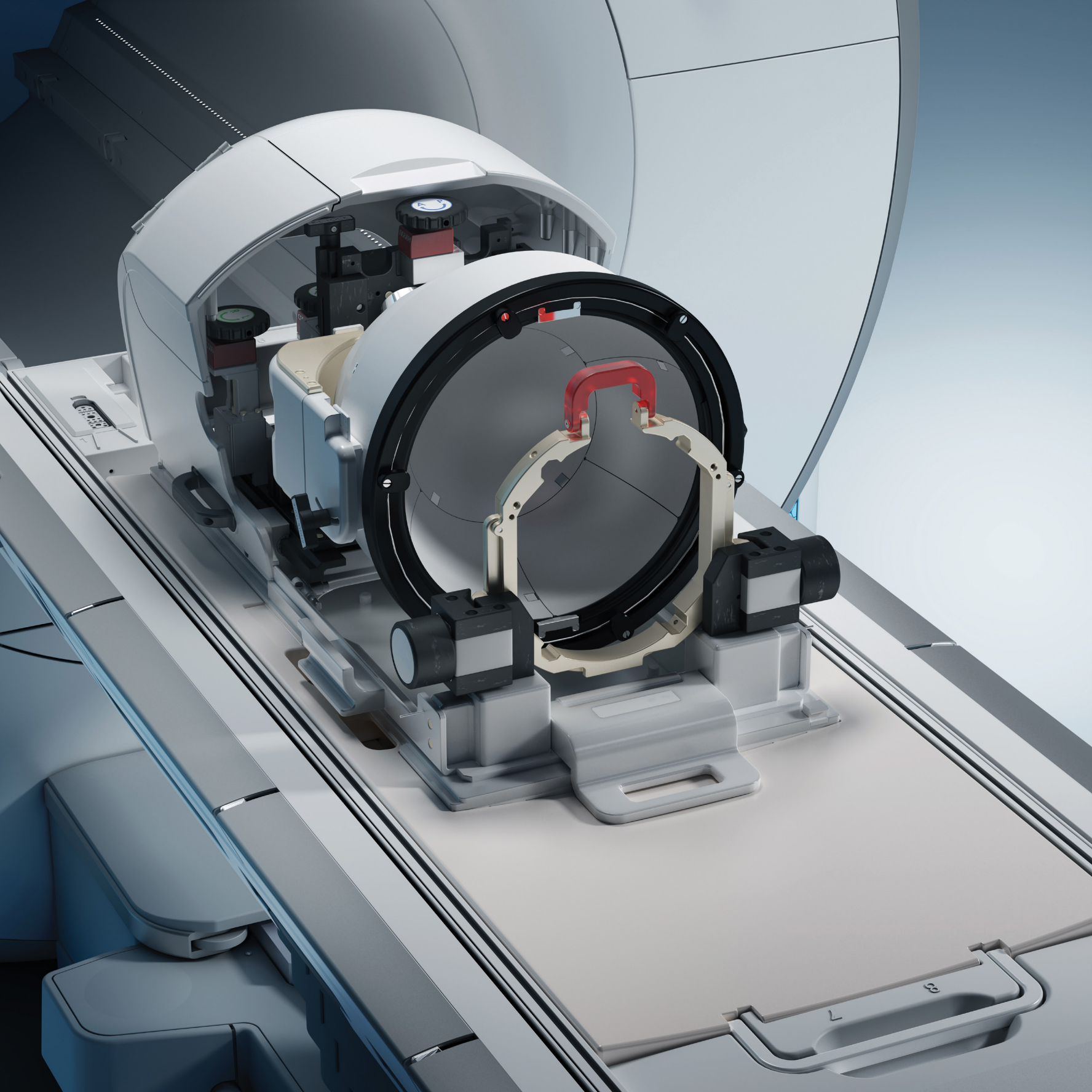
INCISIONLESS **NEUROSURGERY**

Exablate Neuro | MR-guided
Focused Ultrasound

INSIGHTEC



Harness the Therapeutic Power of Focused Ultrasound

Incisionless. Outpatient. Life-changing.

