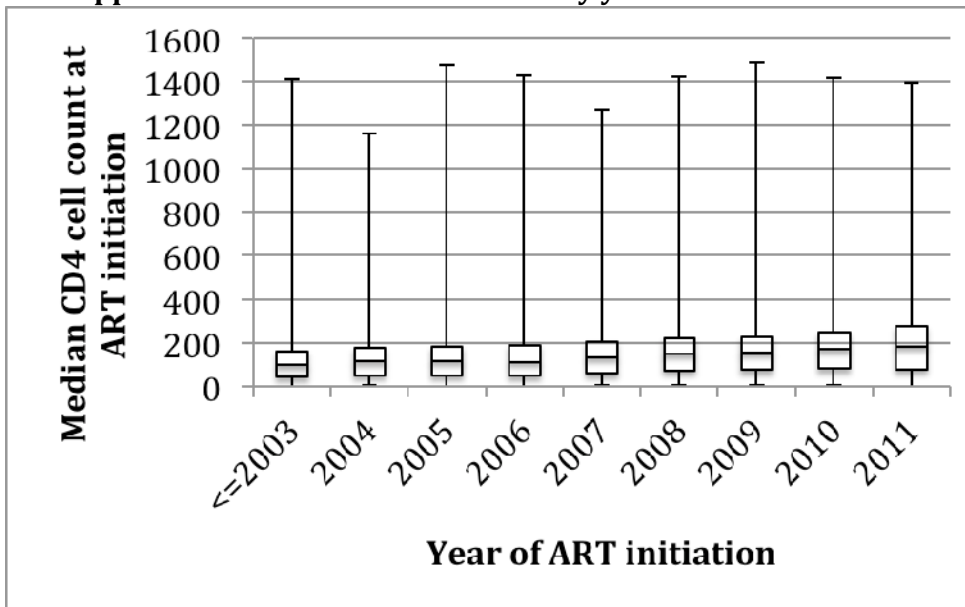
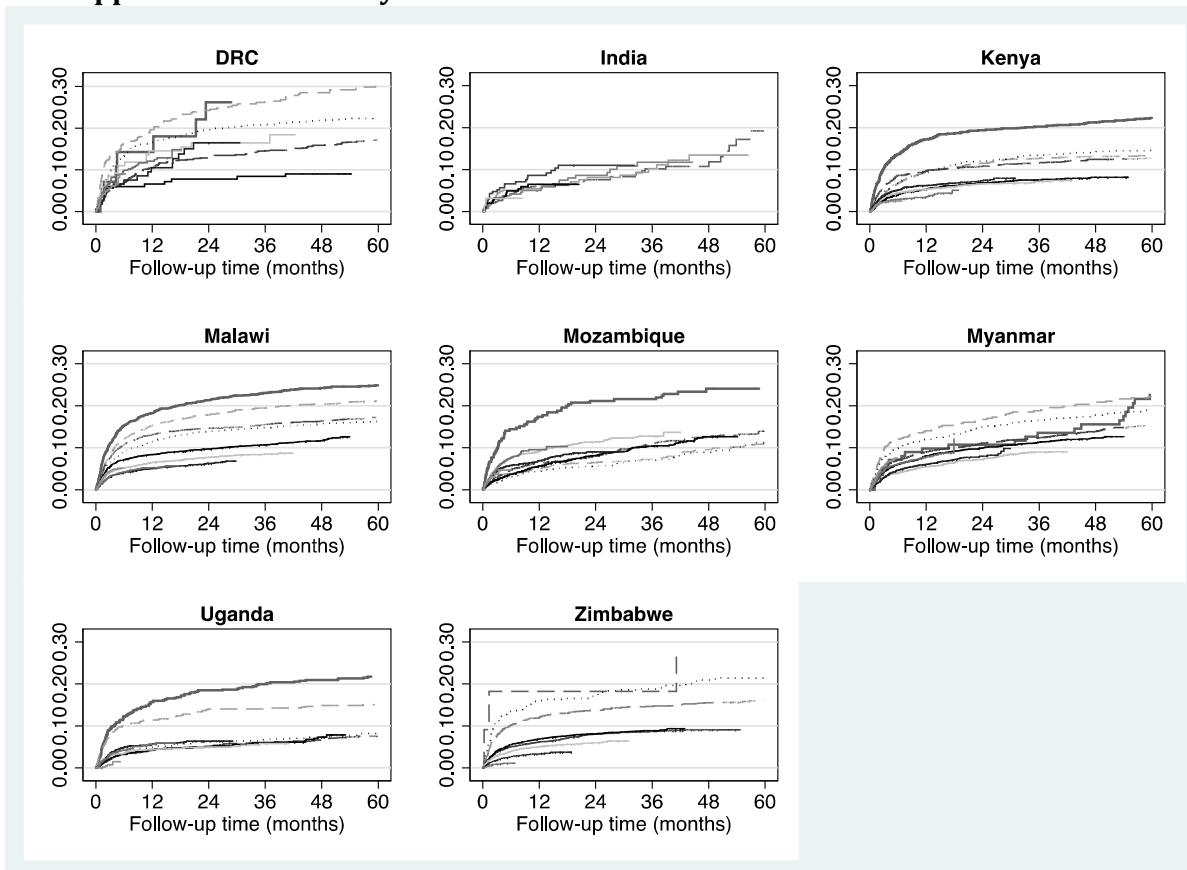


Web Appendix 1: Median CD4 cell count by year of ART initiation

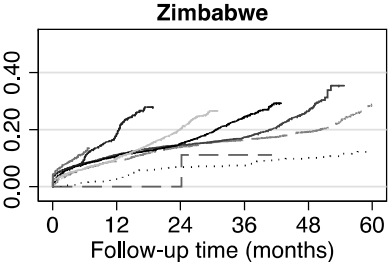
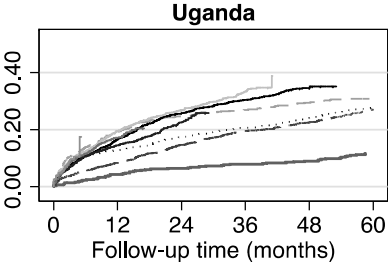
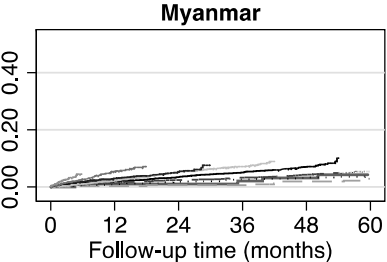
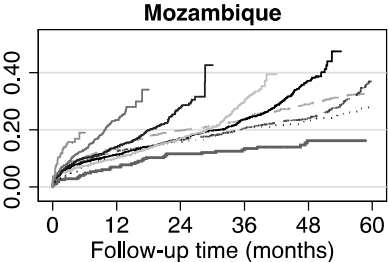
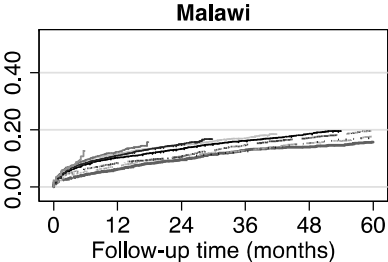
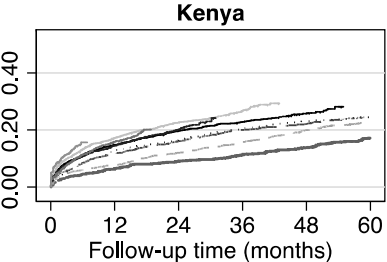
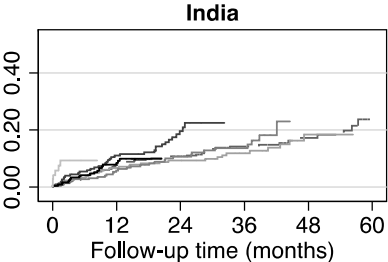
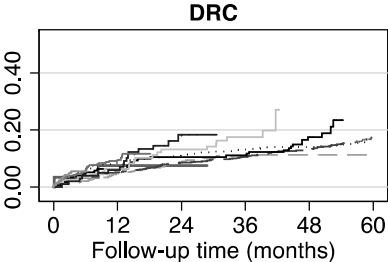


