

Appendix Table 1. Characteristics of cART initiators by CD4 cell count at cART initiation, HIV-CAUSAL Collaboration 2000-2013.

Characteristics at HIV diagnosis, N (%)	CD4 cell count at cART initiation	
	≥500 cells/mm ³ (N=3594)	<500 cells/mm ³ (N=36123)
Calendar year, median [IQR]	2007 [2003,2009]	2006 [2003,2008]
Age, median [IQR]	35 [28,44]	38 [31,46]
Sex		
Male	2810 (78%)	27432 (76%)
Female	784 (22%)	8691 (24%)
Transmission group		
Heterosexual	1091 (30%)	14395 (40%)
Homo/bisexual	2016 (56%)	15745 (44%)
Injecting drug use	76 (2%)	926 (3%)
Other/unknown	411 (11%)	5046 (14%)
Geographical origin		
Western countries	2796 (78%)	24084 (67%)
Sub-saharan Africa	401 (11%)	7067 (20%)
Rest of the world	271 (8%)	3310 (9%)
Unknown	126 (4%)	1653 (5%)
AIDS before cART initiation	76(2%)	792 (2%)

Appendix Table 2. Sensitivity analyses: Mortality risk ratios by cART initiation strategy, HIV-CAUSAL Collaboration 2000-2013.

cART initiation strategy	Adjusting for Hepatitis C Virus co-infection	Including individuals with no CD4 or HIV-RNA after baseline	Excluding the seroconverters cohorts
Immediate universal	1 (ref.)	1 (ref.)	1 (ref.)
<500 cells/mm ³	1.03 (1.01,1.04)	1.02 (1.00,1.02)	1.02 (1.01,1.03)
<350 cells/mm ³	1.09 (1.05,1.14)	1.06 (1.04,1.08)	1.06 (1.04,1.10)

Appendix Table 3. Proportion (%) in need of antiretroviral treatment (95% confidence interval)*. HIV-CAUSAL Collaboration 2000-2013.

cART initiation strategy	1 year		2 years			5 years			7 years		
Immediate universal	100	(100, 100)	100	(100, 100)	100	(100, 100)	100	(100, 100)	100	(100, 100)	
CD4<500 cells/mm ³	77.9	(77.8, 78.3)	87.3	(87.2, 87.7)	97.2	(97.0, 97.3)	98.7	(98.6, 98.7)	98.7	(98.6, 98.7)	
CD4<350 cells/mm ³	57.7	(57.3, 58.2)	69.9	(65.5, 70.2)	88.3	(87.7, 88.5)	92.6	(92.2, 92.9)	92.6	(92.2, 92.9)	

*Estimates based on the parametric g-formula adjusted for measured time-varying confounders (CD4 count, HIV-RNA and AIDS) and baseline characteristics (calendar period and age of HIV diagnosis, risk group, gender, geographical origin, ethnicity and cohort).

Appendix Table 4. Proportion with suppressed virological replication (<50 copies/mL) (95% confidence interval)*. HIV-CAUSAL Collaboration 2000-2013.

cART initiation strategy	1 year		2 years		5 years		7 years	
Immediate universal	57.5	(57.1, 58.1)	81.8	(81.5, 82.5)	85.8	(85.4, 86.4)	87.3	(87.3, 88.6)
CD4<500 cells/mm ³	45.6	(45.5, 46.2)	67.8	(67.5, 68.3)	83.8	(83.5, 84.4)	87.4	(87.4, 88.6)
CD4<350 cells/mm ³	35.5	(35.5, 36.0)	53.0	(52.4, 53.5)	76.4	(76.1, 77.0)	83.8	(83.6, 84.9)

*Estimates based on the parametric g-formula adjusted for measured time-varying confounders (CD4 count, HIV-RNA and AIDS) and baseline characteristics (calendar period and age of HIV diagnosis, risk group, gender, geographical origin, ethnicity and cohort).

Appendix Figure 1. Mean of the main study variables: observed (solid line) and estimated via the parametric g-formula (dotted line)
HIV-CAUSAL Collaboration 2000-2013.

Appendix Figure 1a	Appendix Figure 1b	Appendix Figure 1c
Appendix Figure 1d	Appendix Figure 1d	Appendix Figure 1e

Appendix Figure 2. Proportion of individuals with suppressed virological replication, defined as HIV-RNA<400 copies/mL by cART initiation strategy. HIV-CAUSAL Collaboration 2000-2013