

Supplementary Tables and Figures

Supplementary Table 1: Predictors of virological failure using a sensitivity analysis of data for patients with complete covariates

	Total	VF N (%)	HR	aHR*	95% CI	p-value
Subtype						
B	3765	194 (5.2)	0.46	0.96	0.65-1.40	0.81**
C	684	71 (10.4)	1.00	1.00	---	
Non-B Non-C	1023	92 (9.0)	0.90	0.98	0.72-1.34	0.90**
First -line regimen						<0.001
TDF + 3TC/FTC + EFV	3804	206 (5.4)	1.00	1.00	---	
TDF + 3TC/FTC + NVR	248	27 (10.9)	1.93	1.79	1.19-2.69	
TDF + 3TC/FTC + ATA/r	555	55 (9.9)	1.93	1.86	1.38-2.51	
TDF + 3TC/FTC + DRV/r	375	24 (6.4)	1.63	1.49	0.96-2.31	
TDF + 3TC/FTC + LPV/r	490	45 (9.2)	1.54	1.26	0.90-1.76	
Exposure group						<0.001
MSM	3618	157 (4.3)	1.00	1.00	---	
MSF	657	73 (11.1)	2.81	2.18	1.50-3.19	
FSM	792	82 (10.4)	2.67	1.91	1.28-2.84	
Other	405	45 (11.1)	2.89	2.92	2.06-4.14	
Ethnicity						0.04
White	3661	195 (5.3)	1.00	1.00	---	
Black	1247	138 (11.1)	2.25	1.36	0.98-1.89	
Asian	189	7 (3.7)	0.70	0.58	0.27-1.25	
Other	375	17 (4.5)	0.84	0.76	0.46-1.25	
Baseline HIV RNA (copies/ml)***						<0.001

5,000	1.00	1.00	---	
10,000	1.03	1.04	1.00-1.07	
50,000	1.20	1.22	1.10-1.36	
100,000	1.35	1.36	1.19-1.57	
250,000	1.62	1.63	1.34-1.98	
Baseline CD4 count (cells/mm³)***				0.21
100	1.00	1.00	---	
200	0.82	0.95	0.89-1.03	
300	0.74	0.93	0.83-1.04	
400	0.68	0.91	0.79-1.06	
500	0.64	0.90	0.76-1.06	
Date of ART initiation (per calendar year)				
	0.98	0.98	0.92-1.03	0.42

