

Table S1 ROI-wise analysis for altered GMV in PD patients at 12 months after MRgFUS thalamotomy compared with baseline

Label. ID	Gyrus	Brain region	Side	Anatomical and modified cyto-architectonic descriptions	MNI (x, y, z)	t value	P value*
30	Frontal lobe	Inferior frontal gyrus (IFG)	R	A44d: dorsal area 44	45, 16, 25	3.289	0.011
54		Precentral gyrus (PrG)	R	A4hf: area 4 (head and face region)	55, -2, 33	3.859	0.005
58		Precentral gyrus (PrG)	R	A4ul: area 4 (upper limb region)	34, -19, 59	2.369	0.045
68		Paracentral lobule (PCL)	R	A4ll: area 4 (lower limb region)	5, -21, 61	2.658	0.029
102	Temporal lobe	Inferior temporal gyrus (ITG)	R	A20cv: caudoventral of area 20	54, -31, -26	2.628	0.030
124		Posterior superior temporal sulcus (pSTS)	R	cpSTS: caudoposterior superior temporal sulcus	57, -40, 12	2.539	0.035
128	Parietal lobe	Superior parietal lobule (SPL)	R	A7c: caudal area 7	19, -69, 54	3.112	0.014
130		Superior parietal lobule (SPL)	R	A5l: lateral area 5	35, -42, 54	3.164	0.013
136		Inferior parietal lobule (IPL)	R	A39c: caudal area 39 (PGp)	45, -71, 20	2.474	0.038
140		Inferior parietal lobule (IPL)	R	A40rd: rostradorsal area 40 (PFt)	47, -35, 45	3.157	0.013
144		Inferior parietal lobule (IPL)	R	A39rv: rostroventral area 39 (PGa)	53, -54, 25	2.770	0.024
146		Inferior parietal lobule (IPL)	R	A40rv: rostroventral area 40 (PFop)	55, -26, 26	2.632	0.030
151		Precuneus (Pcun)	L	dmPOS: dorsomedial parietooccipital sulcus (PEr)	-12, -67, 25	2.475	0.038
152	Precuneus (Pcun)	R	dmPOS: dorsomedial parietooccipital sulcus (PEr)	16, -64, 25	2.731	0.026	
154	Precuneus (Pcun)	L	A31: area 31 (Lc1)	6, -54, 35	2.404	0.043	
158	Postcentral gyrus (PoG)	R	A1/2/3tonla: area 1/2/3 (tongue and larynx region)	56, -10, 15	2.387	0.044	
192	Occipital lobe	Medioventral occipital cortex (MVOcC)	R	rCunG: rostral cuneus gyrus	7, -76, 11	3.177	0.013
198		Medioventral occipital cortex (MVOcC)	R	vmPOS: ventromedial parietooccipital sulcus	15, -63, 12	2.441	0.041
199		Lateral occipital cortex (LOcC)	L	mOccG: middle occipital gyrus	-31, -89, 11	2.329	0.048
200		Lateral occipital cortex (LOcC)	R	mOccG: middle occipital gyrus	34, -86, 11	2.716	0.026
202		Lateral occipital cortex (LOcC)	R	V5/MT+: area V5/MT+	48, -70, -1	3.025	0.016
205		Lateral occipital cortex (LOcC)	L	iOccG: inferior occipital gyrus	-30, -88, -12	2.914	0.019
208		Lateral occipital cortex (LOcC)	R	msOccG: medial superior occipital gyrus	16, -85, 34	2.550	0.034
236		Subcortical nuclei	Thalamus (Tha)	R	Stha: sensory thalamus	18, -22, 3	2.674

*, the significance threshold was set at 0.05. ROI, region of interest; GMV, gray matter volume; PD, Parkinson's disease; MRgFUS, magnetic resonance imaging-guided focused ultrasound; MNI, Montreal Neurological Institute.

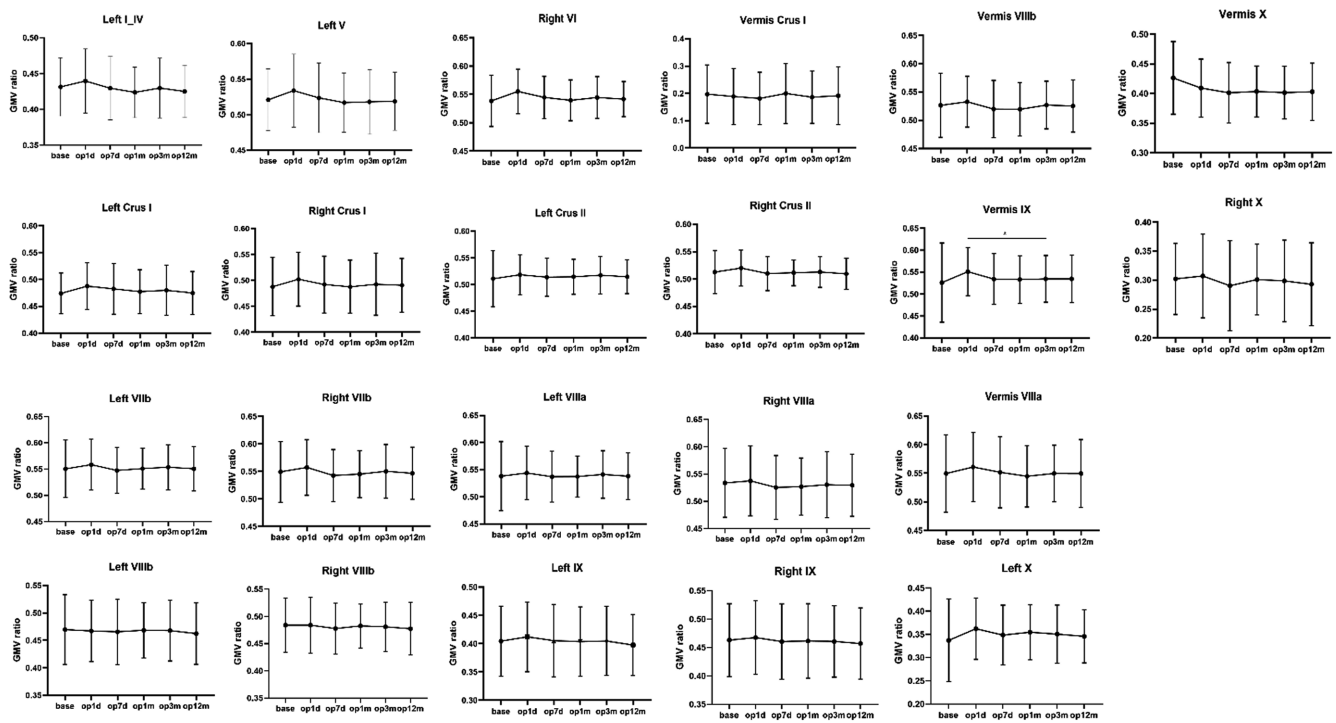


Figure S1 The changing trends in GMV in cerebellar subregions after MRgFUS thalamotomy. GMV, gray matter volume; MRgFUS, magnetic resonance imaging-guided focused ultrasound; op1d, 1 day post-operation; op7d, 7 days post-operation; op1m, 1 month post-operation; op3m, 3 months post-operation; op12m, 12 months post-operation.