Web Appendix 3: Kaplan-Meier cumulative estimates of mortality and LTFU by country and year of ART initiation

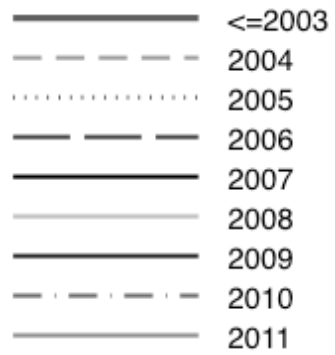
Web Appendix 3A: Mortality



Web Appendix 3B: LTFU



Legend:



There are differences between countries. However, general trends in mortality and LTFU are similar. Country 2 shows little improvement in reducing mortality and a small proportion of LTFU – it is the country with the smallest cohorts.

Web Appendix 4: Kaplan–Meier estimates of mortality, loss to follow-up and programme retention in care by duration of follow-up, programme size and rate of programme expansion

	n (%)	Mortality % (95% CI)	LTFU % (95% CI)	Retention in care % (95% CI)
Duration of follow-up				
6 months	102 289 (77.3)	6.0 (5.9-6.2)	7.7 (7.6-7.9)	86.7 (86.6-86.9)
12 months	85 249 (64.4)	7.6 (7.5-7.8)	10.8 (10.6-11.0)	82.4 (82.2-82.7)
24 months	61 005 (46.1)	9.3 (9.2-9.5)	15.1 (14.9-15.4)	76.9 (76.7-77.2)
36 months	41 801 (31.6)	10.5 (10.3-10.7)	18.6 (18.4-18.9)	72.8 (72.5-73.1)
48 months	25 835 (19.5)	11.6 (11.3-11.8)	21.7 (21.4-22.0)	69.2 (68.9-69.6)
60 months	14 747 (11.1)	12.5 (12.3-12.8)	24.4 (24.1-24.8)	66.1 (65.8-66.5)
Programme size (patients)				
	n (%)	12-month mortality % (95% CI)	12-month LTFU % (95% CI)	12-month retention in care % (95% CI)
<500	3 512 (2.7)	12.1 (11.1-13.3)	2.7 (2.2-3.3)	85.5 (84.3-86.6)
500-999	7 398 (5.6)	10.6 (9.9-11.3)	5.3 (4.8-5.8)	84.7 (83.9-85.5)
1000-2499	25 348 (19.2)	9.4 (9.0-9.7)	7.8 (7.5-8.2)	83.5 (83.1-84.0)
2500-4999	37 001 (28.0)	8.1 (7.8-8.4)	10.3 (10.0-10.7)	82.4 (82.0-82.8)
5000-7499	22 153 (16.7)	5.5 (5.2-5.9)	14.7 (14.2-15.2)	80.6 (80.1-81.2)
7500 – 9999	14 530 (11.0)	5.8 (5.4-6.2)	12.7 (12.1-13.3)	82.3 (81.6-82.9)
10000-14999	13 314 (10.1)	6.3 (5.8-6.7)	13.9 (13.3-14.5)	80.7 (80.0-81.4)
15000-19999	3 885 (2.9)	4.7 (4.1-5.5)	10.6 (9.7-11.7)	85.2 (84.0-86.3)
≥20000	5 193 (3.9)	5.6 (4.9-6.4)	12.2 (11.2-13.3)	82.9 (81.6-84.0)
Rate of expansion (patients/month)				
	n (%)	12-month mortality % (95% CI)	12-month LTFU % (95% CI)	12-month retention in care % (95% CI)
<25	23 445 (17.7)	10.0 (9.6-10.4)	5.6 (5.3-6.0)	84.9 (84.5-85.4)
25-60	23 214 (17.5)	9.3 (8.9-9.7)	9.6 (9.2-10.0)	82.0 (81.5-82.5)
60-90	27 009 (20.4)	7.3 (7.0-7.6)	12.6 (12.2-13.1)	81.0 (80.5-81.5)
90-125	27 375 (20.7)	6.7 (6.4-7.1)	11.6 (11.2-12.0)	82.5 (82.0-82.9)
≥125	31 291 (23.7)	5.3 (5.0-5.6)	13.3 (12.9-13.7)	82.1 (81.6-82.6)

Web Appendix 5: Sensitivity analysis: Cox proportional hazards estimates of mortality including patients with missing data*

