



DEPRESSION TREATMENTS COMPARISON

EFFICACY

SIDE EFFECTS

LOGISTICS

FDA-APPROVED DIAGNOSES

CONTRAINDICATIONS

OFF-LABEL USE



VNS VAGUS NERVE STIMULATION

VNS Therapy involves a device that is implanted via outpatient surgery. It stimulates the vagus nerve by sending mild pulses, which have been shown to improve depression symptoms.

- ✓ Covered by insurance
- * Medication history required

Nearly 7 in 10 patients saw significant improvement when VNS Therapy was added to their usual treatment. Nearly 4 in 10 fully or almost fully recovered.

VNS Therapy may cause mild side effects including hoarseness or changes in voice, prickling or tingling in the skin, or cough only while an electrical pulse is occurring (5-sec duration).

VNS Therapy often takes 6 months for prior authorization. Outpatient surgery is scheduled at a local hospital, and then in-clinic follow-up appointments for device interrogation are required.

- Major Depressive Disorder
- Bipolar Depression

- Vagotomy

- None



TMS TRANSCRANIAL MAGNETIC STIMULATION

This non-invasive treatment involves applying magnetic pulses to the brain to improve communication between the neurons involved in mood.

- ✓ Covered by insurance
- * 3+ antidepressants in medication history required

Among Breakthru's patients with depression, 93.9% experienced an improvement in symptoms, with 42.4% achieving remission. Similarly, 87.9% of patients with anxiety showed improvement, with 42.4% achieving remission.

One major advantage of TMS is the lack of systemic side effects. Patients may experience a slight headache after the first 1-2 treatments.

TMS protocol is 36 treatments over 9 weeks, with improvement likely by the 4th week. Treatment is 5x a week for 6 weeks and then a taper down for the last 3 weeks. Appointments last 30 minutes, and patients can drive themselves after treatment.

- Major Depressive Disorder

- Bipolar 1 and 2
- Epilepsy
- Metal implant above the waist
- Mood stabilizers

- Generalized Anxiety Disorder
- Obsessive Compulsive Disorder



SPRAVATO®

Spravato is an FDA-approved refined form of ketamine administered nasally. It has the same beneficial effects as ketamine at a lower dosage.

- ✓ Covered by insurance
- * 3+ antidepressants in medication history required, and currently on an anti-depressant

Among Breakthru's patients with depression, 89.7% of patients showed improvement, and 31.0% achieved remission by treatment 13. For anxiety patients, 88.9% of patients showed improvement, and 18.5% achieved remission by treatment 13.

Because Spravato is a refined form of ketamine, it elicits lower levels of side effects than IV ketamine at the dosage effective for treating depression.

Spravato treatment is 2x week for 4 weeks, then 1x week for 4 weeks. Maintenance treatments are required to maintain symptom relief. Appointments last 2 hours, and patients cannot drive themselves after treatment.

- Major Depressive Disorder

- Bipolar 1 and 2
- High blood pressure
- History of aneurisms
- Arteriovenous malformation
- Substance Use Disorder

- None



IV KETAMINE

Ketamine works by rapidly improving the brain's neuroplasticity. Its fast-acting effects make it ideal for severe, treatment-resistant, or suicidal depression.

- ✗ Not covered by insurance
- * No medication history required

Among Breakthru's patients with depression, 95.8% of patients showed improvement, and 41.7% achieved remission by treatment 9. For anxiety patients, 90.9% of patients showed improvement, and 54.5% achieved remission by treatment 9.

Ketamine may cause mild side effects of **nausea, headache, dizziness, and dissociation**, which are temporary and only occur during infusion.

IV treatments are typically 2-3x week for 3 weeks and then decreased with the goal of one treatment per month. Maintenance treatments are required to maintain symptom relief. Appointments last 90 minutes, and patients cannot drive themselves after treatment.

Ketamine is not FDA-approved but has been extensively studied in the field of psychiatry and is established as safe and effective.

- Bipolar 1
- High blood pressure
- History of aneurisms
- Arteriovenous malformation
- Substance Use Disorder

- Major Depressive Disorder
- Generalized Anxiety Disorder
- Obsessive Compulsive Disorder
- Post-Traumatic Stress Disorder



PRISM

Prism is an FDA-cleared, neuroscience-informed treatment for PTSD. Using an amygdala-based biomarker, patients engage in a non-trauma-based experience to manage and reduce PTSD symptoms.

- ✗ Not covered by insurance
- * No medication history required

In a clinical trial, 67% of patients showed significant symptom improvement, and +32% experienced remission. Patients continue to improve after treatment is complete.

The most common side effects experienced by subjects were mild, such as headaches, dizziness, and fatigue, which resolved after the end of the session without intervention.

Prism treatment is 15 treatments over 8 weeks. Scheduling is flexible. Appointments are 45 minutes, and no maintenance is required.

- Post-Traumatic Stress Disorder

- None

- Generalized Anxiety Disorder
- High-Performance Stress