

Table S3. Change in cognitive function scores in the Nocturnal Trial extended cognitive study

Cognitive test	Treatment arm	Observed Data (Mean ± SD)			Adjusted Means and Treatment Effect * (± SE or with 95% Confidence Intervals)			
		Baseline	4 Months	12 months	Month 4		Month 12	
					Change from Baseline	Treatment Comparison (6x vs. 3x)	Change from Baseline	Treatment Comparison (6x vs. 3x)
Trails B t-score	3x-per-wk	43.0 ± 16.0	43.5 ± 24.2	57.3 ± 5.8	2.0 ± 8.8	-1.4 (-24.0, 21.1)	15.1 ± 5.9	-17.7* (-33.2, -2.2)
	6x-per-wk	42.7 ± 15.6	36.7 ± 20.7	36.8 ± 22.8	0.6 ± 8.3		-2.6 ± 5.4	
3MS	3x-per-wk	91.5 ± 4.9	92.4 ± 6.3	94.6 ± 3.9	1.6 ± 1.6	0.2 (-4.3, 4.7)	3.8 ± 1.4	0.2 (-3.1, 3.4)
	6x-per-wk	92.6 ± 4.3	93.9 ± 4.9	95.6 ± 3.4	1.8 ± 1.5		3.9 ± 1.4	
Symbol Digit	3x-per-wk	40.4 ± 6.1	46.3 ± 7.7	51.3 ± 10.3	5.9 ± 2.2	-1.5 (-7.5, 4.5)	9.8 ± 2.7	-8.3* (-16.1, -0.6)
	6x-per-wk	40.3 ± 11.3	42.7 ± 14.4	38.4 ± 14.8	4.4 ± 2.1		1.4 ± 2.6	
Trails A	3x-per-wk	38.4 ± 10.4	38.6 ± 6.4	31.0 ± 9.0	-1.0 ± 3.4	0.4 (-8.5, 9.2)	-6.8 ± 5.2	3.0 (-12.1, 18.2)
	6x-per-wk	44.6 ± 19.2	45.0 ± 19.3	47.0 ± 24.5	-0.7 ± 3.3		-3.8 ± 5.2	
RAVLT immed recall	3x-per-wk	38.1 ± 10.1	39.3 ± 12.3	43.5 ± 10.8	0.4 ± 2.3	-3.2 (-9.4, 2.9)	2.7 ± 3.3	-1.3 (-10.7, 8.2)
	6x-per-wk	42.1 ± 10.1	38.1 ± 11.5	40.9 ± 13.9	-2.9 ± 2.1		1.4 ± 3.1	
RAVLT delayed recall	3x-per-wk	6.3 ± 3.6	8.1 ± 2.8	7.4 ± 3.1	1.4 ± 0.9	-1.9 (-4.1, 0.3)	0.2 ± 1.3	-0.6 (-3.9, 2.8)
	6x-per-wk	7.4 ± 4.1	6.4 ± 3.5	6.1 ± 4.2	-0.6 ± 0.9		-0.4 ± 1.2	
Letter number sequencing	3x-per-wk	8.7 ± 1.58	10.9 ± 2.9	9.6 ± 1.9	2.2 ± 0.7	-0.7 (-2.5, 1.0)	0.9 ± 0.5	-0.3 (-1.8, 1.2)
	6x-per-wk	8.9 ± 2.87	9.7 ± 2.9	8.6 ± 2.5	1.5 ± 0.6		0.5 ± 0.5	
COWAT	3x-per-wk	34.2 ± 15.6	27.4 ± 17.5	26.9 ± 13.6	-5.5 ± 3.1	-2.8 (-11.0, 5.3)	-6.4 ± 2.1	-1.8 (-7.0, 3.3)

	6x-per-wk	26.1 ± 11.9	18.6 ± 8.9	18.3 ± 8.1	-8.3 ± 3.0		-8.2 ± 2.0	
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*Values adjusted for baseline score

** P-value <0.05

Note: positive numbers indicate more favorable changes for 6x-per-week versus 3x-per-week group for the Digit Symbol, RAVLT, Letter number sequencing, and COWAT. For all other tests, negative numbers indicate more favorable changes for 6x-per-week versus 3x-per-week group.

Abbreviations: SD - standard deviation, SE - standard error, CI - confidence interval, RAVLT - Rey Auditory Verbal Learning Test, COWAT - controlled oral word association test