

1. LEGENDS FOR SUPPLEMENTAL FILES

Supplementary Figure Legends

Supplementary Figure 1: A – Diagram of the patients included in the study.

Supplementary Figure 2: A – Subscore for the ON items of NFS computed for the 26 patients in the medication ON, medication OFF and stimulation ON conditions and 18 patients in the stimulation OFF conditions. **B** – Subscore for the OFF items of NFS computed for the 26 patients in the medication ON, medication OFF and stimulation ON conditions and 18 patients in the stimulation OFF conditions.

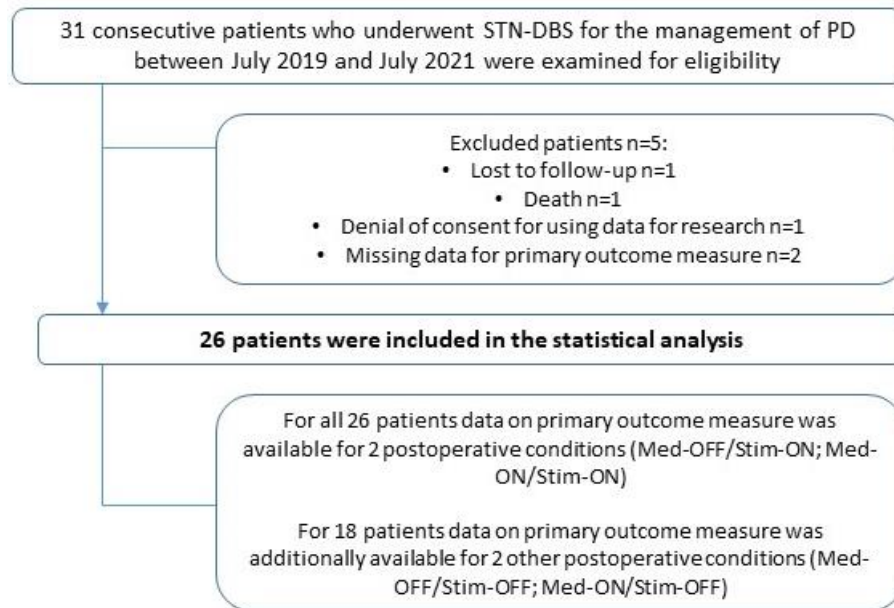
Supplementary Figure 3: A – Correlation of postoperative Neuropsychiatric State score in Med-ON/Stim-ON and postoperative MDS-UPDRS part IV score. **B** – Correlation of postoperative Neuropsychiatric State Score in Med-ON/Stim-ON and postoperative PDQ-39 score. Abbreviations: PDQ-39, The Parkinson's Disease Questionnaire

SUPPLEMENTARY TABLE 1

Supplementary Table 1: Items with missing data for demographic characteristics at baseline and clinical characteristics at preoperative and 12-month postoperative assessments. Abbreviations: MDS-UPDRS, Movement Disorder Society-Unified Parkinson's Disease Rating Scale; MoCA, Montreal Cognitive Assessment; STN-DBS, Subthalamic Nucleus Deep Brain Stimulation; PDQ-39, Parkinson's Disease Questionnaire.

