

NORTHWEST NEUROLOGY SPECIALISTS

Movement Disorders Clinic
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PRE-AUTHORIZATION REQUEST - DEEP BRAIN STIMULATION

Date: October 15, 2025

Procedure: Unilateral (Right) VIM Thalamic DBS

CPT: 61863 (unilateral lead), 61885 (IPG)

PATIENT INFORMATION

Name: Thompson, Gerald Wayne

DOB: 02/14/1952 (Age 73 years)

Sex: Male

MRN: NWN-775293

Insurance: Medicare Part B

Medicare ID: 4RT-YH83-BN65

DIAGNOSIS

Primary: G20 - Parkinson's Disease, tremor-dominant

Duration: 10 years (onset 2015)

CLINICAL HISTORY

Mr. Thompson is 73 yo male w/ 10-yr h/o tremor-dominant Parkinson's disease. Disease onset 2015 w/ R hand resting tremor. Dx by neurologist Dr. Susan Park. Initial tx w/ C/L resulted in good tremor control for several years.

Over past 3 years: progressive worsening of R hand tremor despite med adjustments. Tremor now severely disabling, interfering w/ ADLs (eating, drinking, writing). Pt reports tremor present ~70% of waking hours. L side minimally affected.

CARDINAL PD FEATURES - PRESENT:

- [X] TREMOR - Predominant feature. R hand resting tremor, amplitude 4/4 OFF meds, 2-3/4 ON meds
- [X] RIGIDITY - Mild cogwheel rigidity R>L, scored 1-2/4
- [X] BRADYKINESIA - Mild, primarily R side

DISEASE CHARACTERISTICS:

- RIGHT-SIDED PREDOMINANT throughout 10-yr course
- TREMOR-DOMINANT phenotype (tremor >> rigidity/bradykinesia)
- Classic idiopathic PD presentation
- Slow progression over 10 years

MOTOR EXAMINATION (10/10/2025)

UPDRS PART III MOTOR SCORES:

OFF medications (>12 hrs): 34/132

ON medications (peak): 18/132

Improvement: 16 points = 47%**HOEHN & YAHR STAGE:**

OFF: Stage 2 (bilateral involvement, no balance impairment)

ON: Stage 1-2 (unilateral to bilateral mild)

MOTOR EXAM DETAILS (OFF state):

- R hand resting tremor: 4/4 amplitude (severe, constant)
- L hand resting tremor: 1/4 (minimal)
- Rigidity: R arm 2/4, L arm 1/4, legs 1/4
- Bradykinesia: Mild, R>L. Finger tapping shows slight decrement R side
- Postural stability: Normal (pull test negative)
- Gait: Normal speed/stride, mildly reduced R arm swing

ON STATE:

- R hand tremor improves to 2-3/4 (still present, bothersome)
- L hand tremor 0-1/4
- Rigidity improved to 0-1/4 throughout
- Bradykinesia minimal

NOTE: Disease burden primarily from R HAND TREMOR. Other PD features mild. Tremor persists even in ON state, interferes w/ function.

LEVODOPA RESPONSIVENESS

Formal L-dopa challenge performed 10/05/2025:

- Baseline UPDRS (OFF): 36
- Post C/L 25/250 x3 tabs (90 min): UPDRS 19
- **Improvement: 47%**
- Clear ON period: 2-3 hours
- Tremor improves from 4/4 to 2-3/4 but does NOT fully resolve

INTERPRETATION: Good L-dopa responsiveness confirming idiopathic PD. However, tremor component only partially responsive to meds (typical for tremor-dominant PD). Rigidity/bradykinesia respond well. This pattern supports VIM target rather than STN.

CURRENT MEDICATIONS

Medication	Dose	Frequency	Years
Carbidopa-Levodopa	25/100, 1.5 tabs	4x daily	10
Pramipexole	2 mg	TID	8
Rasagiline	1 mg	Daily	7
Propranolol	80 mg	BID (for tremor)	4

Med optimization: Multiple adjustments over 10 years. Higher L-dopa doses cause nausea w/o additional tremor benefit. Added propranolol 4 yrs ago specifically for tremor → minimal benefit. Tried primidone (caused sedation, d/c'd). Medical therapy optimized for tremor-dominant PD.

