



DBS FOR ESSENTIAL TREMOR

RECLAIM CONTROL

Life-changing therapy awaits.



According to the Essential Tremor foundation, **Deep Brain Stimulation (DBS) is the most effective treatment for tremor.**¹



WHAT IS DBS?

With **more than two decades of clinical evidence and 200,000+ patients implanted worldwide**; DBS is the most common surgical treatment option for essential tremor.^{1,2}

DBS is a medical treatment that delivers electrical signals to precise areas of the brain to modulate abnormal brain activity and provide relief from movement disorder symptoms.

People With DBS In Clinical Studies Have Shown*:

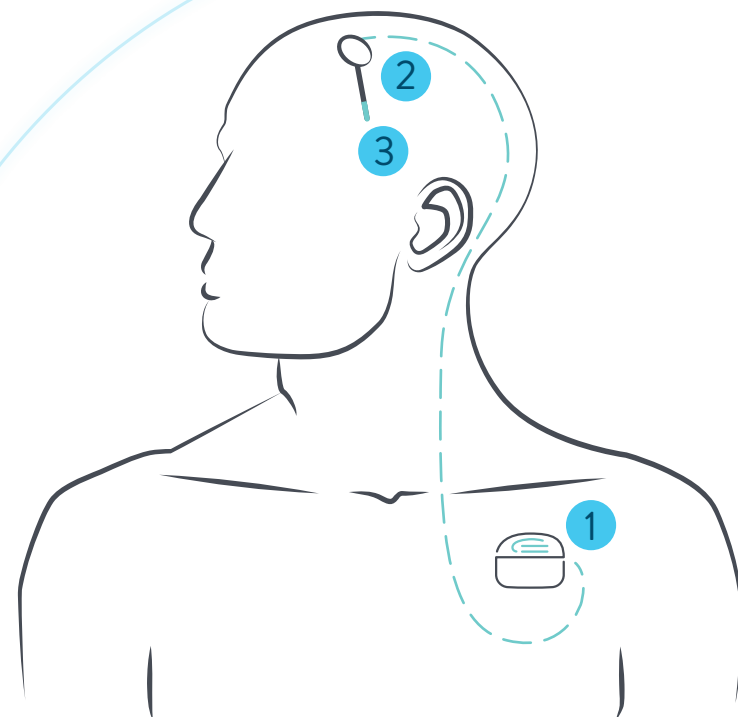
- Enhanced quality of life³
- High patient satisfaction rating³
- 60% average improvement in tremor³
- Activities of daily living improved by 80% at 12-months⁴

HOW DOES DBS WORK?

Essential tremor is caused by abnormal electrical activity in certain areas of the brain. This abnormal activity leads to the involuntary shaking that characterizes essential tremor. DBS helps by sending targeted electrical pulses to the necessary areas of the brain, helping to alleviate tremor.

