

Supplementary Materials

Ipsilesional Data (ARAT)			Contralesional Data (FM-UE)		
Session	Mean \pm SD	Range	Session	Mean \pm SD	Range
1	48.0 \pm 14.0	8 – 57	1	61.8 \pm 2.9	56 – 66
2	53.4 \pm 8.0	23 – 57	2	62.5 \pm 2.8	56 – 66
3	54.5 \pm 6.1	31 – 57	3	63.1 \pm 2.8	56 – 66
4	55.2 \pm 5.2	39 – 57	4	63.9 \pm 2.2	58 – 66
5	56.3 \pm 2.5	46 – 57			
6	56.4 \pm 2.4	45 – 57			
7	56.2 \pm 2.8	42 – 57			
8	56.5 \pm 1.6	51 – 57			

Table 1: ARAT and FM-UE scores across the data collection period

ARAT, action research arm test; FM-UE, Fugl Meyer upper extremity.

Ipsilesional Data			Contralesional Data		
Session	RMT (% MSO)	Baseline MEP (mV)	Session	RMT (% MSO)	Baseline MEP (mV)
	mean \pm SD	mean \pm SD		mean \pm SD	mean \pm SD
1	50.5 \pm 14.2	0.99 \pm 0.76	1	45.6 \pm 8.3	0.92 \pm 0.45
2	52.4 \pm 13.1	0.87 \pm 0.63	2	45.3 \pm 6.8	0.90 \pm 0.41
3	51.4 \pm 12.8	0.70 \pm 0.72	3	45.8 \pm 7.8	0.87 \pm 0.47
4	52.4 \pm 12.9	0.69 \pm 0.65	4	45.4 \pm 8.9	0.97 \pm 0.37
5	50.5 \pm 13.1	0.75 \pm 0.61			
6	51.2 \pm 11.6	0.66 \pm 0.64			
7	50.8 \pm 10.7	0.67 \pm 0.64			
8	51.3 \pm 11.1	0.59 \pm 0.48			

Table 2: Resting motor threshold and baseline motor evoked potential amplitude for each session.

MEP, motor evoked potential; MSO, maximal stimulator output; mV, millivolt; RMT, resting motor threshold.

Model Parameter	Beta Estimate	Standard Error	Confidence Interval	p-value
<i>Ipsilesional Data</i>				
Intercept	52.057	2.163	47.673 to 56.441	<2e-16*
Session	-0.140	0.146	-0.428 to 0.148	0.336
<i>Contralesional Data</i>				
Intercept	45.561	1.801	41.682 to 49.260	<2e-16*
Session	-0.012	0.544	-1.139 to 1.115	0.982

Table 3: Fixed effects of resting motor threshold in the ipsilesional hemisphere (top) and contralesional hemisphere (bottom)