	0-12 months (n=132 334)						12-72 months (n=85 171)			
	Univariate HR (95% CI)	Model 1 HR (95% CI)	Univariate HR (95% CI)	Model 1 HR (95% CI)	Univariate HR (95% CI)	Model 1 HR (95% CI)	Univariate HR (95% CI)	Model 1 HR (95% CI)	Univariate HR (95% CI)	Model 1 HR (95% CI)
Year of ART initiation										
≤2003	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)
2004	0.67 (0.61-0.74)	0.69 (0.63-0.76)	0.82 (0.72-0.93)	0.81 (0.73-0.91)	0.89 (0.78-1.01)	0.77 (0.66-0.91)	0.77 (0.65-0.90)	0.88 (0.72-1.08)	0.88 (0.74-1.05)	0.91 (0.74-1.12)
2005	0.53 (0.48-0.58)	0.60 (0.54-0.66)	0.74 (0.65-0.85)	0.76 (0.68-0.86)	0.82 (0.70-0.95)	0.69 (0.59-0.81)	0.72 (0.61-0.84)	0.88 (0.71-1.09)	0.85 (0.71-1.03)	0.88 (0.71-1.11)
2006	0.51 (0.47-0.56)	0.65 (0.59-0.71)	0.85 (0.74-0.98)	0.87 (0.77-0.99)	0.96 (0.82-1.12)	0.58 (0.50-0.68)	0.63 (0.54-0.74)	0.78 (0.63-0.98)	0.78 (0.64-0.95)	0.81 (0.64-1.02)
2007	0.36 (0.33-0.40)	0.53 (0.48-0.59)	0.82 (0.69-0.96)	0.74 (0.65-0.84)	0.92 (0.77-1.10)	0.53 (0.46-0.62)	0.63 (0.53-0.74)	0.80 (0.62-1.04)	0.78 (0.64-0.97)	0.83 (0.63-1.09)
2008	0.34 (0.31-0.38)	0.57 (0.51-0.62)	0.94 (0.79-1.11)	0.84 (0.73-0.97)	1.09 (0.91-1.31)	0.46 (0.38-0.54)	0.56 (0.47-0.66)	0.74 (0.56-0.98)	0.72 (0.57-0.92)	0.78 (0.58-1.04)
2009	0.29 (0.26-0.32)	0.50 (0.45-0.55)	0.87 (0.73-1.05)	0.76 (0.65-0.88)	1.03 (0.84-1.24)	0.43 (0.35-0.52)	0.52 (0.42-0.63)	0.70 (0.51-0.96)	0.68 (0.52-0.88)	0.73 (0.53-1.00)
2010	0.27 (0.24-0.29)	0.47 (0.43-0.52)	0.79 (0.66-0.96)	0.72 (0.63-0.84)	0.93 (0.76-1.14)	0.50 (0.35-0.72)	0.61 (0.42-0.87)	0.93 (0.60-1.45)	0.79 (0.53-1.17)	0.97 (0.62-1.52)
2011	0.28 (0.24-0.32)	0.49 (0.43-0.57)	0.81 (0.65-1.00)	0.75 (0.63-0.90)	0.93 (0.74-1.16)	-	-	-	-	-
Programme size (patients)										
<500	1.0 (ref)		1.0 (ref)		1.0 (ref)	1.0 (ref)		1.0 (ref)		1.0 (ref)
500-999	0.90 (0.79-1.03)		0.95 (0.83-1.09)		0.94 (0.82-1.08)	0.83 (0.69-1.00)		0.97 (0.80-1.19)		0.98 (0.80-1.19)
1000-2499	0.64 (0.57-0.72)		0.87 (0.75-1.00)		0.87 (0.75-1.00)	0.77 (0.65-0.91)		1.03 (0.84-1.27)		1.05 (0.96-1.29)
2500-4999	0.51 (0.45-0.57)		0.77 (0.65-0.91)		0.81 (0.68-0.96)	0.59 (0.49-0.71)		0.83 (0.65-1.06)		0.89 (0.69-1.14)
5000-7499	0.31 (0.27-0.35)		0.55 (0.44-0.67)		0.58 (0.47-0.72)	0.42 (0.34-0.52)		0.65 (0.48-0.90)		0.69 (0.50-0.96)
7500 - 9999	0.26 (0.23-0.30)		0.43 (0.35-0.54)		0.50 (0.39-0.63)	0.38 (0.29-0.51)		0.58 (0.40-0.85)		0.63 (0.41-0.96)
10000-14999	0.22 (0.19-0.25)		0.54 (0.43-0.69)		0.66 (0.50-0.86)	0.42 (0.33-0.54)		0.81 (0.55-1.19)		0.88 (0.57-1.34)
15000-19999	0.15 (0.12-0.18)		0.43 (0.32-0.57)		0.53 (0.38-0.73)	0.35 (0.25-0.50)		0.80 (0.49-1.32)		0.93 (0.531.61)
≥20000	0.18 (0.15-0.22)		0.56 (0.42-0.75)		0.70 (0.50-0.96)	0.18 (0.06-0.55)		0.29 (0.08-1.02)		0.34 (0.10-1.19)
Rate of expansion (patients/month)										
<25	1.0 (ref)			1.0 (ref)	1.0 (ref)	1.0 (ref)			1.0 (ref)	1.0 (ref)
25-59	0.64 (0.59-0.69)			0.86 (0.79-0.94)	0.85 (0.78-0.93)	0.74 (0.65-0.84)			0.84 (0.73-0.97)	0.87 (0.75-1.00)
60-89	0.43 (0.40-0.47)			0.69 (0.62-0.78)	0.74 (0.65-0.83)	0.56 (0.49-0.65)			0.72 (0.60-0.86)	0.81 (0.67-0.99)
90-124	0.37 (0.34-0.41)			0.67 (0.59-0.77)	0.79 (0.68-0.91)	0.52 (0.45-0.61)			0.75 (0.61-0.92)	0.92 (0.72-1.17)
≥125	0.21 (0.20-0.24)			0.54 (0.47-0.63)	0.63 (0.52-0.77)	0.39 (0.32-0.47)			0.66 (0.50-0.86)	0.79 (0.56-1.12)
Sex										
Female	1.0 (ref)	Sex 1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)
Male	1.61 (1.54-1.68)	1.30 (1.25-1.36)	1.31 (1.25-1.37)	1.31(1.25-1.37)	1.31 (1.25-1.37)	1.77 (1.64-1.91)	1.59 (1.47-1.72)	1.59 (1.47-1.72)	1.59 (1.47-1.72)	1.59 (1.47-1.72)
Age group (years)										
16-25	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)
25-34	1.07 (0.99-1.17)	1.13 (1.05-1.24)	1.14 (1.05-1.24)	1.14 (1.05-1.24)	1.14 (1.05-1.24)	0.94 (0.81-1.09)	0.95 (0.82-1.10)	0.95 (0.81-1.10)	0.95 (0.82-1.10)	0.95 (0.81-1.10)

