

CD4 decline by ethnicity

Additional web table: Model coefficients with 95% confidence intervals on log transformed CD4 scale for gradient and intercept terms and survival time (years) for mortality model from a) unadjusted univariable random effects (RE) models b) mutually adjusted multivariable RE model and c) joint marker and mortality RE model (JMRE).

	CTAC			SHCS		
	univariable	adjusted ¹	JMRE adjusted ¹	univariable	adjusted ¹	JMRE adjusted ¹
CD4 model - slope coefficients						
Time (per year)	-0.28 (-0.33, -0.24)	-0.52 (-0.65, -0.39)	-0.54 (-0.66, -0.41)	-0.22 (-0.24, -0.21)	-0.47 (-0.55, -0.39)	-0.46 (-0.53, -0.39)
Female	0.03 (-0.06, 0.12)	-0.001 (-0.10, 0.10)	0.00 (-0.10, 0.09)	0.051 (0.01, 0.09)	0.024 (-0.02, 0.06)	0.02 (-0.02, 0.06)
age \geq 40 years	-0.21 (-0.31, -0.10)	-0.19 (-0.30, -0.08)	-0.19 (-0.30, -0.08)	-0.05 (-0.09, -0.02)	-0.03 (-0.07, 0.01)	-0.03 (-0.07, 0.01)
Non-white	0.06 (-0.048, 0.16)	0.071 (-0.05, 0.19)	0.06 (-0.05, 0.18)	0.07 (0.01, 0.12)	0.08 (0.02, 0.14)	0.08 (0.02, 0.14)
CD4 200-349	-0.24 (-0.33, -0.15)	0.27 (0.15, 0.39)	0.27 (0.15, 0.39)	-0.24 (-0.28, -0.20)	0.22 (0.13, 0.31)	0.22 (0.13, 0.30)
350-499	-0.15 (-0.25, -0.06)	0.35 (0.22, 0.48)	0.36 (0.23, 0.49)	-0.22 (-0.25, -0.18)	0.24 (0.16, 0.33)	0.24 (0.16, 0.31)
500-750	-0.24 (-0.35, -0.13)	0.27 (0.13, 0.41)	0.32 (0.19, 0.45)	-0.17 (-0.20, -0.15)	0.29 (0.20, 0.37)	0.28 (0.20, 0.36)
CD4 model – intercept coefficients						
Constant ¹	5.58 (5.53, 5.63)	4.86 (4.79, 4.93)	4.86 (4.79, 4.93)	6.01 (6.00, 6.04)	4.89 (4.85, 4.93)	4.93 (4.89, 4.97)
Female	-0.06 (-0.16, 0.03)	-0.07 (-0.12, -0.01)	-0.05 (-0.11, 0.01)	0.11 (0.05, 0.16)	0.04 (0.006, 0.07)	0.03 (0.00, 0.06)
age \geq 40 years	-0.08 (-0.19, 0.04)	-0.003 (-0.07, 0.06)	0.02 (-0.05, 0.08)	-0.15 (-0.21, -0.10)	-0.03 (-0.06, -0.002)	-0.03 (-0.06, -0.002)

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Non-white	-0.11 (-0.23, 0.01)	-0.04 (-0.11, 0.03)	-0.04 (-0.12, 0.03)	-0.11 (-0.19, -0.03)	-0.07 (-0.11, -0.03)	-0.08 (-0.12, -0.04)
CD4 200-349	0.83 (0.77, 0.90)	0.82 (0.75, 0.88)	0.81(0.75, 0.88)	0.86 (0.82, 0.91)	0.82 (0.78, 0.87)	0.81 (0.76, 0.86)
350-499	1.25 (1.18, 1.33)	1.23 (1.16, 1.31)	1.23 (1.15, 1.30)	1.26 (1.22, 1.31)	1.22 (1.18, 1.27)	1.19 (1.14, 1.23)
500-750	1.58 (1.50, 1.66)	1.56 (1.48, 1.63)	1.54 (1.46, 1.62)	1.60 (1.55, 1.64)	1.56 (1.51, 1.60)	1.51 (1.47, 1.56)
Survival model - coefficients			Time in years			Time in years
Constant			1.31 (1.11, 1.51)			2.13 (1.90, 2.37)
Female			-0.03 (-0.19, 0.13)			0.29 (0.08, 0.50)
age \geq 40 years			-0.40 (-0.58, -0.23)			-0.26 (-0.44, -0.07)
Non-white			-0.06 (-0.25, 0.14)			0.65 (0.33, 0.96)
CD4 200-349			0.62 (0.44, 0.80)			0.54 (0.26, 0.82)
350-499			0.93 (0.73, 1.14)			0.93 (0.65, 1.21)
500-750			0.95 (0.73, 1.16)			1.26 (1.00, 1.53)

¹Baseline group white male aged <40 with first CD4 count 50-199

CTAC and SHCS in separate models

JMRE Joint marker (CD4) and mortality (survival time) random effects model

Follow up for both mortality and marker models is censored at 4 years

Coefficients of CD4 model are log ratio of geometric means