

Supplementary Material

Differentiated Effects of Robot Hand Training With and Without Neural Guidance on Neuroplasticity Patterns in Chronic Stroke

Xin Wang¹, Wan-wa Wong¹, Rui Sun¹, Winnie Chiu-wing Chu², Raymond Kai-yu Tong^{1,3,*}

* **Correspondence:** Raymond Kai-yu Tong: kytong@cuhk.edu.hk

1 Supplementary Table

Supplementary Table 1 Region of Interest with corresponding subnetworks

Index	FreeSurfer Labels	AAL Labels	Subnetworks
1	Superior frontal gyrus (F1)	Frontal Sup Frontal Sup Med	Default Mode Network
2	Anterior part of the cingulate gyrus and sulcus (ACC)	Frontal Med Orb Cingulum Ant	
3	Straight gyrus Gyrus rectus	Rectus	
4	Posterior-dorsal part of the cingulate gyrus (dPCC)	Cingulum Post	
5	Angular gyrus	Angular	
6	Precuneus	Precuneus	
7	Middle temporal gyrus (T2)	Temporal Mid	
8	Temporal pole	Temporal Pol Mid	
9	Precentral gyrus	Precentral	Sensory-Motor Areas
10	Postcentral gyrus	Postcentral	
11	Paracentral lobule and sulcus	Paracentral Lob	
12	Orbital gyri	Frontal Sup Orb Frontal Inf Orb	Attention Network
13	Middle frontal gyrus (F2)	Frontal Mid	
14	Fronto-marginal gyrus (of Wernicke) and sulcus	Frontal Mid Orb	

15	Opercular part of the inferior frontal gyrus	Frontal Inf Oper	
16	Triangular part of the inferior frontal gyrus	Frontal Inf Tri	
17	Superior parietal lobule (lateral part of P1)	Parietal Sup	
18	Intraparietal sulcus (interparietal sulcus) and transverse parietal sulci	Parietal Inf	
19	Subcentral gyrus (central operculum) and sulci	Rolandic Oper	Auditory Network
20	Superior segment of the circular sulcus of the insula	Insula	
21	Short insular gyri	Insula	
22	Supramarginal gyrus	SupraMarginal	
23	Anterior transverse temporal gyrus (of Heschl)	Heschl	
24	Lateral aspect of the superior temporal gyrus	Temporal Sup	
25	Planum polare of the superior temporal gyrus	Temporal Pole Sup	
26	Calcarine sulcus	Calcarine	Visual Network
27	Cuneus (O6)	Cuneus	
28	Lingual gyrus, lingual part of the medial occipito-temporal gyrus, (O5)	Lingual	
29	Superior occipital gyrus (O1)	Occipital Sup	
30	Middle occipital gyrus (O2, lateral occipital gyrus)	Occipital Mid	
31	Inferior occipital gyrus (O3) and sulcus	Occipital Inf	

32	Lateral occipito-temporal gyrus (fusiform gyrus, O4-T4)	Fusiform	
33	Subcallosal area, subcallosal gyrus	Olfactory	Subcortical Network
34	Middle-posterior part of the cingulate gyrus and sulcus (pMCC)	Cingulum Mid	
35	Hippocampus, Amygdala	Hippocampus	
36	Parahippocampal gyrus, parahippocampal part of the medial occipito-temporal gyrus, (T5)	ParaHippocampal	
37	Amygdala	Amygdala	
38	Caudate	Caudate	
39	Putamen	Putamen	
40	Pallidum	Pallidum	
41	Thalamus-Proper	Thalamus	
42	Inferior temporal gyrus (T3)	Temporal Inf	