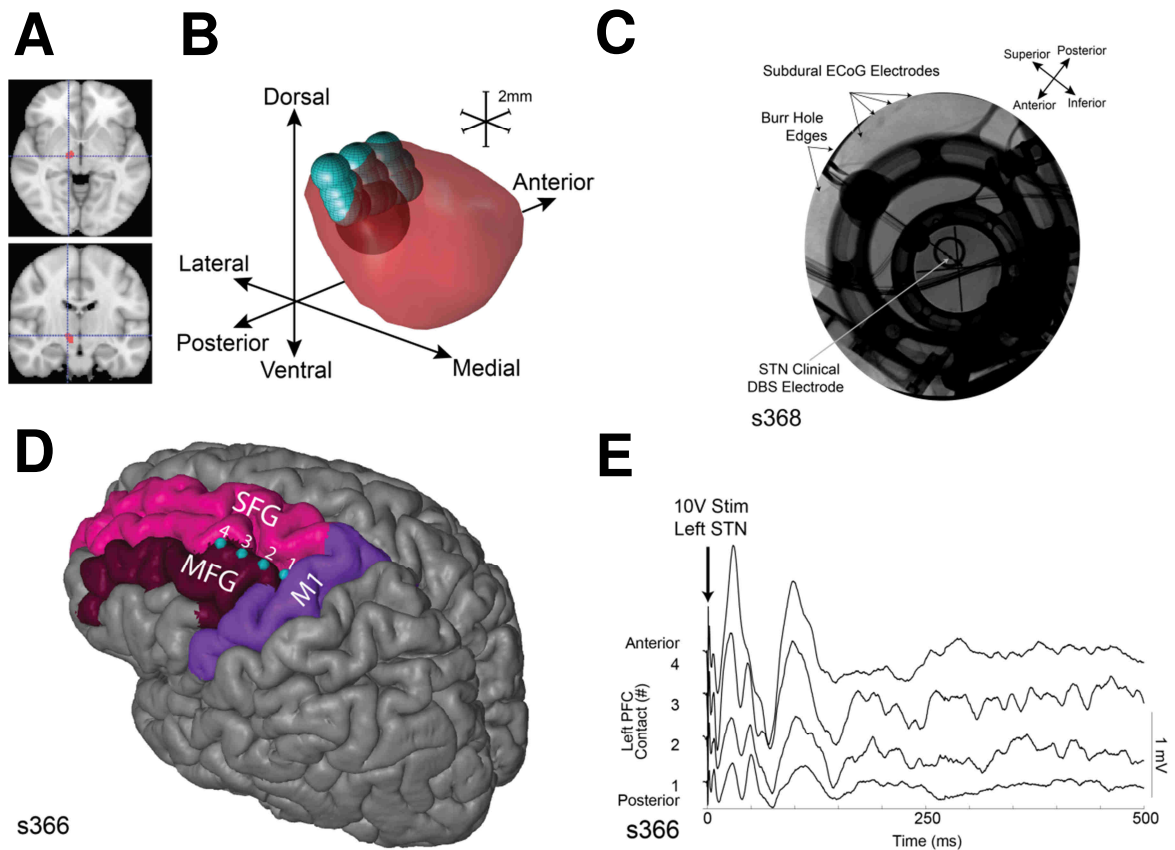


## Supplementary Material



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2 **Supplementary Fig. 1. Human STN and IPFC recording sites during ESTT. Related to Fig. 1.** A) MNI-152  
 3 template brain showing STN-DBS indirect target (STN in red). B) Reconstructed multielectrode recording sites (in  
 4 blue) in MNI space from 10 patients; indirect target marked by dark circle. Only sites within STN and with clear  
 5 neuronal activity were included in our analysis. C) Plain film of intraoperative recordings during STN-DBS  
 6 implantation. Intraoperative X-ray showing the burr hole edges, distance of the electrodes from the burr hole edge,  
 7 location of the subdural electrodes, and the STN clinical depth electrode. D) ECoG electrode locations in IPFC  
 8 (middle frontal gyrus; MFG) and primary motor cortex (M1) during ESTT in an exemplar subject. D) Evoked  
 9 potentials in IPFC and M1 after 10V STN stimulation. These voltage traces demonstrate STN stimulation-induced  
 10 IPFC and M1 oscillations at a longer time window (500 ms).

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