various neurological conditions.

## Key facts about TPS

- Approved for patients with Alzheimer's disease.
- Penetration depths of up to 8 centimetres.
- TPS uses acoustic pulses that are transmitted non-invasively into the brain.
- Straightforward outpatient treatment; six sessions within two weeks, approx. 30 minutes per session.

## Audience takeaway notes

- 1. Learn about TPS technology: Gain a comprehensive understanding of TPS principles, mechanisms, and clinical applications.
- 2. Get an update on current research: Explore the latest advancements and findings in the field of TPS.
- 3. **Practical applications:** Discover how TPS can be utilized for cognitive enhancement and improved patient outcomes.
- 4. **Expand your knowledge:** Understand the broader therapeutic potential of TPS for various neurological conditions.

By attending this session, participants will gain valuable insights into TPS technology, current research developments, and practical applications in the treatment of patients with Alzheimer's disease and beyond. Join us to explore this innovative approach and its potential in non-invasive brain stimulation for neurological disorders.