35-44	1.16 (1.07-1.26)	1.23 (1.13-1.34)	1.22 (1.12-1.33)	1.23 (1.13-1.34)	1.22 (1.12-1.33)	1.10 (0.92-1.27)	1.07 (0.91-1.24)	1.06 (0.91-1.24)	1.07 (0.91-1.24)	1.06 (0.91-1.24)
45+	1.33 (1.22-1.46)	1.49 (1.36-1.63)	1.48 (1.35-1.62)	1.49 (1.36-1.62)	1.48 (1.35-1.62)	1.66 (1.42-1.95)	1.60 (1.37-1.88)	1.60 (1.36-1.87)	1.61 (1.37-1.88)	1.60 (1.37-1.88)
Body Mass Index										
Underweight	3.58 (3.40-3.76)	2.57 (2.44-2.70)	2.58 (2.45-2.71)	2.57 (2.44-2.70)	2.57 (2.44-2.70)	1.64 (1.51-1.78)	1.46 (1.34-1.58)	1.46 (1.35-1.59)	1.45 (1.34-1.58)	1.46 (1.34-1.59)
Normal	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)
Overweight	0.59 (0.50-0.70)	0.74 (0.62-0.87)	0.73 (0.62-0.86)	0.74 (0.62-0.87)	0.73 (0.62-0.86)	0.85 (0.70-1.04)	0.96 (0.79-1.18)	0.96 (0.78-1.17)	0.97 (0.79-1.18)	0.96 (0.79-1.17)
Obese	0.91 (0.69-1.20)	1.20 (0.90-1.58)	1.18 (0.89-1.56)	1.20 (0.90-1.59)	1.18 (0.89-1.57)	0.95 (0.64-1.43)	1.11 (0.74-1.66)	1.10 (0.73-1.64)	1.11 (0.74-1.67)	1.10 (0.73-1.65)
Missing	7.21 (6.75-7.70)	6.18 (5.78-6.60)	6.39 (5.98-6.83)	6.24 (5.84-6.67)	6.45 (6.04-6.90)	3.83 (3.31-4.43)	3.68 (3.18-4.27)	3.80 (3.28-3.41)	3.70 (3.19-4.29)	3.84 (3.31-4.45)
CD4 cell count (cells/ μ l)										
<25	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)
25-49	0.60 (0.56-0.65)	0.70 (0.65-0.75)	0.70 (0.65-0.76)	0.70 (0.65-0.76)	0.70 (0.65-0.76)	0.92 (0.78-1.09)	0.96 (0.81-1.14)	0.96 (0.81-1.14)	0.96 (0.81-1.14)	0.96 (0.81-1.14)
50-99	0.38 (0.36-0.41)	0.50 (0.47-0.54)	0.51 (0.47-0.55)	0.51 (0.47-0.55)	0.51 (0.47-0.55)	0.86 (0.73-1.00)	0.95 (0.81-1.11)	0.95 (0.81-1.11)	0.95 (0.82-1.11)	0.95 (0.81-1.11)
100-149	0.26 (0.24-0.28)	0.39 (0.36-0.43)	0.40 (0.36-0.43)	0.40 (0.37-0.43)	0.40 (0.37-0.43)	0.63 (0.54-0.75)	0.75 (0.63-0.89)	0.75 (0.64-0.89)	0.75 (0.64-0.89)	0.75 (0.64-0.89)
150-199	0.19 (0.17-0.21)	0.34 (0.31-0.37)	0.34 (0.31-0.37)	0.34 (0.31-0.37)	0.34 (0.31-0.37)	0.64 (0.44-0.61)	0.82 (0.70-0.97)	0.82 (0.70-0.97)	0.83 (0.70-0.98)	0.82 (0.70-0.97)
200-349	0.14 (0.13-0.16)	0.28 (0.25-0.30)	0.28 (0.26-0.31)	0.28 (0.26-0.31)	0.28 (0.26-0.31)	0.52 (0.44-0.61)	0.69 (0.58-0.81)	0.69 (0.58-0.81)	0.70 (0.59-0.82)	0.69 (0.59-0.82)
\geq 350	0.24 (0.21-0.28)	0.38 (0.32-0.44)	0.38 (0.33-0.44)	0.38 (0.33-0.44)	0.38 (0.33-0.44)	0.79 (0.60-1.05)	0.95 (0.72-1.26)	0.96 (0.72-1.27)	0.85 (0.72-1.26)	0.95 (0.72-1.26)
Missing	0.45 (0.42-0.48)	0.51 (0.48-0.54)	0.52 (0.48-0.55)	0.52 (0.49-0.56)	0.52 (0.49-0.56)	0.90 (0.78-1.03)	0.95 (0.82-1.09)	0.97 (0.83-1.12)	0.96 (0.83-1.11)	0.97 (0.84-1.12)
Clinical stage										
1 and 2	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)
3	2.60 (2.42-2.79)	1.79 (1.66-1.93)	1.74 (1.61-1.87)	1.75 (1.62-1.88)	1.72 (1.60-1.86)	1.54 (1.38-1.72)	1.27 (1.13-1.43)	1.26 (1.12-1.42)	1.26 (1.12-1.42)	1.25 (1.12-1.41)
4	5.70 (5.31-6.11)	3.09 (2.87-3.33)	3.00 (2.78-3.23)	3.01 (2.79-3.24)	2.96 (2.74-3.19)	2.26 (2.01-2.53)	1.68 (1.49-1.90)	1.65 (1.46-1.87)	1.66 (1.46-1.87)	1.64 (1.45-1.85)
Missing	2.04 (1.72-2.43)	1.53 (1.28-1.82)	1.49 (1.25-1.77)	1.51 (1.26-1.79)	1.48 (1.24-1.76)	1.43 (1.10-1.86)	1.29 (0.99-1.68)	1.28 (0.98-1.68)	1.28 (0.98-1.67)	1.27 (0.97-1.66)

* All models accounted for site heterogeneity using random effects. Model 1 – demographics and baseline variables, Model 2 - Model 1 + programme size, Model 3 – Model 1 + rate of expansion, Model 4 – Model 1 + programme size and rate of expansion

Web Appendix 6: Sensitivity analysis: Cox proportional hazards estimates of LTFU including patients with missing data*