Exablate® Neuro delivers up to 1024 ultrasound waves to precisely heat and ablate deep brain targets with no surgical incisions or burr holes. Treatment is guided by MR imaging for patient-specific planning, real-time temperature monitoring as well as immediate confirmation of treatment outcome.

First, low energy is applied for locating the ultrasound to the anatomic target followed by physiologic evaluation of patient response including tremor relief as well as potential side effects. Once the target is confirmed, the energy is gradually increased to create a highly accurate and controllable lesion. The result for many patients is immediate improvement of tremor with minimal complications.

Innovation is No Longer Cutting Edge

- Phase array, piezoceramic helmet with 1024 elements
- Advanced focusing algorithms that adjust according to patient's skull to ensure beams converge at target
- Precise focal spot location controlled in size (2-5mm) and location (<1mm accuracy)
- Continuous flow of water actively cools patient's skull
- Advanced software for treatment monitoring and control
- Compatible with certain GE Healthcare and Siemens Healthineers MR scanners

For specific indications for use in each country, please refer to the Regulatory Approvals page at www.insightec.com/regulatory-approvals


Imaging
Planning
Treatment

Transforming Patient Care

Focused ultrasound treatment is performed in the MRI suite, with the treating physician sitting at a computer using a mouse instead of scalpel, to expertly create a lesion.

Incisionless treatment

- No invasive burr holes or implants
- No general anesthesia required
- Little to no risk of infection[1]
- Minimal hospitalization

Tremor improvement

- Immediate tremor improvement post-procedure
- Improved quality of life[1]
- ET tremor stably maintained at 3 years[1]

Personalized treatment

- Neurologic evaluation of patient response and potential side effects before final lesion
- Enables sub-millimeter target movement

Safe and effective

- Real-time thermal feedback to continuously monitor patient safety and temperature at target
- Majority of adverse events were minor and the rest were moderate[1]

Risks

Risks associated with focused ultrasound thalamotomy include transient and/or permanent sensory paresthesias, numbness, imbalance, and/or gait disturbance. Additional risks and adverse events associated with the Exablate Neuro treatment include brief sonication-related pain, brief sonication-related dizziness and nausea or potential for deep vein thrombosis associated with lengthy time on the treatment bed. For complete risk information, please refer to the Safety Information page at **www.insightec.com/safety-information**

[1] Premarket Approval P150038
www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpma/pma.cfm?id=P150038

See. Treat. Monitor.

Focused ultrasound is usually performed as an outpatient procedure without sedation. Treatment time is on average 2.5 hours including patient preparation and scans. The treatment is unilateral, generally treating the dominant hand.

Patient Preparation

Before treatment, a CT scan is done to detail the shape, thickness and density of the patient's skull for final confirmation of patient candidacy and to guide treatment. On the day of treatment, the patient's head is shaved and a local anesthetic is applied for affixing the stereotactic frame. The patient is positioned on the treatment bed with their head in the Exablate Neuro helmet. Cold water is circulated around the scalp.

Planning

Pre-operative and intraoperative (fused) MRI images are taken to create a patient-specific treatment plan.

Target Verification

First low energy sonications (application of ultrasound energy) are used to align the focal point to the intended target. Energy is gradually increased to assess patient response and identify any potential complications. Spirals or other testing methods are used to assess tremor improvement throughout the treatment.

Treatment

High energy is applied to make the final lesion. The ultrasound waves precisely converge at the target in the Vim of the thalamus. At the focal point, temperatures increase to near 140°F/60°C, causing thermal ablation of the target tissue. The treatment is continuously guided by MRI for real-time thermal feedback of temperature changes at the target.

Assessment

Treatment outcome may be confirmed using an MRI scan post-procedure. Many patients experience an immediate reduction in their tremor with minimal complications and usually return to normal daily activities within days.

