

What is TMS Therapy?

Transcranial magnetic stimulation (TMS) involves the use of very short pulsed magnetic fields to stimulate nerve cells in the brain. Since the 1980s, TMS has been used to study the nerve fibers that carry information about movements from the brain to the spinal cord and muscles. In the late 1990s physicians began to explore the therapeutic potential of TMS for the treatment of a variety of diseases, with depression being the most thoroughly studied to date. Since then, more than 30 randomized, controlled trials studying TMS as a treatment for depression have been published by investigators throughout the world.¹

NeuroStar TMS Therapy[®] for the treatment of depression* is a short outpatient procedure which uses pulsed magnetic fields to stimulate nerve cells within the area of the brain thought to control mood. TMS Therapy is performed in a psychiatrist's office under their supervision while the patient remains awake and alert. The NeuroStar TMS Therapy system is the only TMS device cleared by the FDA for the treatment of major depression. NeuroStar TMS Therapy is available upon the prescription of a psychiatrist. NeuroStar TMS is not indicated for all patients with depression; its choice as a treatment option and the benefits and risks of treatment should be discussed with the treating physician.

NeuroStar delivers TMS Therapy as an outpatient procedure, while patients remain awake and alert throughout treatment.

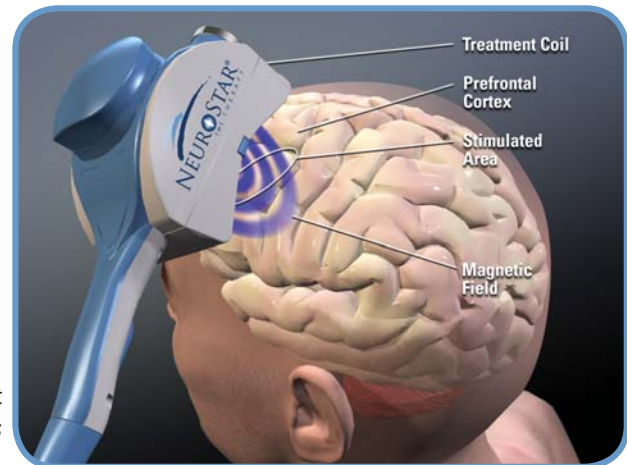


Placed over the prefrontal cortex, the NeuroStar treatment coil is repeatedly energized generating focused magnetic fields which non-invasively enter the brain.

How Does TMS Therapy Work?

During NeuroStar TMS Therapy, the treating clinician positions the treatment coil over the left prefrontal cortex, the part of the brain thought to be involved with mood regulation. Through the treatment coil, the NeuroStar TMS Therapy system generates a highly concentrated, magnetic field which turns on and off rapidly. The magnetic field is the same type and strength as that produced by a magnetic resonance imaging (MRI) machine. The magnetic field passes through the hair, scalp, and skull and into the prefrontal cortex unimpeded. This method allows for a precise type of stimulation, minimizing the stimulation of brain tissue not involved in mood.

Inside the brain, the dynamic nature of the pulsed magnetic field induces electrical charges to flow. The amount of electricity created in the brain is very small, but these small electric charges cause the neurons to fire or become active. The treatment goal is to stimulate (or activate) brain cells non-invasively without anesthesia or sedation. The most common side effects associated with TMS Therapy are scalp pain or discomfort at the site of application. Patients remain awake and alert throughout the TMS Therapy session, able to resume normal life activities immediately following treatment.



For more information visit www.neurostartms.com or call 1-877-600-7555.

*NeuroStar TMS Therapy[®] is indicated for the treatment of Major Depressive Disorder in adult patients who have failed to achieve satisfactory improvement from one prior antidepressant medication at or above the minimal effective dose and duration in the current episode.

¹ Schutter, D. (2009). "Antidepressant efficacy of high-frequency transcranial magnetic stimulation over the left dorsolateral prefrontal cortex in double-blind sham-controlled designs: a meta-analysis." *Psychological Medicine* 39: 65-75.