

## Supplementary File

**Table S1.** Results (p-values) of the cluster based permutation tests for all EEG conditions.

Condition	Power	Brain-rate	Entropy	Hjorth A	Hjorth M	Hjorth C
<b>Rest 1</b>	-	-	-	-	-	-
<b>Rest 2</b>	-	-	- 0.0459	-	-	-
	-	-	- 0.0459	-	-	-
<b>WP learn</b>	-	-	-	-	-	-
<b>WP recall</b>	-	-	-	- 0.0352	-	-
<b>VR learn</b>	-	+ 0.0469	+ 0.0078	+ 0.0313	-	-
	-	-	- 0.0078	-	-	-
<b>Simon C</b>	+ 0.0039 ( $\gamma$ )	-	-	-	+ 0.0391	-
<b>Simon IC</b>	- 0.0430 ( $\alpha\beta$ )	- 0.0430	- 0.0117	-	+ 0.0352	-
	-	-	-	-	- 0.0352	-

*Notes:* Cluster based permutation tests based on the t-statistics for dependent samples were performed across BASELINE vs MONTELUKAST. Level of significance,  $p = <.05$ . Resting EEG (n = 10, 1024 permutations), cognitive EEG (n = 8, 256 permutations), positive cluster (+), negative cluster (-). Frequency and electrode cluster correction was performed for power, electrode cluster correction for all other measures.