

Memantine Effects on Electroencephalographic Measures of Putative Excitatory/Inhibitory Balance in Schizophrenia

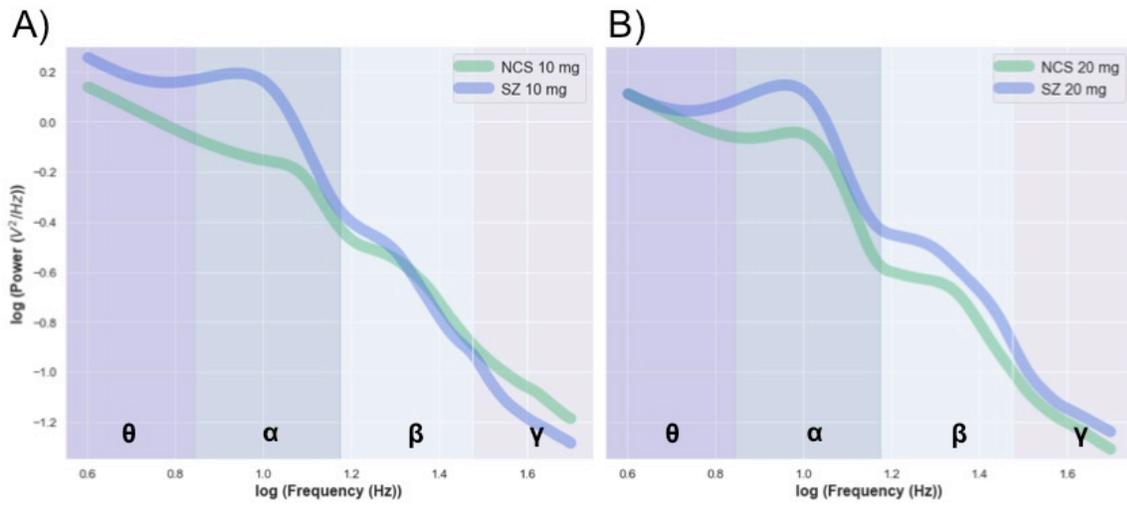
Supplemental Information

Supplemental Table S1. Association between spectral parameters, clinical and demographic measures during PBO condition. Note: these differences do not survive Bonferroni correction for multiple comparisons.

	Aperiodic slope	Theta Power	Alpha Power	Beta Power	Gamma Power
	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>
Age	0.09	0.23	0.03	0.22	0.19
Age of onset	0.12	-0.20	-0.41*	-0.29	0.27
Duration of Illness	0.04	0.37*	0.32	0.37*	-0.01
GAF	0.04	0.08	-0.02	-0.06	0.12
WRAT	-0.30	0.30	0.39	0.32	0.45
PANSS Positive	0.02	-0.01	0.08	0.40*	-0.13
PANSS Negative	-0.03	-0.17	-0.12	-0.11	-0.14
PANSS General	-0.14	-0.11	0.16	0.22	-0.20
PANSS Total	-0.08	-0.13	0.07	0.21	-0.20
CPZ equivalents	-0.14	-0.07	0.15	0.07	-0.03
Speed of Processing	0.10	0.11	0.33	0.13	-0.06
Attention/Vigilance	0.04	0.08	-0.09	0.24	-0.05
Working Memory	-0.03	0.02	0.15	0.19	-0.11
Verbal Learning	-0.14	-0.17	0.14	0.05	-0.09
Visual Learning	-0.25	-0.09	0.23	-0.01	0.14
Reasoning & Prob. Solving	-0.29	-0.16	0.24	0.06	-0.01
Social Cognition	0.02	0.18	-0.11	0.15	0.08

* $p < .05$

Supplemental Figure S1. Power Spectral Density plots for acute MEM 10 mg (a) and 20 mg (b) conditions.



Supplemental Figure S2. Topographical distribution of spectral slopes and MEM effects. Left panel shows “raw” aperiodic slope values for PBO and MEM 20 mg conditions. SZ patients have a similar, but more broadly distributed pattern of aperiodic slopes elevations during PBO condition, which are “normalized” by MEM 20 mg relative to NCS. Right side of panel show T-score maps of PBO vs. MEM 20 mg for both SZ and NCS, separately. Drug effects are more distributed and extend beyond fronto-central electrodes in both groups, reflecting aperiodic slope elevations by MEM 20 mg in NCS and slope reductions in SZ.

