

Supplementary Table 1: Stimulation settings at final follow-up time point

DBS Target	Number of Patients	Left			Right		
		Frequency (Hz), Mean (SD, range)	Pulse Width ( $\mu$ s), Mean (SD, range)	Voltage (V), Mean (SD, range)	Frequency (Hz), Mean (SD, range)	Pulse Width ( $\mu$ s), Mean (SD, range)	Voltage (V), Mean (SD, range)
All Targets	110	137.1 (25.1, 60-185)	111.7 (65.1, 60-400)	3.2 (1.2, 0.6-9.3)	137.0 (25.1, 60-185)	111.4 (63.3, 60-400)	3.2 (1.2, 0.6-9.3)
CM Thalamus	51	131.0 (19.4, 70-185)	114.0 (56.8, 60-400)	3.1 (1.5, 0.6-9.3)	130.1 (18.2, 70-185)	115.6 (58.0, 60-400)	3.2 (1.5, 0.6-9.3)
amGPi	27	132.0 (19.6, 80-180)	112.2 (87.5, 60-330)	3.3 (1.0, 1.1-5.6)	133.1 (21.4, 80-180)	111.1 (88.0, 60-330)	3.3 (1.0, 1.1-5.6)
pvGPi	20	165.0 (32.2, 60-185)	111.0 (69.2, 80-400)	2.9 (0.5, 1.5-3.5)	165.0 (32.2, 60-185)	106.5 (53.8, 80-330)	2.9 (0.5, 1.5-3.5)
NA/ALIC	4	130.0 (14.1, 120-150)	90.0 (24.5, 60-120)	3.1 (0.3, 3.0-3.5)	130.0 (14.1, 120-150)	90.0 (24.5, 60-120)	3.1 (0.3, 3.0-3.5)
CM Thalamus + GPi	3	CM Thalamus: 130.0 (0.0)	CM Thalamus: 100.0 (17.3, 90-120)	CM Thalamus: 3.4 (0.4, 3.0-3.7)	CM Thalamus: 130.0 (0.0)	CM Thalamus: 100.0 (17.3, 90-120)	CM Thalamus: 3.4 (0.3, 3.0-3.6)
		GPi: 130.0 (0.0)	GPi: 70.0 (17.3, 60-90)	GPi: 1.7 (0.5, 1.2-3.0)	GPi: 130.0 (0.0)	GPi: 70.0 (17.3, 60-90)	GPi: 1.6 (0.5, 1.2-2.1)
CM Thalamus + NA/ALIC	5	CM Thalamus: 125.0 (5.8, 120-130)	CM Thalamus: 112.5 (28.7, 90-150)	CM Thalamus: 3.8 (1.2, 3.0-5.5)	CM Thalamus: 125.0 (5.8, 120-130)	CM Thalamus: 112.5 (28.7, 90-150)	CM Thalamus: 3.8 (1.2, 3.0-5.5)
		NA/ALIC: 140.0 (11.5, 130-150)	NA/ALIC: 120.0 (0.0)	NA/ALIC: 3.8 (0.3, 3.5-4.0)	NA/ALIC: 140.0 (11.5, 130-150)	NA/ALIC: 120.0 (0.0)	NA/ALIC: 3.5 (0.4, 3.0-4.0)