

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
Rest 1	-	-	-	-	-	-
Rest 2	-	-	- 0.0459	-	-	-
	-	-	- 0.0459	-	-	-
WP learn	-	-	-	-	-	-
WP recall	-	-	-	- 0.0352	-	-
VR learn	-	+ 0.0469	+ 0.0078	+ 0.0313	-	-
	-	-	- 0.0078	-	-	-
Simon C	+ 0.0039 (γ)	-	-	-	+ 0.0391	-
Simon IC	- 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.