



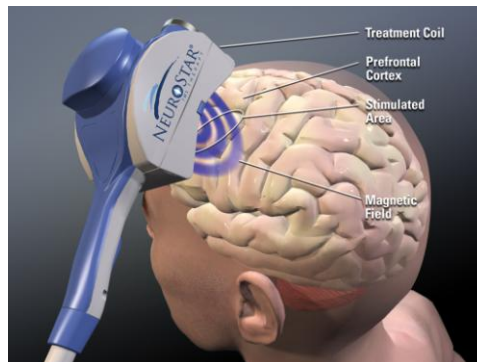
NeuroStar® TMS Therapy System Fact Sheet

The NeuroStar TMS Therapy system is the first and only non-systemic and non-invasive treatment for depression. It was recently cleared by the U.S. Food and Drug Administration (FDA) for the treatment of Major Depressive Disorder in adult patients who have failed to achieve satisfactory improvement from prior antidepressant medication. NeuroStar TMS Therapy is a 40-minute outpatient procedure that is performed under the supervision of a psychiatrist, it does not require anesthesia or sedation, and patients remain awake and alert during the procedure. The treatment is administered daily for 4-6 weeks.



How NeuroStar TMS Therapy Works

During NeuroStar TMS Therapy, magnetic field pulses are generated and aimed at the left, prefrontal cortex, an area of the brain that has been demonstrated to function abnormally in patients with depression. These magnetic fields are the same type and strength as those used in magnetic resonance imaging (MRI) machines. The magnetic field pulses pass unimpeded through the hair, skin, and skull and into the brain.



Once inside the brain, the magnetic field pulses induce an electrical current to flow. The amount of electricity created is very small, and cannot be felt by the patient, but the electric charges cause the neurons to become active and are thought to lead to the release of

neurotransmitters such as serotonin, norepinephrine and dopamine.

Efficacy and Safety of NeuroStar TMS Therapy

NeuroStar TMS Therapy was evaluated for efficacy, safety, and tolerability in the acute treatment of major depression in patients who had failed to receive satisfactory improvement from prior antidepressant medication. A six-week, randomized, placebo-controlled, double-blind study established the efficacy of NeuroStar TMS Therapy in the treatment of depression.

This clinical study population was comprised of patients with unipolar, non-psychotic major depressive disorder. Almost all of them (97%) had suffered previous depression episodes. These patients also had an extensive treatment history without satisfactory improvement. They had received a median of 4 total prior antidepressant treatment attempts in the current episode, one of which achieved treatment adequacy at or above the minimal effective dose and duration. Thirty-five percent of the patients had a co-morbid anxiety disorder and all had moderate to severe depressive symptoms.

In the indicated patient population, the following efficacy results were observed in the randomized, controlled study:

- The primary efficacy measure, the Montgomery-Asberg Depression Rating Scale (MADRS) symptom score change at four weeks, was statistically significant compared to placebo ($p=0.0006$), for NeuroStar-treated patients. Similar results were observed with the Hamilton Depression Rating Scale (HAMD).
- NeuroStar TMS Therapy-treated patients had statistically significant response and remission rates, which were approximately twice the rate of placebo-treated patients
- NeuroStar TMS Therapy also produced statistically significant improvements compared to placebo on the HAMD factor scores for core depression symptoms, anxiety symptoms, somatization, and psychomotor retardation

Patients who did not respond in the randomized, controlled study entered into a 6-week, open-label treatment study. In the open-label study, which is most like real-world clinical practice, the following was observed:

- Patients treated with NeuroStar TMS Therapy achieved a 54% response rate on the HAMD 24-item scale, at the end of 6 weeks. Similar results were also noted in other depression rating scales

Safety

Throughout NeuroStar TMS Therapy studies, more than 10,000 active TMS treatments were safely performed, with the following the safety results observed:

- No systemic side effects (weight gain, sexual dysfunction, sedation, nausea, or dry mouth)
- No adverse effects on concentration or memory
- No seizures
- No device-drug interactions
- The most common adverse event related to treatment was scalp pain or discomfort at the treatment area during active treatments, which was transient and mild to moderate in severity; the incidence of this declined markedly after the first week of treatment.
- There was a less than 5 percent discontinuation rate due to adverse events.

NeuroStar TMS Therapy is contraindicated in patients with implanted metallic devices or non-removable metallic objects in or around the head. As with any antidepressant treatment, patients should be monitored for symptoms of worsening depression.

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