	0-12 months (n=132 334)					12-72 months (n=85 171)				
	Univariate HR (95% CI)	Model 1 HR (95% CI)	Model 2 HR (95% CI)	Model 3 HR (95% CI)	Model 4 HR (95% CI)	Univariate HR (95% CI)	Model 1 HR (95% CI)	Model 2 HR (95% CI)	Model 3 HR (95% CI)	Model 4 HR (95% CI)
Year of ART initiation										
≤2003	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)
2004	1.62 (1.40-1.88)	1.59 (1.37-1.84)	1.06 (0.88-1.27)	1.42 (1.21-1.66)	1.04 (0.87-1.25)	1.31 (1.16-1.49)	1.30 (1.15-1.47)	1.07 (0.90-1.26)	1.15 (1.00-1.31)	1.02 (0.87-1.21)
2005	1.69 (1.46-1.95)	1.76 (1.52-2.03)	1.16 (0.97-1.39)	1.55 (1.32-1.82)	1.12 (0.92-1.35)	1.19 (1.05-1.35)	1.21 (1.07-1.37)	0.99 (0.83-1.18)	0.96 (0.84-1.11)	0.84 (0.70-1.00)
2006	1.62 (1.41-1.86)	1.86 (1.62-2.14)	1.21 (1.01-1.45)	1.58 (1.34-1.87)	1.12 (0.92-1.35)	1.47 (1.31-1.66)	1.56 (1.39-1.76)	1.30 (1.10-1.54)	1.16 (1.00-1.34)	1.00 (0.84-1.20)
2007	2.04 (1.78-2.34)	2.55 (2.22-2.92)	1.48 (1.23-1.80)	2.12 (1.80-2.50)	1.40 (1.14-1.71)	1.82 (1.62-2.05)	2.00 (1.77-2.26)	1.74 (1.43-2.11)	1.46 (1.26-1.70)	1.37 (1.11-1.69)
2008	2.26 (1.98-2.59)	2.83 (2.47-3.24)	1.70 (1.40-2.06)	2.25 (1.90-2.66)	1.46 (1.27-1.92)	2.44 (2.15-2.75)	2.68 (2.37-2.04)	2.33 (1.89-2.86)	1.86 (1.58-2.19)	1.80 (1.45-2.24)
2009	2.14 (1.87-2.45)	2.72 (2.37-3.12)	1.56 (1.27-1.90)	2.07 (1.75-2.46)	1.35 (1.09-1.67)	3.60 (3.16-4.10)	3.96 (2.47-4.51)	3.59 (2.88-4.46)	2.67 (2.25-3.18)	2.61 (2.06-3.29)
2010	2.99 (2.62-3.42)	3.84 (3.35-4.40)	2.15 (1.75-2.63)	2.86 (2.41-3.39)	1.90 (1.53-2.36)	6.50 (5.45-7.76)	7.07 (5.92-8.46)	6.61 (5.11-8.55)	4.87 (3.95-6.00)	4.94 (3.77-6.47)
2011	3.64 (3.15-4.21)	4.77 (4.12-5.53)	2.63 (2.12-3.27)	3.51 (2.93-4.20)	2.44 (1.94-3.06)	-	-	-	-	-
Program size (patients)										
<500	1.0 (ref)		1.0 (ref)		1.0 (ref)	1.0 (ref)		1.0 (ref)		1.0 (ref)
500-999	1.71 (1.29-2.26)		1.93 (1.45-2.56)		1.80 (1.35-2.39)	1.64 (1.34-2.00)		1.60 (1.31-1.96)		1.55 (1.27-1.89)
1000-2499	3.02 (2.33-3.92)		2.81 (2.13-3.72)		2.60 (1.97-3.44)	2.35 (1.94-2.86)		1.75 (1.41-2.16)		1.69 (1.27-2.10)
2500-4999	3.29 (2.54-4.27)		2.90 (2.16-3.88)		2.54 (1.89-3.41)	2.66 (2.19-3.22)		1.87 (1.48-2.36)		1.64 (1.29-2.08)
5000-7499	4.36 (3.36-5.67)		3.29 (2.42-4.48)		2.86 (2.10-3.90)	3.80 (3.11-4.65)		1.65 (1.26-2.15)		1.37 (1.3-1.79)
7500 - 9999	4.60 (3.53-5.99)		2.92 (2.13-4.00)		2.13 (1.54-2.95)	5.47 (4.42-6.77)		1.67 (1.26-2.21)		1.07 (0.79-1.45)
10000-14999	6.17 (4.73-8.04)		3.95 (2.79-5.32)		2.34 (1.67-3.30)	4.06 (3.22-5.12)		1.49 (1.09-2.04)		1.02 (0.74-1.43)
15000-19999	5.97 (4.49-7.93)		4.50 (3.18-6.38)		2.79 (1.94-4.01)	4.89 (3.69-6.48)		1.16 (0.80-1.67)		0.84 (0.57-1.23)
≥20000	7.35 (5.55-9.73)		3.78 (2.66-3.67)		2.26 (1.56-3.27)	7.03 (4.30-11.48)		0.95 (0.54-1.67)		0.67 (0.38-1.20)
Rate of scale up (patients/month)										
0<25	1.0 (ref)			1.0 (ref)	1.0 (ref)	1.0 (ref)			1.0 (ref)	1.0 (ref)
25-59	1.57 (1.41-1.75)			1.32 (1.17-1.49)	1.27 (1.12-1.44)	1.48 (1.33-1.64)			1.27 (1.14-1.42)	1.21 (1.08-1.35)
60-89	1.94 (1.73-2.18)			1.34 (1.16-1.54)	1.30 (1.12-1.51)	1.96 (1.75-2.18)			1.47 (1.28-1.68)	1.49 (1.29-1.72)
90-124	2.16 (1.92-2.4)			1.40 (1.20-1.63)	1.46 (1.24-1.73)	2.79 (2.48-3.14)			1.81 (1.56-2.11)	1.98 (1.68-2.34)
≥125	3.09 (2.74-3.48)			1.79 (1.52-2.10)	2.04 (1.68-2.46)	3.72 (3.25-4.27)			1.69 (1.41-2.03)	2.28 (1.84-2.82)
Sex										
Female	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)
Male	1.31 (1.27-1.36)	1.29 (1.24-1.33)	1.28 (1.24-1.33)	1.28 (1.23-1.33)	1.28 (1.23-1.33)	1.16 (1.11-1.21)	1.21 (1.16-1.27)	1.21 (1.16-1.27)	1.21 (1.15-1.27)	1.21 (1.16-1.27)
Age group (years)										
16-25	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)
25-34	0.72 (0.69-0.76)	0.76 (0.72-0.80)	0.76 (0.72-0.80)	0.76 (0.72-0.80)	0.76 (0.72-0.80)	0.63 (0.59-0.67)	0.64 (0.60-0.69)	0.64 (0.60-0.69)	0.64 (0.60-0.69)	0.64 (0.60-0.69)

