

Table 1 Patient characteristics at cART initiation, overall, and by educational level

	Incompleted primary	Primary	Secondary	Tertiary	Overall
N (%)	5719 (9%)	4999 (32%)	7945 (44%)	5406 (15%)	24069 (100%)
Sex					
Female	1851 (32%)	1307 (26%)	1462 (18%)	543 (10%)	5163 (21%)
Male	3868 (68%)	3692 (74%)	6483 (82%)	4863 (90%)	18906 (79%)
Transmission category					
Sex between men	1057 (18%)	1800 (36%)	4275 (54%)	3919 (73%)	11051 (46%)
Sex between men and women	2938 (51%)	2242 (45%)	2674 (37%)	1123 (21%)	8977 (37%)
Injecting drug use	1413 (25%)	729 (15%)	647 (8%)	118 (2%)	2907 (12%)
Other/Unknown	311 (5%)	228 (5%)	349 (4%)	246 (5%)	1134 (5%)
Median [IQR] age of cART, years	37 [31,45]	37 [31,45]	37 [31,44]	37 [31,43]	37 [31,44]
Median [IQR] year of cART	2005 [2001,2009]	2007 [2003,2010]	2007 [2003,2010]	2008 [2004,2011]	2007 [2002,2010]
Geographical origin					
Europe	4466 (78%)	3384 (68%)	5132 (65%)	3419 (63%)	16401 (68%)
Other	514 (9%)	667 (13%)	694 (9%)	517 (10%)	2392 (10%)
Unknown	739 (13%)	948 (19%)	2119 (27%)	1470 (27%)	5276 (22%)
AIDS before cART	1235 (22%)	746 (15%)	1153 (15%)	600 (11%)	3734(16%)
Median [IQR] CD4 count	220 [90,343]	259 [136,375]	267 [140,382]	300 [189,411]	263 [136,380]
Number of CD4 count per patient	13 [6,24]	12 [6,22]	12 [6,23]	11 [5,21]	12 [6,22]
Mean CD4 count interval per patient (months)	4 [3,6]	4 [3,5]	4 [3,5]	4 (3,5)	4 [3,5]
Median [IQR] HIV RNA	4.9[4.2,5,4]	4.8 [4.1,5.3]	4.8 [4.2,5.3]	4.8 [4.2,5.3]	4.8 [4.2,5.3]
Number of HIV RNA	12 [6,23]	11 [6,20]	11 [5,21]	10 [5,19]	11 [6,21]
Mean per patient HIV RNA interval (months)	4 [3,6]	4 [3,5]	4 [3,5]	4 [3,5]	4 [3,5]
Initial cART combination					
NNRTI	2096 (37%)	1853 (37%)	2744 (35%)	1735 (32%)	8428 (35%)

PI	2768 (48%)	2218 (44%)	3960 (50%)	2763 (51%)	11709 (49%)
Other	855 (15%)	928 (19%)	1241 (16%)	908 (17%)	3932 (16%)
Cohort geographical area					
Greece, Italy, Spain	4748 (83%)	2855 (57%)	5574 (70%)	3373 (62%)	16550 (69%)
Austria, Germany, Netherlands, Switzerland	971 (17%)	2144 (43%)	2371 (30%)	2033 (38%)	7519 (31%)
Median follow-up, years	5.2	4.1	4.4	3.8	4.4
Proportion lost to follow-up	1486 (28%)	1006 (20%)	1427 (18%)	893 (17%)	4812 (21%)

Table 2. Differences in mortality, new AIDS event/death, virological suppression from cART initiation according to educational level

Educational level	a) Mortality	b) New AIDS event or mortality	c) Virological success
Incompleted primary	1.93 (1.54,2.43)	1.60 (1.39, 1.85)	0.80 (0.76,0.84)
Primary	1.68 (1.32, 2.12)	1.51 (1.30, 1.75)	0.93 (0.89,0.97)
Secondary	1.30 (1.05,1.60)	1.21 (1.06, 1.38)	0.97 (0.94,1.01)
Tertiary	1	1	1
	p<0.001	p<0.001	p<0.001

*Cox models adjusted for sex, risk group, previous AIDS diagnosis, calendar period, initial cART combination, geographical origin, CD4 count, age and HIV-RNA at cART initiation and stratified by cohort.

Table 3. Estimates of change in square root CD4 count after initiation of combined antiretroviral therapy (cART) from a piecewise linear mixed model.

	Estimate	(95% CI)	P
CD4 count at time 0 for baseline* patient with tertiary education	21.96	(21.49, 22.42)	<0.001
Incompleted primary	-1.24	(-1.50, -0.97)	
Primary	-0.38	(-0.63, -0.12)	
Secondary	-0.71	(-0.94, -0.48)	
Tertiary	ref		<0.001
Annual rate of increase in the first 6 months for baseline patient with tertiary education	6.67	(6.37, 6.96)	<0.001
Incompleted primary	-0.14	(-0.57, 0.30)	
Primary	-0.41	(-0.83, 0.02)	
Secondary	0.25	(-0.13, 0.64)	
Tertiary	ref		0.111
Annual rate of increase after 6 months for tertiary education	0.80	(0.76, 0.85)	<0.001
Incompleted primary	0.00	(-0.05, 0.06)	
Primary	-0.04	(-0.10, 0.02)	
Secondary	0.05	(-0.01, 0.10)	
Tertiary	ref		0.115
Pre-cART AIDS	-3.62	(-3.79, -3.44)	<0.001
Sex			
Male	ref		
Female	0.39	(0.21, 0.57)	<0.001
Mode of exposure			
Sex between men	ref		<0.001
Injecting drug use	-2.76	(-2.99, -2.54)	
Sex between men and women	-1.43	(-1.60, -1.26)	

Other	-1.16	(-1.82,	-0.50)	
Unknown	-1.29	(-1.63,	-0.96)	
Age at cART, 10 year	-0.56	(-0.62,	-0.50)	<0.001
Year at cART initiation				
<2001	-1.58	(-1.79,	-1.38)	<0.001
2001-2004	-2.16	(-2.36,	-1.97)	
2005-2008	-1.58	(-1.74,	-1.42)	
2009-2013	ref			
Geographical origin				
European	ref			<0.001
Non -European	-1.03	(-1.25,	-0.81)	
Other	-0.63	(-0.79,	-0.47)	
Initial cART combination				
NNRTI	ref			0.024
PI	-0.21	(-0.36,	-0.06)	
Other	-0.05	(-0.23,	0.13)	
Viral load (log10 scale)	-0.32	(-0.38,	-0.26)	<0.001
