

Supplementary Table S3. Model fit indices, fixed effects estimates, and random effects estimates for generalized linear mixed effect regression (GLMER) models examining overall neurocognitive performance (T scores) and rates of impairment in participants living with HIV (n=472).

Performance (T scores) Model - Main Effects					Impairment (Y/N) Model - Main Effects				
Type	LMER	AIC	47383.22		Type	GLMER	AIC	7417.97	
Variance-Covariance	Unstructured	BIC	47534.16		Family	Binomial	BIC	7562.07	
		Ps-R ² (fixed)	0.09		Link	Logit	Ps-R ² (fixed)	0.09	
		Ps-R ² (total)	0.45				Ps-R ² (total)	0.38	
Fixed Effects	β	95% CI	z	p	Fixed Effects	OR	95% CI	z	p
Difference in NC Performance Profile Attributable to Condition					Difference in NC Impairment Profile Attributable to Condition				
M+C+ v. M-C-	-0.24	[-1.52, 1.04]	-0.37	0.71	M+C+ v. M-C-	0.81	[0.51, 1.31]	-0.85	0.40
M+C+ v. M+C-	-2.23	[-3.44, -1.02]	-3.61	< .001	M+C+ v. M+C-	1.72	[1.14, 2.60]	2.59	0.01
M-C+ v. M-C-	-1.15	[-2.16, -0.14]	-2.24	0.03	M-C+ v. M-C-	1.51	[0.95, 2.41]	1.73	0.08
Viral Load Detectable	-1.85	[-3.63, -0.08]	-2.04	0.04	Viral Load \geq 50% Detectable	0.97	[0.60, 1.57]	-0.13	0.90
Nadir CD4 < 200	-1.07	[-2.10, -0.05]	-2.05	0.04	Nadir CD4 < 200	1.37	[1.02, 1.84]	2.08	0.04
Currently on ART	0.87	[-0.02, 1.77]	1.92	0.06	Currently on ART	0.85	[0.66, 1.10]	-1.25	0.21
Pre-Morbid Verbal IQ	0.12	[0.09, 0.15]	7.62	< .001	Pre-Morbid Verbal IQ	0.97	[0.96, 0.98]	-6.68	< .001
BDI-II Score	-0.08	[-0.12, -0.05]	-4.45	< .001	BDI-II Score	1.02	[1.01, 1.03]	4.02	< .001
Random Effects	Group	ICC	SD		Random Effects	Group	ICC	SD	
	Subject (n=472)	0.40	5.01			Subject (n=472)	0.31	1.22	
	NC Domain (n=8)	0.03	1.47			NC Domain (n=8)	0.04	0.44	

Note: ^a β estimates are equivalent to the difference in T scores attributable to the condition. ^bOR represents the odds ratio, or comparative difference in odds attributable to the condition. AIC = Akaike information criterion, BIC = Bayesian information criterion, Ps-R2 = Pseudo R-squared, ICC = intraclass correlation coefficient