35-44	0.60 (0.57-0.64)	0.62 (0.59-0.66)	0.62 (0.59-0.66)	0.62 (0.58-0.66)	0.62 (0.59-0.66)	0.50 (0.47-0.54)	0.51 (0.47-0.55)	0.50 (0.47-0.54)	0.51 (0.47-0.55)	0.50 (0.47-0.54)
45+	0.60 (0.56-0.64)	0.61 (0.57-0.65)	0.61 (0.57-0.65)	0.61 (0.57-0.65)	0.61 (0.57-0.65)	0.51 (0.47-0.56)	0.50 (0.46-0.55)	0.50 (0.46-0.55)	0.51 (0.47-0.55)	0.50 (0.46-0.55)
Body Mass Index										
Underweight	1.69 (1.63-1.76)	1.50 (1.44-1.57)	1.50 (1.44-1.56)	1.50 (1.44-1.57)	1.50 (1.44-1.56)	1.12 (1.06-1.17)	1.05 (1.00-1.11)	1.06 (1.00-1.11)	1.05 (1.00-1.11)	1.05 (1.00-1.11)
Normal	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)
Overweight	0.91 (0.83-0.99)	1.00 (0.91-1.09)	1.00 (0.91-1.08)	1.00 (0.91-1.09)	0.99 (0.91-1.09)	0.99 (0.90-1.09)	1.07 (0.97-1.17)	1.06 (0.97-1.17)	1.07 (0.97-1.18)	1.07 (0.97-1.17)
Obese	1.13 (0.96-1.32)	1.28 (1.10-1.50)	1.28 (1.09-1.50)	1.29 (1.10-1.51)	1.28 (1.09-1.50)	0.87 (0.70-1.07)	0.98 (0.79-1.121)	0.97 (0.79-1.20)	0.98 (0.79-1.21)	0.97 (0.79-1.20)
Missing	2.91 (2.76-3.07)	2.70 (2.55-2.85)	2.72 (2.57-2.88)	2.69 (2.54-2.84)	2.73 (2.58-2.88)	2.00 (1.84-2.18)	1.97 (1.81-2.14)	2.00 (1.84-2.18)	1.99 (1.83-2.17)	2.07 (1.90-2.25)
CD4 cell count (cells/ μ l)										
<25	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)
25-49	0.81 (0.75-0.88)	0.89 (0.82-0.96)	0.88 (0.81-0.96)	0.88 (0.81-0.96)	0.88 (0.81-0.96)	0.93 (0.84-1.04)	1.00 (0.90-1.11)	1.00 (0.90-1.12)	0.99 (0.89-1.11)	1.00 (0.90-1.12)
50-99	0.62 (0.58-0.67)	0.73 (0.68-0.79)	0.72 (0.67-0.78)	0.72 (0.67-0.78)	0.72 (0.67-0.78)	0.86 (0.78-0.95)	0.95 (0.86-1.05)	0.96 (0.87-1.05)	0.94 (0.86-1.04)	0.95 (0.86-1.05)
100-149	0.57 (0.53-0.61)	0.70 (0.65-0.75)	0.69 (0.64-0.75)	0.69 (0.64-0.75)	0.69 (0.64-0.75)	0.84 (0.77-0.93)	0.94 (0.85-1.03)	0.95 (0.86-1.04)	0.93 (0.84-1.02)	0.94 (0.85-1.03)
150-199	0.48 (0.44-0.51)	0.60 (0.56-0.65)	0.60 (0.55-0.65)	0.60 (0.55-0.65)	0.60 (0.55-0.65)	0.87 (0.79-0.96)	0.96 (0.87-1.06)	0.97 (0.88-1.07)	0.95 (0.86-1.05)	0.96 (0.87-1.06)
200-349	0.52 (0.48-0.55)	0.60 (0.56-0.65)	0.59 (0.55-0.63)	0.60 (0.55-0.63)	0.59 (0.55-0.63)	0.91 (0.83-1.00)	0.91 (0.82-1.00)	0.92 (0.84-1.01)	0.90 (0.82-0.99)	0.92 (0.83-1.01)
\geq 350	0.79 (0.71-0.87)	0.75 (0.67-0.83)	0.75 (0.67-0.83)	0.75 (0.68-0.84)	0.75 (0.68-0.84)	1.15 (0.98-1.34)	1.04 (0.89-1.23)	1.06 (0.90-1.24)	1.02 (0.87-1.20)	1.03 (0.88-1.21)
Missing	0.83 (0.78-0.89)	0.92 (0.86-0.98)	0.93 (0.87-0.99)	0.92 (0.86-0.98)	0.92 (0.86-0.98)	1.02 (0.94-1.12)	1.08 (0.99-1.18)	1.08 (0.98-1.18)	1.04 (0.96-1.14)	1.05 (0.96-1.14)
Clinical stage										
1 and 2	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)
3	1.10 (1.05-1.14)	1.17 (0.11-1.22)	1.17 (1.12-1.23)	1.18 (1.13-1.24)	1.18 (1.12-1.23)	1.05 (0.99-1.11)	1.19 (1.12-1.26)	1.18 (1.11-1.25)	1.18 (1.11-1.25)	1.16 (1.10-1.23)
4	1.51 (1.44-1.59)	1.54 (1.46-1.62)	1.55 (1.48-1.64)	1.57 (1.49-1.65)	1.57 (1.49-1.65)	1.11 (1.04-1.18)	1.29 (1.20-1.38)	1.28 (1.20-1.37)	1.29 (1.21-1.38)	1.29 (1.20-1.37)
Missing	1.01 (0.88-1.17)	1.05 (0.91-1.21)	1.04 (0.90-1.20)	1.05 (0.91-1.21)	1.03 (0.89-1.18)	1.06 (0.89-1.25)	1.14 (0.96-1.35)	1.12 (0.94-1.33)	1.11 (0.94-1.32)	1.08 (0.91-1.29)

* All models accounted for site heterogeneity using random effects. Model 1 – demographics and baseline variables, Model 2 - Model 1 + programme size, Model 3 – Model 1 + rate of expansion, Model 4 – Model 1 + programme size and rate of expansion

25-34	1.10 (1.01-1.19)	1.11 (0.99-1.24)	1.10 (0.98-1.23)	1.11 (0.99-1.24)	1.10 (0.98-1.23)	0.98 (0.84-1.14)	0.87 (0.72-1.05)	0.88 (0.73-1.06)	0.88 (0.73-1.07)	0.88 (0.73-1.06)
35-44	1.19 (1.09-1.29)	1.23 (1.10-1.38)	1.22 (1.08-1.36)	1.22 (1.09-1.37)	1.21 (1.08-1.36)	1.13 (0.98-1.32)	1.03 (0.85-1.25)	1.06 (0.87-1.28)	1.07 (0.88-1.29)	1.06 (0.88-1.29)
45+	1.37 (1.26-1.50)	1.60 (1.42-1.80)	1.56 (1.39-1.76)	1.57 (1.39-1.77)	1.56 (1.38-1.76)	1.66 (1.42-1.94)	1.54 (1.27-1.88)	1.62 (1.33-1.98)	1.64 (1.35-2.00)	1.64 (1.34-2.00)
Body Mass Index										
Underweight	3.49 (3.32-3.66)	2.47 (2.33-2.63)	2.49 (2.34-2.65)	2.48 (2.33-2.64)	2.49 (2.34-2.65)	1.67 (1.54-1.81)	1.54 (1.39-1.71)	1.51 (1.36-1.67)	1.50 (1.35-1.66)	1.50 (1.36-1.66)
Normal	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)
Overweight	0.58 (0.49-0.68)	0.72 (0.60-0.87)	0.72 (0.60-0.87)	0.73 (0.60-0.88)	0.72 (0.60-0.87)	0.85 (0.69-1.03)	1.01 (0.80-1.27)	1.01 (0.80-1.28)	1.01 (0.80-1.28)	1.01 (0.80-1.28)
Obese	0.86 (0.65-1.13)	1.13 (0.83-1.55)	1.15 (0.84-1.57)	1.16 (0.85-1.58)	1.14 (0.84-1.56)	0.95 (0.64-1.43)	0.75 (0.42-1.33)	0.76 (0.43-1.35)	0.77 (0.43-1.36)	0.77 (0.43-1.36)
CD4 cell count (cells/ μ l)										
<25	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)
25-49	0.64 (0.59-0.69)	0.73 (0.67-0.80)	0.73 (0.66-0.79)	0.73 (0.67-0.79)	0.73 (0.67-0.79)	0.95 (0.80-1.12)	1.01 (0.84-1.21)	0.98 (0.82-1.18)	0.99 (0.83-1.19)	0.98 (0.82-1.18)
50-99	0.43 (0.40-0.46)	0.57 (0.53-0.62)	0.57 (0.52-0.62)	0.57 (0.52-0.62)	0.57 (0.52-0.62)	0.87 (0.74-1.01)	1.04 (0.88-1.22)	1.02 (0.86-1.21)	1.04 (0.88-1.23)	1.03 (0.87-1.21)
100-149	0.29 (0.27-0.32)	0.46 (0.42-0.51)	0.46 (0.42-0.50)	0.46 (0.42-0.50)	0.46 (0.42-0.50)	0.64 (0.54-0.75)	0.82 (0.68-0.98)	0.82 (0.68-0.98)	0.83 (0.69-1.00)	0.82 (0.69-0.99)
150-199	0.21 (0.20-0.23)	0.39 (0.35-0.43)	0.38 (0.35-0.43)	0.39 (0.35-0.43)	0.38 (0.35-0.43)	0.64 (0.55-0.76)	0.92 (0.77-1.10)	0.91 (0.76-1.08)	0.93 (0.78-1.12)	0.91 (0.76-1.10)
200-349	0.17 (0.15-0.18)	0.35 (0.31-0.38)	0.34 (0.31-0.37)	0.34 (0.31-0.38)	0.34 (0.31-0.37)	0.53 (0.45-0.62)	0.79 (0.66-0.94)	0.76 (0.64-0.92)	0.79 (0.66-0.95)	0.77 (0.64-0.93)
\geq 350	0.28 (0.24-0.32)	0.53 (0.45-0.62)	0.52 (0.45-0.61)	0.52 (0.44-0.61)	0.52 (0.45-0.61)	0.78 (0.59-1.03)	1.01 (0.74-1.37)	1.02 (0.75-1.39)	1.02 (0.75-1.39)	1.02 (0.75-1.39)
Clinical stage										
1 and 2	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)
3	2.43 (2.27-2.61)	1.50 (1.37-1.63)	1.55 (1.42-1.69)	1.58 (1.43-1.71)	1.58 (1.45-1.73)		1.49 (1.33-1.66)	1.14 (0.99-1.31)	1.11 (0.97-1.27)	1.13 (0.99-1.30)
4	5.41 (5.05-5.79)	2.45 (2.23-2.69)	2.55 (2.32-2.81)	2.61 (2.37-2.87)	2.61 (2.37-2.87)		2.28 (2.04-2.55)	1.46 (1.26-1.69)	1.43 (1.24-1.66)	1.45 (1.25-1.68)

