

Table S1: Associations with CD4⁺ and log₁₀ HIV RNA with Genetically Determined Ancestry Controlling for Host Genetic Markers

Model	Predictor	Group	HIV RNA*		CD4 ⁺ Count**		CD4 ⁺ Percent**	
			Slope (LCI, UCI)	P-value	Slope (LCI, UCI)	P-value	Slope (LCI, UCI)	P-value
1 (All Racial Groups Included) N=994	GDA*	Eur vs. Afk (ref)	0.15 (-0.05, 0.34)	0.13	4 (-177, 185)	0.97	1 (-2, 4)	0.43
		Amer vs. Afk (ref)	-0.01 (-0.49, 0.47)	0.96	110 (-262, 482)	0.56	3 (-4, 9)	0.41
		Amer vs. Eur (ref)	-0.16 (-0.68, 0.36)	0.55	106 (-303, 515)	0.61	1 (-5, 8)	0.69
3*** (All Racial Groups Included) N=994	GDA*	Eur vs. Afk(ref)	0.26 (-0.04, 0.56)	0.094	-234 (-512, 43)	0.098	-2 (-7, 3)	0.38
		Amer vs. Afk(ref)	0.18 (-0.39, 0.75)	0.53	-46 (-513, 420)	0.85	2 (-5, 9)	0.62
		Amer vs. Eur(ref)	-0.08 (-0.65, 0.49)	0.78	188 (-247, 623)	0.40	4 (-3, 11)	0.30
4 (SRR Black only) N=605	GDA*	Eur vs. Afk(ref)	0.52 (0.07, 0.97)	0.024	-435 (-839, -31)	0.035	-5 (-12, 2)	0.16
		Amer vs. Afk(ref)	0.31 (-0.72, 1.35)	0.55	259 (-830, 1349)	0.64	-2 (-20, 15)	0.80
		Amer vs. Eur(ref)	-0.20 (-1.33, 0.93)	0.72	694 (-451, 1839)	0.23	3 (-16, 22)	0.77
6 (SRR Hispanic only) N=246	GDA*	Eur vs. Afk(ref)	0.04 (-0.51, 0.60)	0.88	-300 (-821, 221)	0.26	0 (-9, 8)	0.95
		Amer vs. Afk(ref)	-0.05 (-0.83, 0.72)	0.89	-382 (-1025, 262)	0.25	4 (-5, 14)	0.39
		Amer vs. Eur(ref)	-0.10 (-0.78, 0.58)	0.78	-81 (-532, 369)	0.72	4 (-4, 13)	0.29

All models are adjusted for age, weight for age z-score, and study (P152/P300). Eur=Europe; Afk=Africa; Amer=Americas (LCI, UCI)=95% percent confidence interval. *Linear regression models use a continuous GDA predictor as a proportion, and the estimates are therefore interpreted as a comparison for subjects with 100% GDA for a particular region relative to a reference group (ref) with 100% GDA. Negative values indicate lower average values than the reference. Model 5 is not presented due to instability of parameter estimates.

* Adjusted for HLA_B-57, HLA_Cw-8, HLA_B-14, HLA_DRB1*10, HLA_DRB1*15, CCR5_wt/delta32, CCL3L1, CX3CR1_280, HLA_Cw-6, RANTES_28, HLA_A HLA_C, MBL2.

** Adjusted for HLA_A-24, HLA_A-68, HLA_B-27/57, HLA_DRB1*7, HLA_C2-1, HLA_DRB1*3, IRGM_313, APOBEC3G_197193, MBL2

*** Adjusted for self-reported race