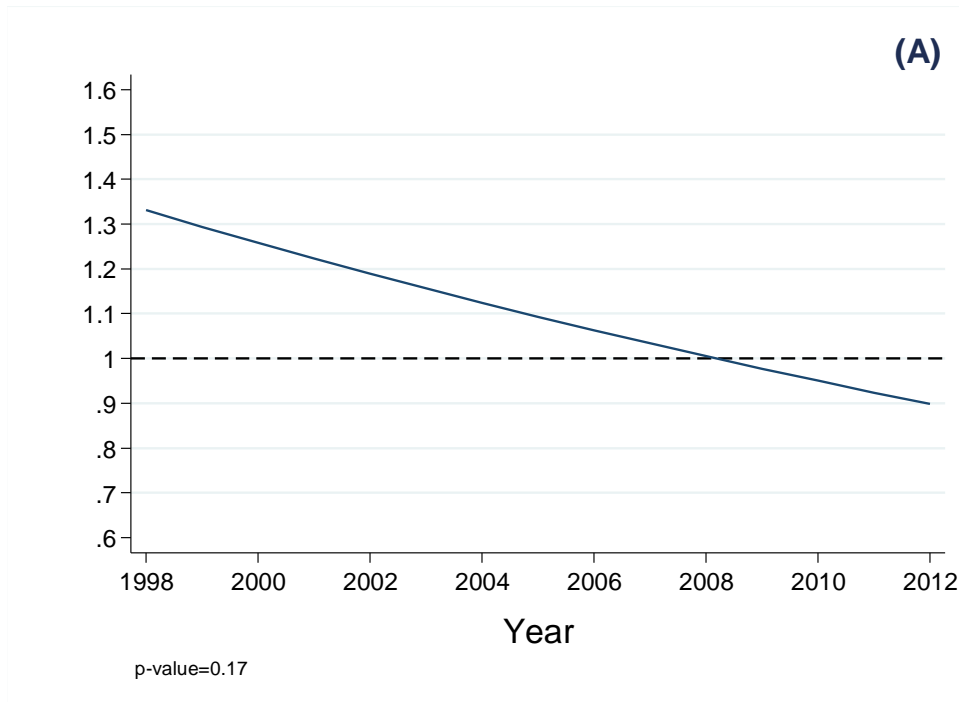
*Adjusted for all variables in table

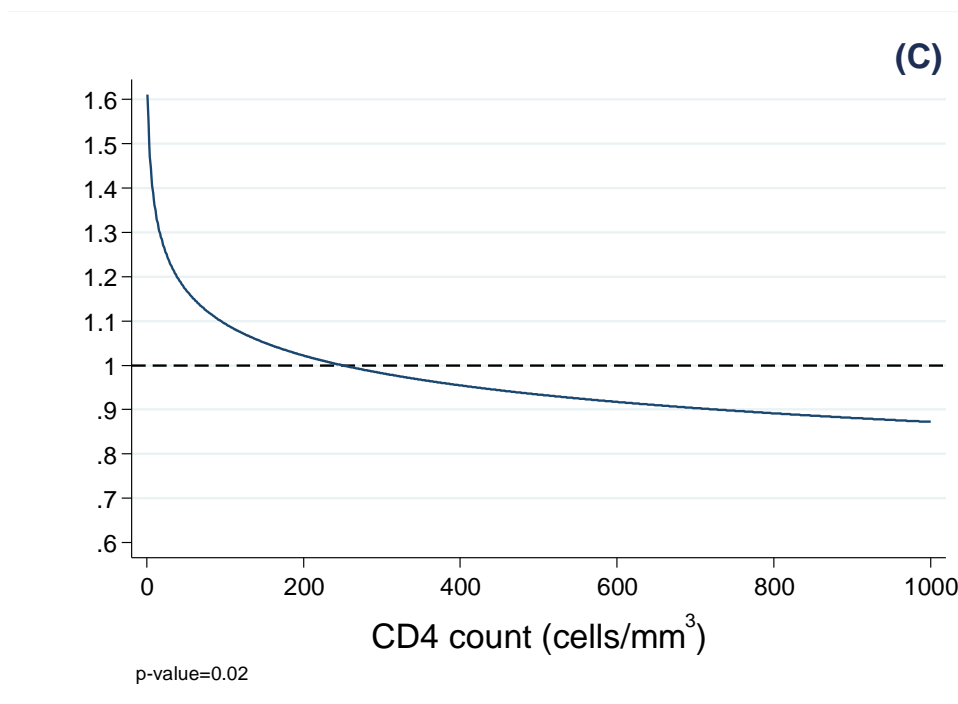
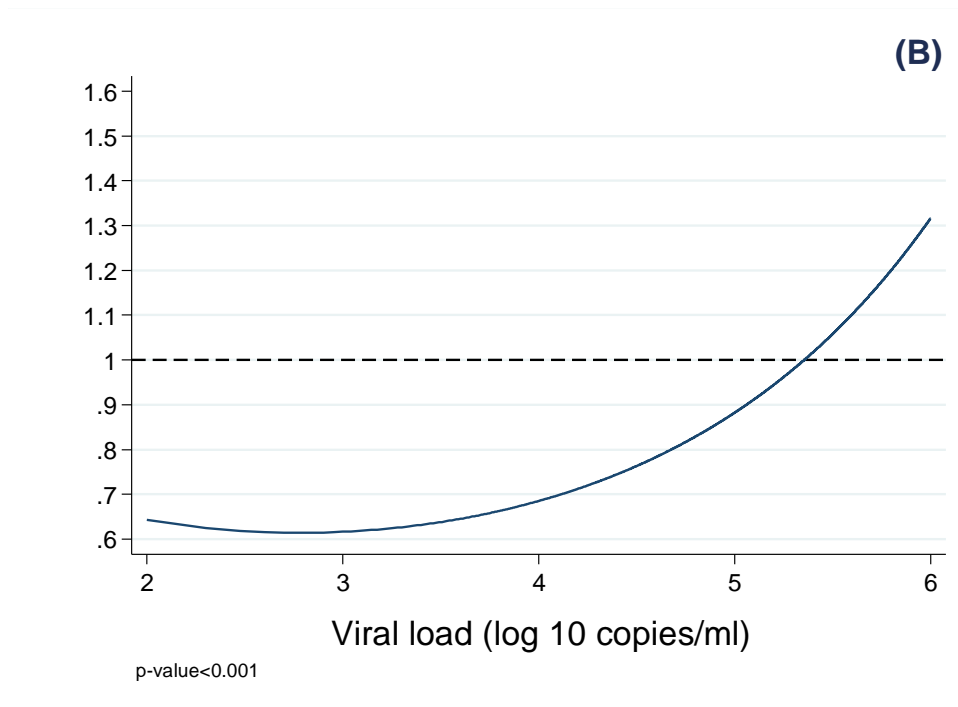
**P-values from individual Wald tests

***Hazard ratios presented at selected values as fitted as non-linear, continuous relationship.

Values shown are averages over imputed datasets

Supplementary Figure 1: Predicted hazard ratios from adjusted Cox model





Supplementary Figure 1 Legend: (A) Year of ART initiation, (B) pre-ART viral load, (C) pre-ART CD4 count.

Supplementary Table 2: Patterns of complete data for analysis covariates

		Subtype	Exposure	Ethnicity	Baseline RNA	Baseline CD4
Number	%					
5693	65					
1714	20					
522	6					
171	2					
156	2					
490	5	Other patterns				

*Shaded boxes show patterns of complete data for analysis model. First-line regimen and year of ART available for all individuals.