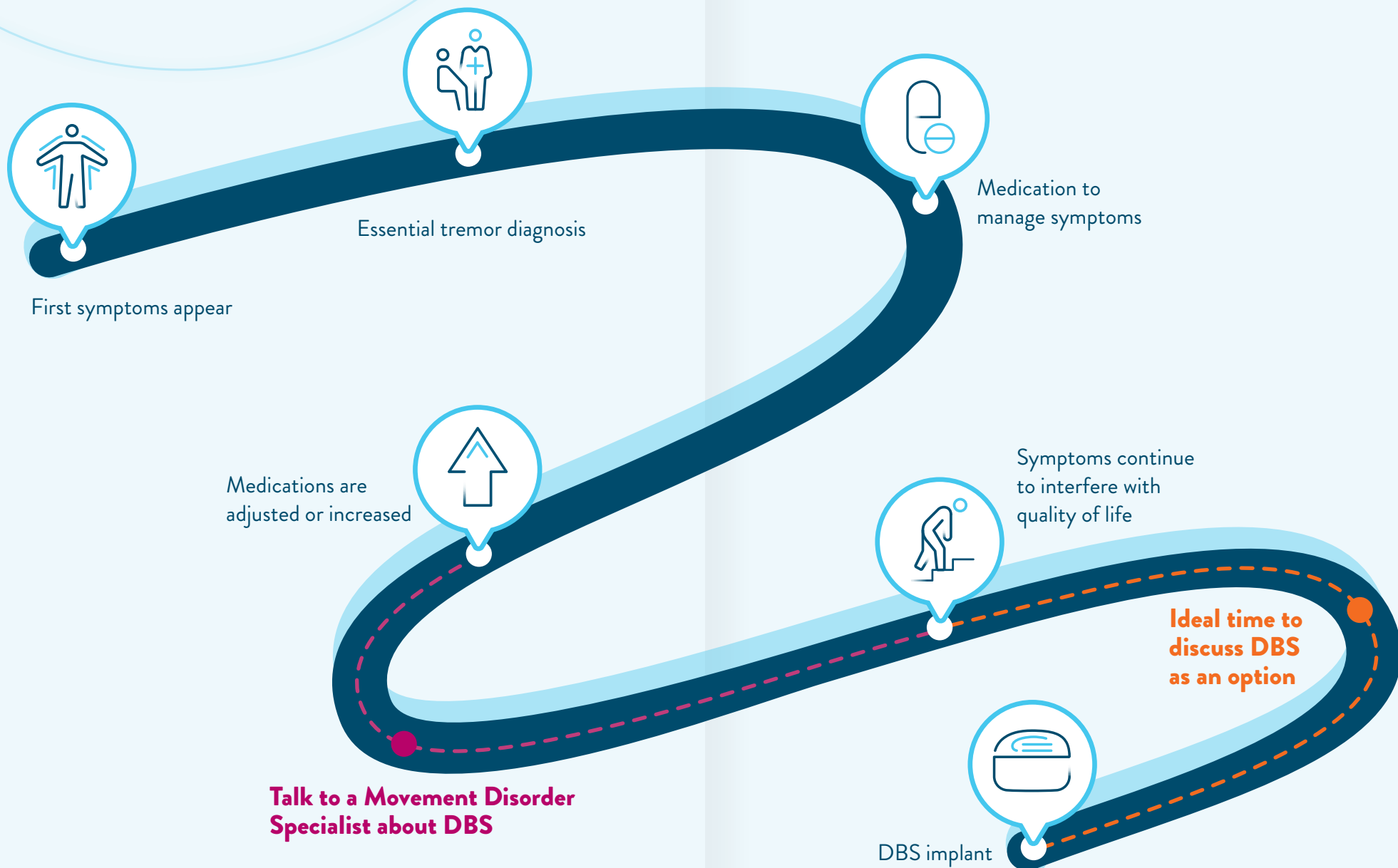
How DBS Therapy Works

- 1 The DBS battery sends energy pulses through thin wires called leads, like a pacemaker for the brain.
- 2 The leads target the specific areas of the brain responsible for movement disorder symptoms.
- 3 The pulses of energy help to relieve movement disorder symptoms.



WHEN SHOULD I GET DBS?

In general, the best time to get DBS treatment is after you've tried managing the condition with medication, but symptoms continue to interfere with your quality of life.³



THE ABBOTT DIFFERENCE

Abbott is committed to addressing the unique experiences and needs of individuals living with essential tremor by providing **DBS systems that help people improve their quality of life**. Our commitment is not just about providing DBS devices; it's about listening and adapting to the evolving needs of people with essential tremor.

“After DBS, my life has significantly improved. I’m no longer bound to plastic cups, and my writing is back. It’s been four years since my DBS implant, and I couldn’t be happier!”

Jeff W.
Abbott DBS Ambassador



PIONEERS OF DIRECTIONALITY

With **Abbott’s introduction of directional lead technology**, the prospects for individuals with essential tremor significantly improved.

Directional lead technology gives your doctor the ability to personalize your therapy optimizing outcomes.⁵



Expanding Possibilities
with Abbott’s directional
lead technology.

*Enlarged image – not actual size.

OPTIONS FOR

RECHARGEABLE Liberta RC™ DBS System

The Liberta RC™ DBS System is our smallest option available, and great for people who can maintain a recharging schedule.



SMALLEST DBS BATTERY

on the market^{6**}



LOWEST RECHARGE FREQUENCY

with 10 recharges per year^{7,8***}



UPGRADEABLE TECHNOLOGY

ensures wireless access to future upgrades without surgery



PERSONALIZED SETTINGS

from your personal smartphone with our downloadable app



REMOTE PROGRAMMING

With NeuroSphere™ Virtual Clinic, a first-of-its-kind connected care technology in the U.S. that allows people to communicate with their doctors, ensure proper settings and functionality, and receive new treatment settings remotely as needed without stepping foot in a doctor's office^{9†,††}

ANY LIFESTYLE

NON-RECHARGEABLE Infinity™ DBS System

The Infinity™ DBS System is an option for patients who prefer to simply turn on the device and not think about recharging.