Clinical Evidence

3 year follow up pivotal study of focused ultrasound for essential tremor[1]

Population

Of the total 75 subjects in the Insightec sponsored pivotal trial, 57 are included in the 2-year and 54 are included in the 3-year analysis of the long term study results.

Safety

The most common adverse events experienced after treatment included:

- Imbalance/gait disturbance (26%)
- Numbness/tingling (33%)
- Headache/head pain (51%)

Most of these events were classified as mild or moderate, and 48% of all adverse events resolved on their own within 30 days.

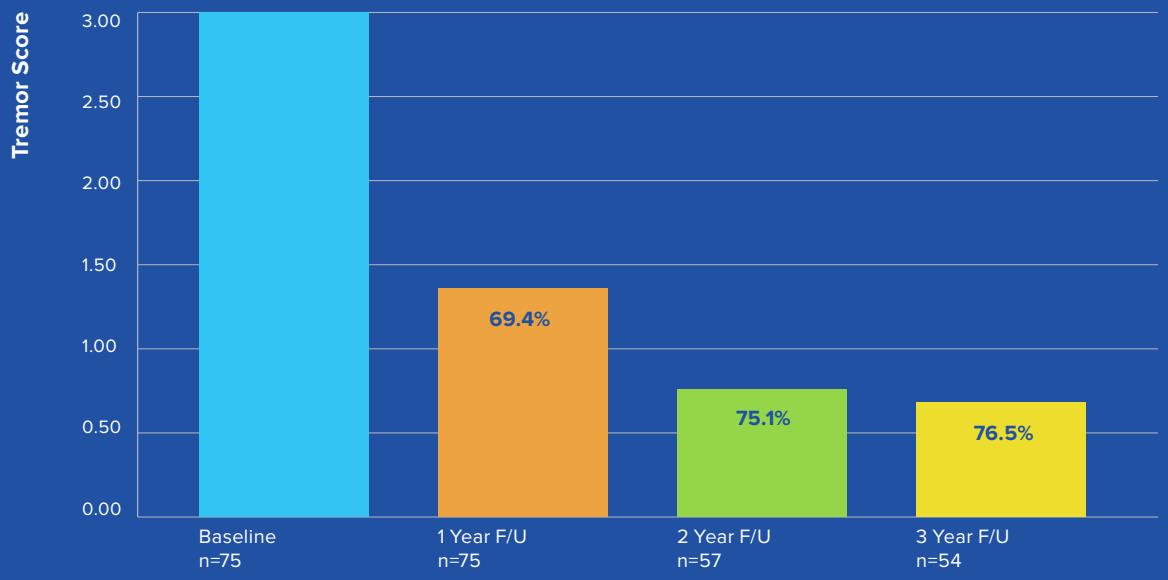
Adverse events that persisted at three years were all mild or moderate and included:

- Numbness/tingling (9%)
- Imbalance (4%)
- Unsteadiness (4%)
- Gait disturbance (2%)
- Musculoskeletal weakness (2%)

Additional infrequent events include dizziness, taste disturbance, slurred speech, fatigue and vomiting. The number in parenthesis is the percentage of active subjects experiencing these adverse events.

[1] Premarket Approval P150038
www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpma/pma.cfm?id=P150038

Essential Tremor Outcome



Percentages represent tremor improvement over baseline.

Efficacy: The tremor severity score (CRST Part A) improved 75.1% and 76.5% over baseline at 2- and 3-year follow-up, respectively, for combined (Exablate Neuro and crossover) subjects.

Additionally, improvement in tremor/motor function (CRST Part A & B) was 39.6% at one year (75 subjects), and 53.1% at three years (54 subjects). Functional disability (CRST Part C) showed a 64.0% improvement at one year with some decline to 56.9% improvement from baseline at three years.

The graph above represents the long term results of thalamotomy for ET. Corresponding results for thalamotomy for Tremor-dominant Parkinson's Disease are limited to one year follow up.[1]

@insightec.MRgFUS

@insightec

@company/insightec

insightec.com

PUB41006947 Rev. 1