

Table 1: Characteristics of included women at ART initiation.

	South Africa	Latin America	North America	Europe
	N (%)	N (%)	N (%)	N (%)
All women	13,569 (100%)	2,261 (100%)	4,120 (100%)	44,281 (100%)
Median follow-up time (IQR) [years]	2.1 (0.8-4.1)	5.0 (2.1-8.5)	5.4 (2.3-9.9)	4.8 (2.0-8.5)
Median age at ART initiation (IQR) [years]	35.1 (29.7-41.7)	35.4 (29.3-43.6)	38.6 (32.4-44.8)	34.6 (29.0-41.5)
Age at ART initiation [years]				
16-30	3,584 (26%)	627 (28%)	693 (17%)	12,934 (29%)
31-50	8,969 (66%)	1,363 (60%)	2,947 (72%)	26,944 (61%)
>50	1,016 (7%)	271 (12%)	480 (12%)	4,403 (10%)
First line ART regimen				
NNRTI-based	12,594 (93%)	1,579 (70%)	1,261 (31%)	16,724 (38%)
PI-based	939 (7%)	623 (28%)	2,476 (60%)	24,325 (55%)
Other ART	36 (<1%)	59 (3%)	383 (9%)	3,232 (7%)
Year of ART initiation				
1996-1998	0 (0%)	26 (1%)	1,600 (39%)	4,260 (10%)
1999-2003	51 (<1%)	560 (25%)	1,276 (31%)	13,236 (30%)
2004-2007	6,791 (50%)	801 (35%)	864 (21%)	12,821 (29%)
2008-2014	6,727 (50%)	874 (39%)	380 (9%)	13,964 (32%)
Median CD4 cell count at ART initiation (IQR) [cells/μl]	115 (50-182)	178 (74-281)	241 (107-385)	241 (129-363)
CD4 cell count at ART initiation [cells/μl]				
< 50	3,113 (23%)	340 (15%)	577 (14%)	4,676 (11%)
50-99	2,402 (18%)	274 (12%)	303 (7%)	3,271 (7%)
100-199	4,733 (35%)	465 (21%)	663 (16%)	7,890 (18%)
200-349	1,821 (13%)	601 (27%)	1,047 (25%)	13,122 (30%)
350-499	276 (2%)	154 (7%)	587 (14%)	6,146 (14%)
500-699	139 (1%)	74 (3%)	349 (8%)	3,069 (7%)
\geq 700	66 (<1%)	30 (1%)	170 (4%)	1,638 (4%)
Missing	1,019 (8%)	323 (14%)	424 (10%)	4,469 (10%)

Median HIV RNA at ART initiation (IQR) [log10]	4.4 (2.6-5.2)	4.8 (4.0-5.3)	4.3 (3.4-5.0)	4.5 (3.7-5.1)
HIV RNA at ART initiation [log10 copies/ml]				
< 2.7	788 (6%)	91 (4%)	608 (15%)	4,704 (11%)
2.7-3.9	404 (3%)	260 (11%)	806 (20%)	7,319 (17%)
4.0-4.9	870 (6%)	585 (26%)	1,218 (30%)	14,051 (32%)
≥ 5.0	984 (7%)	568 (25%)	946 (23%)	11,764 (27%)
Missing	10,523 (78%)	757 (33%)	542 (13%)	6,443 (15%)

ART, antiretroviral therapy; HIV, human immunodeficiency virus; IQR, interquartile range; NNRTI, non-nucleoside reverse-transcriptase inhibitor; PI, protease-inhibitor; RNA, ribonucleic acid.

Table 2: Comparison of ICC rates between different regions and Europe: Crude and adjusted HRs for ICC at 2 years and 5 years after ART initiation in women living with HIV.

	At 2 years		At 5 years	
	Crude HR (95% CI)	Adjusted HR* (95% CI)	Crude HR (95% CI)	Adjusted HR* (95% CI)
Region				
Europe	1.00	1.00	1.00	1.00
North America	1.81 (0.94 - 3.48)	1.51 (0.73 – 3.12)	0.98 (0.48 - 1.99)	0.79 (0.37 - 1.71)
Latin America	1.93 (1.09 - 3.42)	1.83 (0.99 - 3.37)	2.32 (1.24 - 4.31)	2.43 (1.27 - 4.68)
South Africa	6.84 (5.20 - 9.00)	6.23 (4.29 - 9.05)	11.06 (7.80 - 15.68)	10.66 (6.73 - 16.88)

* Adjusted for CD4 cell count at ART initiation, age at ART initiation, first-line ART regimen, and calendar period of ART initiation.

ART, antiretroviral therapy; CI, confidence interval; HR, hazard ratio; ICC, invasive cervical cancer.

Table 3: Adjusted hazard ratios for the effect of different factors on their risk of developing incident ICC in women who have initiated ART.

	Hazard ratio* (95% CI)	p-value for interaction**
CD4 cell count at ART initiation		0.76
per 100 cells/ μ l decrease	1.25 (1.15 - 1.36)	
Age at ART initiation [years]		0.34
16-30	1.00	
31-50	1.38 (1.05 - 1.81)	
>50	1.57 (1.03 - 2.40)	
First-line ART regimen		0.21
NNRTI-based	1.00	
PI-based	1.05 (0.79 - 1.41)	
Other ART	0.57 (0.27 - 1.18)	
Year of ART initiation		0.13
1996-1998	1.49 (0.92 - 2.42)	
1999-2003	1.19 (0.80 - 1.77)	
2004-2007	0.83 (0.61 - 1.14)	
2008-2014	1.00	

* Adjusted for region, CD4 cell count at ART initiation, age at ART initiation, calendar year of ART initiation, and first-line ART regimen.

** Derived from likelihood ratio test comparing the adjusted model with and without the interaction of a specific variable with region.

ART, antiretroviral therapy; CI, confidence interval; ICC, invasive cervical cancer; NNRTI, non-nucleoside reverse-transcriptase inhibitor; PI, protease-inhibitor