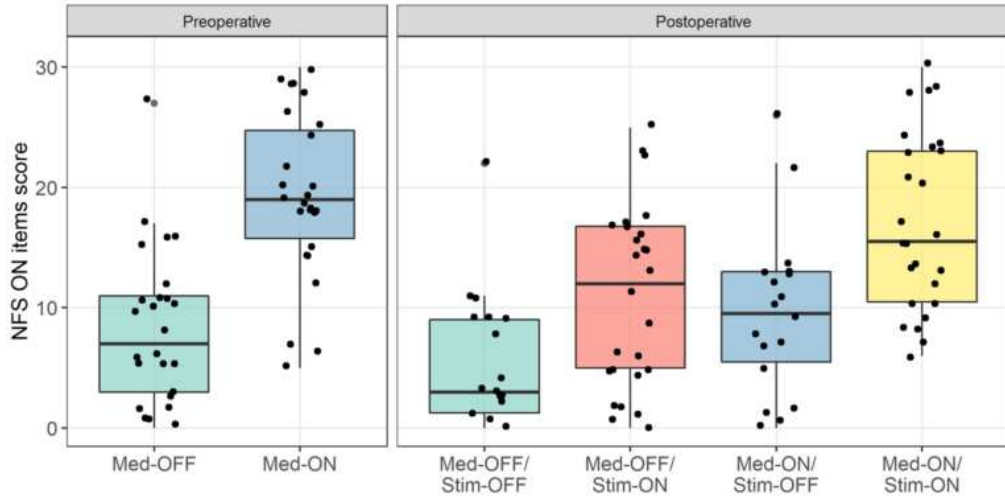
Demographic characteristics	Missing data (%)	
Sex (M/F)	0	
Age at onset	0	
Disease duration	0	
Education	1 (3.8)	
Clinical characteristics	Preoperative Missing data (%)	Postoperative Missing data (%)
Levodopa equivalent daily dose total [LEDD-total (mg/day)]	0	0
Levodopa equivalent daily dose levodopa [LEDD-LDopa (mg/day)]	0	0
Levodopa equivalent daily dose dopamine agonist [LEDD-DA (mg/day)]	0	0
Number of daily levodopa intake	0	0
Levodopa challenge dose	0	0
MDS-UPDRS part IA	3 (1.9)	12 (7.7)
Depressed mood (MDS-UPDRS part IA)	0	2 (7.7)

Anxious mood (MDS-UPDRS part IA)	0	2 (7.7)
Apathy (MDS-UPDRS part IA)	0	2 (7.7)
Dopamine dysregulation syndrome (MDS-UPDRS partIA)	0	2 (7.7)
MDS-UPDRS part IB	0	14 (7.7)
MDS-UPDRS part III	0	0
MDS-UPDRS part IV	4 (2.6)	12 (7.7)
MoCA	0	1 (3.8)
STN-DBS stimulation parameters	0	0
PDQ-39 Summary Index Score	22 (2.2)	6 (0.6)

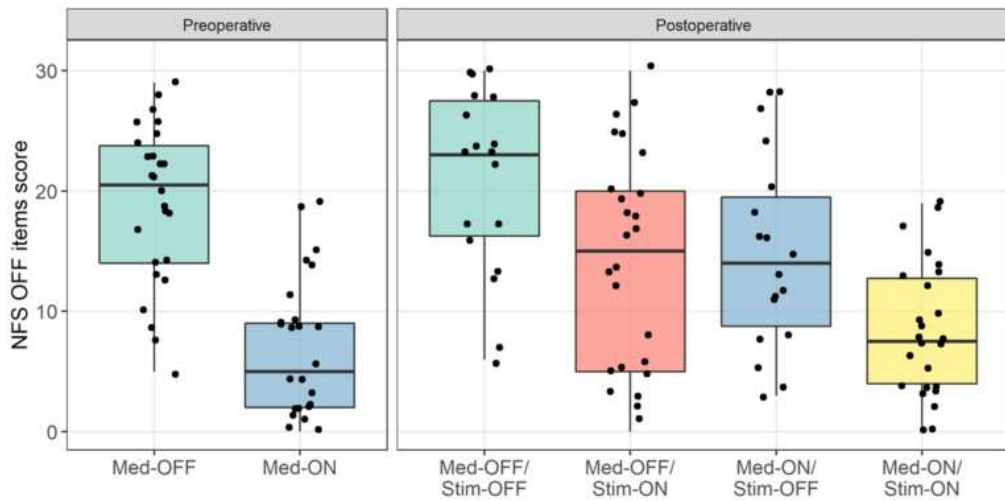
SUPPLEMENTARY FIGURE 1

SUPPLEMENTARY FIGURE 2

A



B



SUPPLEMENTARY FIGURE 3