* Model 1 – demographics and baseline variables, Model 2 - Model 1 + programme size, Model 3 – Model 1 + rate of expansion, Model 4 – Model 1 + programme size and rate of expansion

Web Appendix 8: Sensitivity analysis: Competing risks estimates of LTFU*

	0-12 months (n=132 334)					12-72 months (n=85 171)				
	Univariate HR (95% CI)	Model 1 HR (95% CI)	Model 2 HR (95% CI)	Model 3 HR (95% CI)	Model 4 HR (95% CI)	Univariate HR (95% CI)	Model 1 HR (95% CI)	Model 2 HR (95% CI)	Model 3 HR (95% CI)	Model 4 HR (95% CI)
Year of ART initiation										
≤2003	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)
2004	1.66 (1.44-1.93)	1.45 (1.16-1.82)	0.89 (0.70-1.12)	1.02 (0.81-1.28)	0.91 (0.72-1.15)	1.44 (1.27-1.63)	1.30 (1.11-1.53)	0.81 (0.68-0.97)	0.98 (0.84-1.16)	0.94 (0.78-1.12)
2005	1.59 (1.38-1.83)	1.75 (1.43-2.16)	0.99 (0.79-1.23)	1.24 (1.00-1.53)	1.11 (0.89-1.40)	1.17 (1.04-1.32)	1.23 (1.06-1.44)	0.71 (0.60-0.84)	0.95 (0.81-1.11)	0.85 (0.71-1.02)
2006	1.45 (1.26-1.66)	1.72 (1.42-2.10)	0.95 (0.77-1.16)	1.20 (0.98-1.47)	1.02 (0.83-1.26)	1.41 (1.26-1.59)	1.58 (1.37-1.83)	0.96 (0.82-1.12)	1.14 (0.98-1.32)	1.03 (0.87-1.21)
2007	1.89 (1.65-2.16)	2.57 (2.12-3.10)	1.15 (0.94-1.41)	1.69 (1.40-2.06)	1.34 (1.09-1.65)	1.73 (1.54-1.94)	2.17 (1.88-2.51)	1.48 (1.27-1.74)	1.55 (1.34-1.80)	1.65 (1.40-1.95)
2008	2.13 (1.86-2.44)	2.94 (2.43-3.55)	1.31 (1.07-1.61)	1.82 (1.50-2.21)	1.50 (1.22-1.85)	2.20 (1.95-2.49)	2.85 (2.46-3.31)	1.83 (1.55-2.17)	2.21 (1.89-2.58)	2.13 (1.78-2.54)
2009	1.90 (1.66-2.17)	2.71 (2.24-3.28)	1.23 (1.00-1.51)	1.77 (1.46-2.15)	1.44 (1.16-1.78)	2.95 (2.60-2.25)	3.76 (3.21-4.40)	2.50 (2.10-2.98)	3.06 (2.60-3.60)	2.91 (2.42-3.50)
2010	2.66 (2.33-3.04)	4.00 (3.32-4.82)	1.79 (1.47-2.20)	2.56 (2.11-3.10)	2.15 (1.74-2.65)	4.72 (3.97-5.61)	5.70 (4.61-7.04)	3.91 (3.11-4.92)	4.67 (3.78-5.77)	4.85 (3.80-6.15)
2011	2.90 (2.51-3.35)	3.90 (3.19-4.76)	1.76 (1.42-2.19)	2.50 (2.04-3.06)	2.14 (1.71-2.67)	-	-	-	-	-
Programme size (patients)										
<500	1.0 (ref)		1.0 (ref)		1.0 (ref)	1.0 (ref)		1.0 (ref)		1.0 (ref)
500-999	1.99 (1.58-2.52)		2.52 (1.82-3.50)		2.39 (1.72-3.32)	1.93 (1.62-2.30)		1.88 (1.51-2.33)		1.83 (1.47-2.27)
1000-2499	3.03 (1.58-2.52)		3.22 (2.36-4.39)		2.54 (1.89-3.48)	2.03 (1.73-2.39)		1.78 (1.44-2.19)		1.45 (1.16-1.81)
2500-4999	4.21 (3.40-5.20)		5.21 (3.83-7.07)		2.67 (1.93-3.70)	3.26 (2.79-3.83)		3.55 (2.89-4.36)		1.82 (1.43-2.31)
5000-7499	6.09 (4.86-7.44)		7.13 (5.23-9.74)		3.21 (2.29-4.49)	3.84 (3.26-4.52)		3.10 (2.50-3.85)		1.52 (1.18-1.95)
7500 - 9999	5.21 (4.20-6.46)		5.84 (4.26-7.99)		2.36 (1.67-3.33)	5.33 (4.49-6.33)		3.38 (2.68-4.25)		1.52 (1.16-1.01)
10000-14999	5.55 (4.47-6.88)		6.88 (5.03-9.42)		2.51 (1.77-3.57)	1.96 (1.63-2.35)		1.54 (1.21-1.95)		0.72 (0.54-0.95)
15000-19999	4.35 (3.45-5.48)		6.28 (4.50-8.77)		2.25 (1.56-3.26)	2.19 (1.72-2.78)		1.34 (1.00-1.80)		0.66 (0.46-0.93)
≥20000	5.25 (4.19-6.59)		5.14 (3.72-7.13)		1.79 (1.24-2.48)	3.11 (1.95-4.97)		1.15 (0.66-2.01)		0.53 (0.29-0.97)
Rate of expansion (patients/month)										
<25	1.0 (ref)			1.0 (ref)	1.0 (ref)	1.0 (ref)			1.0 (ref)	1.0 (ref)
25-59	1.76 (1.64-1.89)			1.91 (1.75-2.10)	1.71 (1.53-1.91)	1.58 (1.46-1.70)			1.71 (1.56-1.88)	1.59 (1.42-1.78)
60-89	2.40 (2.25-2.57)			2.88 (2.64-3.15)	2.32 (2.03-2.66)	2.09 (1.95-2.25)			2.76 (2.08-2.49)	2.04 (1.77-2.34)
90-124	2.18 (2.04-2.33)			2.41 (2.21-2.64)	2.12 (1.84-2.43)	2.42 (2.25-2.60)			2.63 (2.40-2.88)	2.58 (2.22-2.99)
≥125	2.57 (2.41-2.75)			2.74 (2.50-3.00)	2.86 (2.39-3.34)	1.85 (1.69-2.03)			1.33 (1.18-1.49)	2.12 (1.74-2.56)
Sex										
Female	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)
Male	1.17 (1.13-1.21)	1.11 (1.06-1.16)	1.18 (1.12-1.23)	1.18 (1.12-1.23)	1.18 (1.13-1.24)	1.06 (1.01-1.10)	1.05 (0.99-1.11)	1.11 (1.05-1.18)	1.13 (1.07-1.19)	1.12 (1.06-1.19)
Age group (years)										
16-25	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)
25-34	0.70 (0.66-0.74)	0.70 (0.65-0.75)	0.70 (0.65-0.75)	0.70 (0.65-0.75)	0.70 (0.65-0.75)	0.65 (0.61-0.70)	0.70 (0.64-0.77)	0.68 (0.63-0.75)	0.69 (0.63-0.75)	0.68 (0.62-0.74)