LONG-LASTING NON-RECHARGEABLE

with the average battery lasting five years or longer.¹⁰



LOW MAINTENANCE



UPGRADEABLE TECHNOLOGY

ensures wireless access to future upgrades without surgery



PERSONALIZED SETTINGS

from your personal smartphone with our downloadable app



REMOTE PROGRAMMING

With NeuroSphere™ Virtual Clinic, a first-of-its-kind connected care technology in the U.S. that allows people to communicate with their doctors, ensure proper settings and functionality, and receive new treatment settings remotely as needed without stepping foot in a doctor's office^{9†,††}

THE FUTURE OF CONNECTED HEALTH TECH IS HERE

With DBS, follow-up appointments to reprogram the device are necessary from time to time. Abbott DBS systems are the only **DBS systems with NeuroSphere™ Virtual Clinic**, a first-of-its-kind connected care technology in the U.S. offering you a direct link to healthcare providers for consultations and therapy adjustments from the comfort of home.^{9†,††}

BENEFITS

- Virtual care and therapy adjustments
- Shorter time to symptom improvement and therapy optimization¹¹
- Initial studies suggest remote programming can save users and their care partners time and money¹²



9 OUT OF 10 PATIENTS¹⁴

- ✓ Agreed NeuroSphere™ Virtual Clinic improved their access to care
- ✓ Were satisfied with their experience
- ✓ Would use NeuroSphere™ Virtual Clinic again



COMMON QUESTIONS

1 Will insurance cover the DBS implant?

Medicare and most major insurance plans typically cover it. Ask the staff at your doctor's office how to ensure you have coverage.

2 How long does it take for symptoms to improve?

For some people, symptoms improve immediately after the surgery. Others may see improvements over several weeks or months as the doctor continues to make programming changes and adjust medications.

“DBS gave me and my family our lives back. We all know the meaning of a second chance and are so grateful. I have my life back!”

Debbie E.
Abbott DBS Ambassador



REAL EXPERIENCES. REAL SUPPORT.

Like Debbie, many people with essential tremor have gotten their life back with DBS. Connect with an Ambassador to learn from someone who's found joy and relief through DBS or visit LifeWithDBS.com for additional FAQs and resources.



* Studies include devices from Boston Scientific†, Medtronic‡, and Abbott§

** US market only. Based off comparison to volume of the following smallest IPG offerings from US DBS manufacturers:

AbbottLiberta RC™ DBS System: 13.6 cc, Boston Scientific Vercise† Genus R16: 20.1 cc and Medtronic Percept† RC: 13.77 cc.

*** Upon implant of the Liberta RC™ DBS System, 37 days of therapy when programmed with standard (nominal) stimulation settings as described in device instructions for use. Recommended recharge frequency and duration for competitor rechargeable DBS systems described in their respective IFU or clinical studies, which may involve different patient populations and other variables. Not a head-to-head comparison of stimulation settings or clinical outcomes.

† Anywhere with a cellular or Wi-Fi connection and sufficiently charged patient controller and neurostimulation device.

‡ Available on eligible mobile devices. For a list of mobile devices compatible with Abbott's Neuromodulation Patient Controller applications visit <http://www.NMmobiledevicesync.com/dbs>

1. International Essential Tremor Foundation. Surgical Options: A Comprehensive Handbook on Current Surgical Treatments. Published 2023. Accessed July 9, 2024. Available from: <https://essentialtremor.org/wp-content/uploads/2023/08/Surgical-Options-Brochure-2023.pdf>
2. Lozano AM, Lipsman N, Bergman H, et al. Deep brain stimulation: current challenges and future directions. *Nat Rev Neurol*. 2019;15(3):148-160. doi:10.1038/s41582-018-0128-2
3. Iorio-Morin C, Fomenko A, Kalia SK. Deep-Brain Stimulation for Essential Tremor and Other Tremor Syndromes: A Narrative Review of Current Targets and Clinical Outcomes. *Brain Sci*. 2020;10(12):925. doi:10.3390/brainsci10120925.
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5. Schnitzler A, Mir P, Brodsky MA, et al. Directional Deep Brain Stimulation for Parkinson's Disease: Results of an International Crossover Study With Randomized, Double-Blind Primary Endpoint. *Neuromodulation*. 2022;25(6):817-828. doi:10.1111/ner.13407
6. Abbott. Liberta RC™ DBS System Size Comparison Claims Memo (MAT- 2400042). 2024.
7. Abbott. Liberta RC™ DBS System Recharging Comparison Claims Memo. Plano, TX. 2024.
8. Abbott. Liberta RC™ Implantable Pulse Generator Clinician's Manual. Plano, TX. 2023.
9. Abbott. Virtual Clinic First-of-its-kind Memo. Plano, TX. 2021.
10. Abbott. Infinity IPG Lifetime Determination Report, Development Technical Report. Document Number: 90933515.
11. Abbott. ROAM-DBS Clinical Study Report (CL1023599). Plano, TX. 2024.
12. Esper CD, Merola A, Himes L, Patel N, Bezchlibnyk YB, Falconer D, Weiss D, Luca C, Cheeran B, Mari Z. Necessity and feasibility of remote tele-programming of deep brain stimulation systems in Parkinson's disease. *Parkinsonism Relat Disord*. 2022 Mar;96:38-42. doi: 10.1016/j.parkreldis.2022.01.017. Epub 2022 Jan 24. PMID: 35151948.