* indicates statistically significant at $p \leq 0.05$

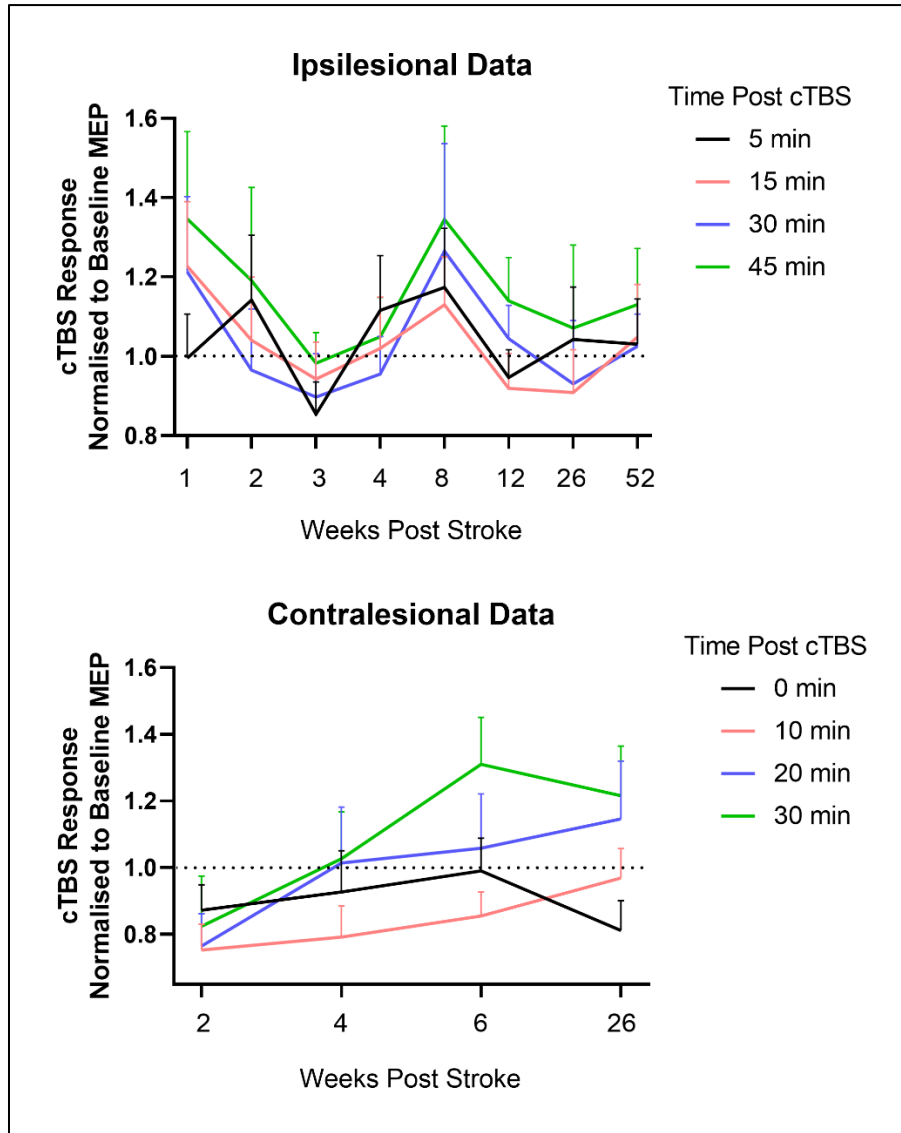


Figure 1: Continuous theta burst stimulation response for the ipsilesional hemisphere (top) and contralesional hemisphere (bottom). Amplitudes of motor evoked potentials have been normalised to baseline. Error bars are standard deviation.

Note, continuous theta burst stimulation is thought to induce a suppression of cortical excitability. Therefore, a larger decrease in motor evoked potential amplitude indicates greater plasticity. Data points below the dashed black line indicate motor evoked potential suppression. cTBS, continuous theta burst stimulation; MEP, motor evoked potential.

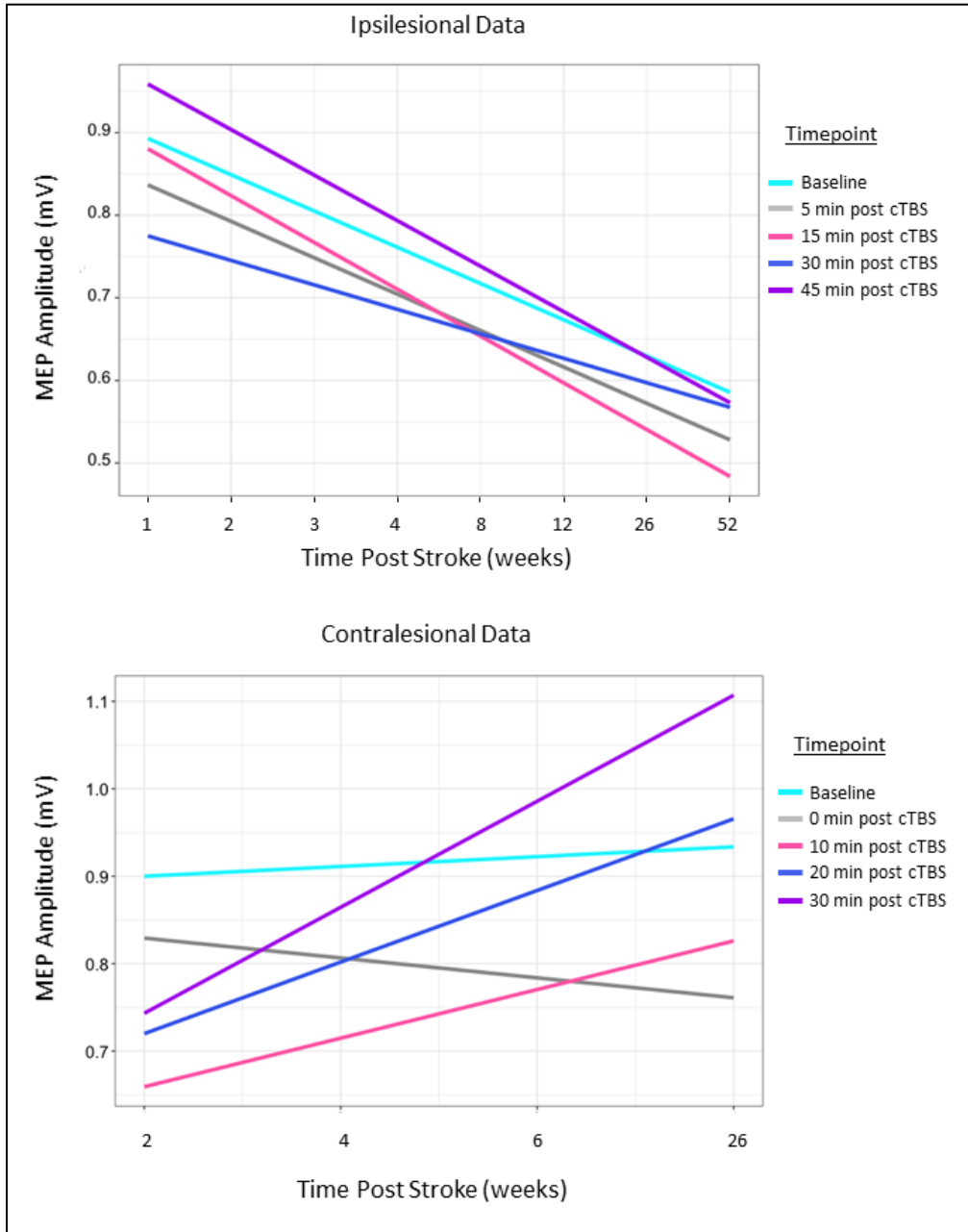


Figure 2: Linear modelling of continuous theta burst stimulation response for the ipsilesional hemisphere (top) and contralesional hemisphere (bottom).

cTBS, continuous theta burst stimulation; MEP, motor evoked potential.