

Supplementary Table 1. Number and proportion of participants developing virological failure, interrupting treatment, and developing TCVF, by risk group and age at the start of ART

Risk group	Perinatal						
Age in years at start of ART	< 2	2 - 4	5 - 9	10 - 14	15 - 19	All	15 - 19
Number of participants	238	148	229	171	20	806	264
Follow-up from ART start <i>p</i> yrs							
Median (IQR)	4.9 (2.7-7.0)	5.1 (3.3-6.9)	4.5 (2.7-6.2)	3.0 (1.5-4.3)	1.4 (1.0-2.3)	4.1 (2.3-6.1)	3.5 (1.8-5.7)
No. (%) who developed VF	119 (50.0%)	63 (42.6%)	99 (43.2%)	70 (40.9%)	6 (30.0%)	357 (44.3%)	100 (37.9%)
Estimated cumulative % who had VF by							
3 yrs (95% CI)	48.9 (42.2-55.6)	35.7 (27.7-43.7)	33.6 (27.1-40.2)	44.3 (36.0-52.7)	-	40.7 (37.0-44.3)	34.0 (27.9-40.1)
5 yrs (95% CI)	54.0 (46.9-61.1)	44.9 (36.0-53.8)	47.3 (39.7-54.9)	51.1 (41.2-60.9)		49.9 (45.8-54.0)	44.8 (37.4-52.2)
No. (%) who developed TCVF	18 (7.6%)	11 (7.4%)	21 (9.1%)	20 (11.7%)	0 (0%)	70 (8.7%)	7 (2.7%)
Estimated cumulative % with TCVF by							
3 yrs (95% CI)	3.7 (1.0-6.4)	3.4 (0.1-6.6)	3.6 (1.0-6.2)	9.8 (4.5-15.0)	-	4.7 (3.1-6.4)	2.1 (0.0-4.1)
5 yrs (95% CI)	7.8 (3.7-12.0)	4.5 (0.6-8.5)	8.4 (3.9-12.9)	27.7 (13.2-42.1)		9.6 (7.0-12.3)	2.1 (0.0-4.1)
Number of treatment interruptions	81	38	70	40	7	236	133
Rate of interruption per 100 person-years (95% CI)	8.0 (6.3-9.9)	5.4 (3.8-7.4)	7.4 (5.7-9.3)	8.4 (6.0-11.4)	-	7.4 (6.5-8.4)	15.4 (12.9-18.2)
Number of restarts after interruption	51	27	44	27	6	155	100
Rate of restarting per 100 person-years (95% CI)	66.2 (49.3-87.1)	46.6 (30.7-67.7)	115.8 (84.1-155.4)	49.1 (32.4-71.4)	-	67.4 (57.2-78.9)	65.4 (53.2-79.5)

Supplementary Table 2: Outcomes of TCVF, by risk group and age at the start of ART

Risk group	Perinatal					Heterosexual			
	< 2	2 - 4	5 - 9	10 – 14	All	15 - 19	20 - 24	25 - 29	All
Age in years at start of ART	< 2	2 - 4	5 - 9	10 – 14	All	15 - 19	20 - 24	25 - 29	All
Number who developed TCVF	18	11	21	20	70	7	61	114	182
Number who have follow-up after TCVF	18	10	19	17	64	6	58	106	170
One year after TCVF									
<i>median (IQR)</i>	1130	509	477	162	540	363	286	334	305
CD4 count <i>cells/mm³</i>	(754-1285)	(385-920)	(239-630)	(73-288)	(239-920)	(242-418)	(190-475)	(183-478)	(190-475)
<i>n</i>	<i>n=13</i>	<i>n=10</i>	<i>n=15</i>	<i>n=9</i>	<i>n=47</i>	<i>n=5</i>	<i>n=47</i>	<i>n=67</i>	<i>n=119</i>
CD4 percentage	28	26	18	6	22	-	-	-	-
<i>(IQR)</i>	(22-35)	(15-30)	(13-25)	(5-12)	(12-28)				
<i>n</i>	<i>n=12</i>	<i>n=10</i>	<i>n=15</i>	<i>n=9</i>	<i>n=46</i>				
Viral load <i>log₁₀ c/ml</i>	3.1	3.1	3.6	4.4	3.6	3.2	2.3	2.7	2.6
<i>(IQR)</i>	(2.0-3.6)	(1.7-4.5)	(1.7-3.9)	(4.4-5.2)	(1.7-4.5)	(3.1-3.4)	(1.7-3.9)	(1.7-4.3)	(1.7-4.2)
<i>n</i>	<i>n=12</i>	<i>n=10</i>	<i>n=15</i>	<i>n=9</i>	<i>n=46</i>	<i>n=5</i>	<i>n=46</i>	<i>n=70</i>	<i>n=121</i>
Viral load on ART <i>log₁₀ c/ml</i>	3.6	1.7	3.5	4.4	3.5	3.1	2.7	2.7	2.7
<i>(IQR)</i>	(3.5-3.7)	(1.7-3.9)	(1.7-3.7)	(1.7-4.4)	(1.7-3.9)	(2.4-3.3)	(1.7-4.1)	(1.7-4.2)	(1.7-4.1)
<i>n</i>	<i>n=5</i>	<i>n=6</i>	<i>n=9</i>	<i>n=5</i>	<i>n=25</i>	<i>n=4</i>	<i>n=27</i>	<i>n=46</i>	<i>n=77</i>
AIDS diagnosis after TCVF	1	0	1	0	2	3	3	10	16
Death after TCVF	0	0	0	1	1	0	1	2	3
Treatment change by one year after TCVF	3	1	2	0	6	3	14	26	43