Risk Information: There is no cure for Parkinson's disease (PD) and essential tremor (ET), but there are options available to treat symptoms. The first-line therapy is medication. Surgical treatments are also available. It's important to discuss with your doctor what's right for you along with the risks and side effects of each option, such as motor fluctuations or permanent neurological impairment. As with any surgery or therapy, DBS has risks and complications. Loss of coordination is a potential side effect of DBS therapy. Patients should exercise reasonable caution when participating in activities requiring coordination, including those that were done before receiving therapy (for example, swimming). Patients should also exercise reasonable caution when bathing. New onset or worsening depression, which may be temporary or permanent, is a risk that has been reported with DBS therapy. Suicidal ideation, suicide attempts, and suicide are events that have also been reported. Most side effects of DBS surgery are temporary and correct themselves over time. Some people may experience lasting, stroke-like symptoms, such as weakness, numbness, problems with vision or slurred speech. In the event that the side effects are intolerable, or you are not satisfied with the therapy, the DBS system can be turned off or surgically removed. Risks of brain surgery include serious complications such as coma, bleeding inside the brain, paralysis, seizures and infection. Some of these may be fatal.

Abbott

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Neuromodulation.Abbott

Rx Only

Brief Summary: Prior to using Abbott devices, please review the User's Guide for a complete listing of indications, contraindications, warnings, precautions, potential adverse events, and directions for use. The system is intended to be used with leads and associated extensions that are compatible with the system.

Indications for Use: Bilateral stimulation of the subthalamic nucleus (STN) or the internal globus pallidus (GPI) as an adjunctive therapy to reduce some of the symptoms of advanced levodopa-responsive Parkinson's disease that are not adequately controlled by medications, and unilateral or bilateral stimulation of the ventral intermediate nucleus (VIM) of the thalamus for the suppression of disabling upper extremity tremor in adult essential tremor patients whose tremor is not adequately controlled by medications and where the tremor constitutes a significant functional disability.

Contraindications: Patients who are unable to operate the system or for whom test stimulation is unsuccessful. Diathermy, electroshock therapy, and transcranial magnetic stimulation (TMS) are contraindicated for patients with a deep brain stimulation system.

Warnings/Precautions: Return of symptoms due to abrupt cessation of stimulation (rebound effect), excessive or low frequency stimulation, risk of depression and suicide, implanted cardiac systems or other active implantable devices, magnetic resonance imaging (MRI), electromagnetic interference (EMI), proximity to electrosurgery devices and high-output ultrasonics and lithotripsy, ultrasonic scanning equipment, external defibrillators, and therapeutic radiation, therapeutic magnets, radiofrequency sources, explosive or flammable gases, theft detectors and metal screening devices, case damage, activities requiring excessive twisting or stretching, operation of machinery and equipment, pregnancy, pediatric use, and implant heating. Loss of coordination is a possible side effect of DBS Therapy, exercise caution when doing activities requiring coordination (for example, swimming), and exercise caution when bathing. Patients who are poor surgical risks, with multiple illnesses, or with active general infections should not be implanted.

Adverse Effects: Loss of therapeutic benefit or decreased therapeutic response, painful stimulation, persistent pain around the implanted parts (e.g., along the extension path in the neck), worsening of motor impairment, paresis, dystonia, sensory disturbance or impairment, speech or language impairment, and cognitive impairment. Surgical risks include intracranial hemorrhage, stroke, paralysis, and death. Other complications may include seizures and infection. User's Guide must be reviewed for detailed disclosure.

™ Indicates a trademark of the Abbott group of companies.

‡ Indicates a third-party trademark, which is property of its respective owner.

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