FUNCTIONAL IMPACT**R hand tremor severely disabling:**

- Cannot eat soup or drink coffee w/o spilling
- Writing illegible (uses computer for all written tasks)
- Cannot use tools/utensils requiring precision
- Embarrassment in social situations
- Previously enjoyed woodworking hobby - unable to continue

Schwab & England: 80% (mostly independent but tremor limits some activities)

RATIONALE FOR VIM TARGET (vs STN)

Pt has TREMOR-DOMINANT PD w/ relatively mild rigidity/bradykinesia. Primary disability is R HAND TREMOR that persists despite meds.

VIM thalamic DBS specifically indicated for tremor control in:

- Essential tremor
- Parkinsonian tremor (tremor-dominant PD)

Policy NCD 160.24 covers: "unilateral or bilateral thalamic VIM DBS for treatment of essential tremor AND/OR PARKINSONIAN TREMOR"

Given pt's tremor-dominant phenotype + R-sided predominance, UNILATERAL RIGHT VIM DBS is appropriate target.

DIAGNOSTIC STUDIES**MRI Brain (09/20/2025):**

Normal study. No stroke, tumor, vascular malformation. Basal ganglia normal. Age-appropriate changes only. Suitable for stereotactic surgery.

DaTscan (2019):

Reduced striatal DAT uptake R>L, consistent w/ idiopathic PD.

COGNITIVE/PSYCHIATRIC ASSESSMENT**Office Mental Status (10/10/2025):**

Pt alert, oriented x3. Conversant, appropriate. Follows instructions well during exam. Wife present, no concerns about cognition mentioned.

Brief cognitive screening in office:

- Recalls 3/3 objects after 5 min
- Serial 7's: completed w/o error
- Follows 3-step command
- Clock drawing: adequate

Mood: Denies depression. Some frustration w/ tremor limitations. No anxiety. BDI-II score: 9 (minimal).

Psychiatric: No psychosis, hallucinations. No h/o substance abuse (non-drinker, no drugs).

NOTE: Formal neuropsych evaluation scheduled for 10/22/2025 (Dr. Jennifer Martinez, PhD). Results will be submitted as supplemental documentation. Based on office assessment + wife report, no clinical concerns for dementia, but formal testing will confirm.

EXCLUSION CRITERIA - ASSESSED

[X] NOT atypical PD - idiopathic PD confirmed (L-dopa response, DaTscan, clinical course)

[X] NO structural lesions - MRI normal

[X] NO prior brain surgery

[X] NO substance abuse

[X] Medical comorbidities: HTN controlled, otherwise healthy. Cardiology cleared 10/05/25.

[] Cognitive status: Office screening suggests normal, formal neuropsych testing pending (scheduled 10/22)

PATIENT COOPERATION

Pt + wife attended DBS education 10/08/2025. Good understanding of awake procedure, programming requirements, realistic expectations. Pt motivated, willing to cooperate. Wife supportive, will assist w/ transportation to programming visits.

DEVICE & PROVIDER INFO

Device: Medtronic Activa PC

FDA Status: APPROVED for VIM DBS for Parkinsonian tremor

Target: RIGHT VIM (unilateral)

Neurosurgeon: Dr. Robert Chen, MD - Board certified, 16 yrs exp, 180+ DBS cases

Neurologist: Dr. Susan Park, MD - Movement disorders specialist, 14 yrs

Facility: Northwest Medical Center - Established DBS program, 50+ cases/yr

CLINICAL SUMMARY

Mr. Thompson is 73 yo male w/ 10-yr h/o TREMOR-DOMINANT idiopathic Parkinson's disease. Disease characterized by severe disabling R hand tremor (4/4 OFF meds) that persists despite optimal medical management including C/L, DA agonist, MAO-B inhibitor, + propranolol. Tremor only partially responsive to meds (improves to 2-3/4 ON but still bothersome).

Cardinal PD features all present w/ good L-dopa responsiveness (47% improvement) confirming idiopathic PD. Disease R-sided predominant throughout 10-yr course. Other PD features (rigidity, bradykinesia) mild - PRIMARY DISABILITY IS TREMOR.

Requesting UNILATERAL RIGHT VIM DBS given R-sided tremor predominance.

Formal neuropsychological evaluation scheduled 10/22/2025. Results will be submitted as supplemental documentation within 1 week of testing.

Susan Park, MD

Movement Disorders Neurology

Date: 10/15/2025