INSIGHTEC

CLINICAL STUDY **RESULTS**

Focused Ultrasound for Essential Tremor

What is Magnetic Resonance guided Focused Ultrasound

Magnetic Resonance guided Focused Ultrasound is an incisionless treatment for essential tremor patients who have not responded to medication. It uses sound waves guided by MRI to treat deep in the brain with no incisions or permanent implants.

The ultrasound waves are focused on a small spot in the brain, the Vim of the thalamus, considered to be an area that is responsible for tremor. The temperature at the target rises high enough to create a small ablation or burn, providing a therapeutic e!ect. The patient lies down on a table which moves in and out of the MRI scanner. The MRI is the eyes of the treatment, enabling the physician to plan, guide and target the area for treatment. It also acts like a thermometer, providing continuous temperature monitoring to verify that only the targeted tissue is destroyed.

For intended use in each country, please see insightec.com/regulatory-approvals/

Efficacy Results: First Side

During an Insightec-sponsored clinical trial, 56 subjects received focused ultrasound treatment and 19 received a sham procedure and then crossed over to the focused ultrasound treatment arm. Of these 75 treated subjects, a total of 40 are included in the 5-year analysis.

Hand Tremor: The tremor severity (as measured by the CRST Part A) **improved 73%** over baseline at 5-year follow-up for combined (focused ultrasound and crossover) subjects.

Functional disability and quality of life: Tremor/Motor function (as measured by CRST Part A + B) **improved by 40%** at three years. Functional disability (as measured by CRST part C) **improved 44.5%** from baseline at three years.

73%
Improvement in Tremor Severity at 5-year follow-up

44.5%
Improvement in Functional Disability at 5-year follow-up

Efficacy Results: Second Side

During an additional Insightec-sponsored clinical trial, 51 subjects, who previously had their first side treated, underwent treatment of their second side after waiting at least 9 months.

Tremor: The tremor severity (as measured by the CRST Part A) **improved 80.2%** over baseline at 6 months, as compared to the temor on that side prior to the second treatment

Functional Disability and Motor Function: Tremor/Motor function (as measured by CRST Part A + B) **improved 64.3%** at 6 months, as compared to the second side at baseline prior to treatment. Functional disability (as measured by CRST part C) **improved 74.3%** at 6 months, as compared to the second side at baseline prior to treatment.

80.2%
Improvement in Tremor Severity at 6 month follow-up

74.3%
Improvement in Functional Disability at 6 month follow-up

Safety Results

Overall, the focused ultrasound treatment has been shown to be safe for treating essential tremor with minimal risk, but as with any medical procedure, there are risks. You should have a detailed conversation with your physician regarding complications, also known as adverse events, that you may experience.

First Side Treatment – Insightec sponsored clinical studies have shown that the most common adverse events after treatment are:

- Imbalance/Gait Disturbance (26% of subjects)
- Numbness/Tingling (33% of subjects)
- Headache/Head Pain (51% of subjects).

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

Additional infrequent events include dizziness, taste disturbance, slurred speech, fatigue and vomiting.

First Side Treatment – Adverse events that persisted at 3 years were all mild or moderate and included:

- Numbness/Tingling (9% of subjects)
- Imbalance (4% of subjects)
- Unsteadiness (4% of subjects)
- Gait Disturbance (2% of subjects)
- Musculoskeletal Weakness (2% of subjects)

Second Side Treatment – Insightec sponsored studies have shown that the most common adverse events are:

- Numbness/Tingling (31% of subjects)
- Slurred Speech (29% of subjects)
- Ataxia (23% of subjects)

About half of the related events were still ongoing at 6 months, but nearly all (95.7%) were mild.

Second Side Treatment – Complications that persisted in more than 2% of subjects at 6 months included:

- Numbness/Tingling (16% of subjects)
- Slurred speech (14% of subjects)
- Ataxia (14% of subjects)
- Hyogeusia (8% of subjects)
- Dysphagia (8% of subjects)
- Dysgeusia (6% of subjects)

The number in parentheses is the percentage of active subjects experiencing these adverse events at the 6-month time point.

*For additional safety information, please refer to: Pre-Market Approval (PMA) P150038 for the first treated side and Pre-Market Approval (PMA) P150038-S022 for the second treated side. Again, you should discuss in detail the risks, benefits and treatment options with your physician prior to treatment.

If a blood clot or deep vein thrombosis (DVT) occurs after the procedure and is not treated urgently it could lead to long term muscle, heart, brain, or lung damage. There is a possibility that your tremor may return months or years after treatment. This procedure does not treat the underlying disease nor prevent its progression.

For more information on the focused ultrasound treatment, including warnings, precautions, potential side e!ects and contraindications, please see the Safety Information page: insightec.com/safety-information/

1. Cosgrove GR, Lipsman N, Lozano AM, et al. Magnetic resonance imaging- guided focused ultrasound thalamotomy for essential tremor: 5-year follow-up results. J Neurosurg. 2022;1-6. doi:10.3171/2022.6.JNS212483.
2. Data on file with Insightec. Premarket (PMA) P150038 https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpma/pma.cfm?id=P150038

EU1009709 Rev1
Device name: Exablate Neuro