Network TMS®
Target the exact areas in the brain affected by depression – nothing else

- Non-invasive, CE approved and FDA cleared treatment of major depressive disorder*
- Targets the focal point for depression – and affected networks
- Modulates the circuits in the brain controlling mood and emotion
- 3, 8, or 37 minutes per treatment session
As documented by researchers, the behavioral and functional consequences of depression are due to changes in brain activity. Researchers have also demonstrated that in order to alleviate the depression, a specific focal point in the brain needs to be reached. More specifically, the left side of the brain known as the left dorso-lateral prefrontal cortex (DLPFC).

**Small area – significant impact**
The DLPFC is the entry-point in the brain which connects all the different brain areas involved in depression. It is therefore also the prime target for the approved TMS treatment of treatment-resistant depression. By precisely stimulating this area of the neural brain network, the specific circuit in the brain which controls mood and emotion is reached and can be modulated and may thus alleviate the depression.

**Reach what you need to reach – nothing more**
This, in short, is what constitutes Network TMS™, a technology based on a principle of connectivity rather than an unspecific and large volume stimulation. In reality this means that only the specific areas in the brain which are altered by the depression are reached. Furthermore, there is no spill-over effect on other parts of the brain.

**The effects of network TMS®**

Schematic representation of the effects of network TMS, showing how targeted, focal TMS stimulation of the central executive network in the DLFPC modulates activity in other networks and anatomical parts of the brain for the treatment of depression. Thus, by stimulating at a focal point, the left DLFPC, TMS induces dynamic changes throughout the brain networks. Solid arrows represent direct connectivity, and dashed arrows represent indirect or sparse connectivity.

3 most frequently asked questions about Network TMS®

1. Which brain networks are involved in depression?
The three most prominent brain networks are 1) the default mode network, 2) the central executive network, and 3) the salience network. These three networks are crucial for cognition and self-control but their activity is altered in depression. All three networks can be reached with a frequency of 1 Hz of the right DLPFC, 10 Hz or iTBS of the left DLPFC as well as iTBS of the dorsomedial prefrontal cortex (DMPFC).

2. Which protocols can be used for Network TMS®?
The following protocols are currently CE approved. Both are clinically equivalent in terms of safety and effectiveness in treatment of depression:
- 3 minute Express TMS®, also known as intermittent theta burst stimulation (iTBS)
- 37 minute high frequency repetitive 10 Hz TMS
- 8 minute 1 Hz TMS applied to right DLPFC.

3. What are the most common side effects from Network TMS®?
MagVenture’s TMS Therapy® solution is free from common antidepressant drug side effects such as weight gain, dry mouth, and sexual dysfunction. Most common reported side effects are headache and nausea. As only the specific areas affected by the depression are being stimulated, the risk of further side effects is also reduced.

---


This brochure is an excerpt from “TMS Insights - Network TMS for treatment of depression”, by Sanne Barsballe Jessen, MSc Pharm, PhD, Medical Advisor and Claus Mathiesen, MSc, PhD, Application Specialist. Full article can be requested by contacting MagVenture at info@magventure.com. Please refer to this number: 511-0491.
Get more information

Contact us for more information if you consider offering TMS depression treatment to your patients. You can also find more information about the MagVenture TMS Therapy® on www.magventure.com

*Indication for use

MagVenture TMS Therapy® is FDA cleared for:
“Treatment of Major Depressive Disorder in adult patients who have failed to receive satisfactory improvement from prior antidepressant medication in the current episode.”

Federal law restricts this device to sale by or on the order of a physician.

MagVenture TMS Therapy® is CE approved for:
“Treatment of Major Depressive Disorder in adult patients who have failed to achieve satisfactory improvement from two prior antidepressant medications, at or above the minimal effective dose and duration in the current episode.”

www.magventure.com

---

Why choose MagVenture TMS Therapy®

- Safe, with high tolerability
- One time purchase – no pay per use
- Easy, reliable patient management system
- Covered by most insurance providers
- FDA cleared and CE approved: 3 minute Express TMS®