35-44	0.60 (0.56-0.63)	0.61 (0.56-0.66)	0.59 (0.55-0.64)	0.59 (0.55-0.64)	0.59 (0.55-0.64)	0.55 (0.52-0.60)	0.59 (0.53-0.64)	0.55 (0.50-0.61)	0.55 (0.50-0.61)	0.55 (0.50-0.60)
45+	0.62 (0.58-0.66)	0.63 (0.58-0.69)	0.59 (0.54-0.64)	0.59 (0.54-0.64)	0.59 (0.54-0.64)	0.60 (0.55-0.65)	0.61 (0.55-0.68)	0.56 (0.50-0.62)	0.55 (0.49-0.61)	0.55 (0.49-0.61)
Body Mass Index										
Underweight	1.46 (1.40-1.52)	1.36 (1.30-1.43)	1.40 (1.33-1.47)	1.41 (1.34-1.48)	1.40 (1.34-1.47)	0.98 (0.94-1.03)	0.93 (0.87-0.99)	0.98 (0.92-1.04)	0.98 (0.92-1.04)	0.99 (0.93-1.05)
Normal	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)
Overweight	0.96 (0.83-0.99)	0.93 (0.84-1.03)	0.94 (0.85-1.05)	0.94 (0.85-1.04)	0.94 (0.84-1.04)	1.09 (0.99-1.20)	1.16 (1.04-1.29)	1.12 (1.01-1.25)	1.14 (1.02-1.27)	1.12 (1.00-1.25)
Obese	1.20 (0.88-1.04)	1.14 (0.94-1.39)	1.15 (0.95-1.39)	1.14 (0.94-1.38)	1.13 (0.93-1.37)	1.00 (0.81-1.23)	1.12 (0.87-1.43)	1.05 (0.82-1.35)	1.06 (0.83-1.36)	1.02 (0.80-1.31)
CD4 cell count (cells/ μ l)										
<25	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)
25-49	0.81 (0.75-0.88)	0.85 (0.78-0.93)	0.87 (0.80-0.95)	0.87 (0.80-0.96)	0.88 (0.81-0.96)	0.86 (0.77-0.96)	0.87 (0.78-0.98)	0.93 (0.83-1.04)	0.92 (0.81-1.03)	0.94 (0.84-1.06)
50-99	0.62 (0.58-0.67)	0.76 (0.70-0.83)	0.75 (0.69-0.81)	0.76 (0.70-0.82)	0.76 (0.70-0.82)	0.83 (0.75-0.91)	0.86 (0.77-0.95)	0.90 (0.81-0.99)	0.88 (0.79-0.97)	0.91 (0.82-1.00)
100-149	0.57 (0.53-0.61)	0.76 (0.70-0.83)	0.74 (0.68-0.81)	0.75 (0.69-0.81)	0.75 (0.69-0.81)	0.83 (0.76-0.92)	0.90 (0.81-1.00)	0.93 (0.84-1.03)	0.90 (0.81-1.00)	0.94 (0.84-1.04)
150-199	0.48 (0.44-0.51)	0.65 (0.60-0.71)	0.64 (0.58-0.70)	0.64 (0.59-0.70)	0.64 (0.59-0.70)	0.85 (0.77-0.93)	0.88 (0.79-0.97)	0.92 (0.83-1.02)	0.89 (0.80-0.98)	0.93 (0.84-1.03)
200-349	0.52 (0.48-0.55)	0.66 (0.61-0.72)	0.64 (0.59-0.70)	0.65 (0.60-0.70)	0.65 (0.60-0.70)	0.81 (0.74-0.89)	0.76 (0.68-0.84)	0.83 (0.75-0.92)	0.78 (0.71-0.86)	0.84 (0.76-0.93)
\geq 350	0.79 (0.71-0.87)	0.92 (0.82-1.03)	0.86 (0.77-0.96)	0.87 (0.77-0.97)	0.86 (0.77-0.97)	1.00 (0.86-1.18)	0.92 (0.77-1.09)	0.95 (0.80-1.13)	0.88 (0.75-1.05)	0.92 (0.77-1.09)
Clinical stage										
1 and 2	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)
3	1.10 (1.05-1.14)	1.04 (0.98-1.10)	1.09 (1.03-1.16)	1.12 (1.06-1.19)	1.12 (1.05-1.18)	1.02 (0.96-1.07)	1.23 (1.15-1.32)	1.15 (1.07-1.24)	1.20 (1.11-1.28)	1.15 (1.07-1.24)
4	1.51 (1.44-1.59)	1.22 (1.14-1.31)	1.37 (1.28-1.46)	1.39 (1.30-1.49)	1.40 (1.31-1.50)	0.99 (0.93-1.05)	1.22 (1.12-1.32)	1.21 (1.12-1.32)	1.26 (1.16-1.37)	1.23 (1.13-1.33)

* Model 1 – demographics and baseline variables, Model 2 - Model 1 + programme size, Model 3 – Model 1 + rate of expansion, Model 4 – Model 1 + programme size and rate of expansion

