

SDC 3: Cox Proportional Hazards Analysis of Factors Associated with Death and Loss to Follow-up among Children (<15) Starting ART during 2004–2008 in Côte d’Ivoire

	Orig. No.	Rate/100	Death						LTFU						
			HR	Crude (95% CI)	p	AHR	Adjusted (95% CI)	p	Rate/100	HR	Crude (95% CI)	p	AHR	Adjusted (95% CI)	p
Age at enrolment															
≥5 years	1,085	5.69	1	—	—	1.00	—	—	8.60	1.00	—	—	1.00	—	—
2-<5 years	580	2.90	0.53	(0.37-0.76)	<0.001	0.75	(0.51-1.13)	0.168	8.49	1.01	(0.80-1.27)	0.955	1.12	(0.87-1.44)	0.394
<2 years	445	7.23	1.23	(0.91-1.66)	0.179	1.67	(1.15-2.43)	0.007	12.52	1.42	(1.13-1.79)	0.003	1.26	(0.96-1.65)	0.090
Sex															
Male	1,146	4.83	1	—	—	1.00	—	—	9.39	1.00	—	—	1.00	—	—
Females	964	5.57	1.14	(0.89-1.48)	0.300	1.14	(0.88-1.48)	0.324	9.22	0.98	(0.81-1.18)	0.804	0.95	(0.78-1.16)	0.618
Orphan Status – Parents alive/dead															
Both alive	963	5.93	1	—	—	1.00	—	—	10.81	1.00	—	—	1.00	—	—
One/both dead	728	4.40	0.80	(0.58-1.11)	0.178	0.76	(0.51-1.13)	0.178	7.79	0.75	(0.61-0.93)	0.007	0.86	(0.67-1.10)	0.238
Bacillus Calmette Guerin (BCG) Vaccine															
Yes	322	2.88	1	—	—	1.00	—	—	8.20	1.00	—	—	1.00	—	—
No	1,788	5.58	2.05	(1.29-3.24)	0.002	1.58	(0.89-2.83)	0.121	9.51	1.19	(0.90-1.57)	0.225	1.08	(0.72-1.63)	0.697
All recommended vaccinations															
Yes	187	1.28	1	—	—	1.00	—	—	5.96	1.00	—	—	1.00	—	—
No	1,923	5.61	4.13	(1.84-9.30)	0.001	2.88	(1.07-7.74)	0.035	9.69	1.57	(1.07-2.30)	0.021	1.77	(1.02-3.10)	0.044
Year of ART Start															
2004	187	1.37	1	—	—	1.00	—	—	2.62	1.00	—	—	1.00	—	—
2005	365	4.56	2.85	(1.49-5.46)	0.002	2.44	(1.25-4.77)	0.009	4.22	2.19	(1.22-3.91)	0.009	1.83	(1.01-3.32)	0.048
2006	551	5.46	3.01	(1.58-5.75)	0.001	2.32	(1.17-4.62)	0.016	9.61	5.38	(3.05-9.52)	<0.001	3.39	(1.87-6.17)	<0.001
2007	503	5.34	2.30	(1.17-4.51)	0.015	2.18	(1.07-4.44)	0.032	12.93	7.05	(3.94-12.61)	<0.001	4.82	(2.62-8.87)	<0.001
2008	504	12.28	3.23	(1.66-6.26)	0.001	3.70	(1.83-7.47)	<0.001	26.74	11.61	(6.47-20.83)	<0.001	7.96	(4.31-14.72)	<0.001
Type of HIV															
HIV-1	2,044	5.14	1	—	—	1.00	—	—	9.30	1.00	—	—	1.00	—	—
HIV-2 or 1&2	20	7.83	1.55	(0.51-4.74)	0.442	3.06	(0.96-9.73)	0.059	10.62	1.13	(0.42-3.04)	0.805	1.83	(0.68-4.98)	0.233
WHO Stage															
I/II	329	1.67	1	—	—	1.00	—	—	8.77	1.00	—	—	1.00	—	—
III	939	4.50	2.78	(1.54-5.03)	0.001	2.09	(1.14-3.84)	0.018	7.98	0.93	(0.69-1.24)	0.605	0.94	(0.69-1.27)	0.670
IV	510	9.39	5.38	(2.97-9.75)	<0.001	2.71	(1.42-5.16)	0.003	12.73	1.40	(1.04-1.90)	0.028	1.18	(0.83-1.67)	0.357
Prior TB															
No	1,925	7.84	1	—	—	1.00	—	—	10.16	1.00	—	—	1.00	—	—
Yes	185	4.95	1.43	(0.96-2.14)	0.078	0.96	(0.52-1.78)	0.903	9.24	1.04	(0.74-1.47)	0.819	1.10	(0.68-1.76)	0.703
Active TB															
No	1,960	9.09	1	—	—	1.00	—	—	9.09	1.00	—	—	1.00	—	—
Yes	150	4.91	1.71	(1.14-2.57)	0.010	1.23	(0.67-2.29)	0.503	9.33	0.93	(0.63-1.39)	0.727	0.79	(0.46-1.34)	0.380
Weight-for-Age Z (WAZ) score															
WAZ >-2	929	2.05	1	—	—	1.00	—	—	6.91	1.00	—	—	1.00	—	—
WAZ < -2	1,181	7.55	3.44	(2.42-4.89)	<0.001	2.36	(1.61-3.44)	<0.001	11.15	1.54	(1.24-1.92)	<0.001	1.36	(1.07-1.72)	0.013
CD4 cell count %															
>20%	160	3.39	1	—	—	1.00	—	—	10.20	1.00	—	—	1.00	—	—
10-20%	878	2.72	0.84	(0.45-1.56)	0.580	0.98	(0.52-1.84)	0.958	8.92	0.90	(0.63-1.28)	0.552	0.99	(0.68-1.44)	0.940
<10%	797	8.65	2.56	(1.43-4.58)	0.002	2.51	(1.38-4.57)	0.003	9.62	0.94	(0.66-1.34)	0.736	1.04	(0.71-1.51)	0.855
Hemoglobin															
≥8g/dL	1,438	4.49	1	—	—	1.00	—	—	8.37	1.00	—	—	1.00	—	—
<8g/dL	321	8.70	1.78	(1.30-2.43)	<0.001	1.42	(1.02-1.97)	0.035	14.18	1.60	(1.26-2.05)	<0.001	1.30	(1.00-1.68)	0.048
Prescribed Cotrimoxazole															
Yes	1,239	5.41	1	—	—	1.00	—	—	10.98	1.00	—	—	1.00	—	—
No	871	4.89	1.03	(0.80-1.34)	0.802	1.13	(0.84-1.52)	0.401	7.35	0.72	(0.59-0.87)	0.001	0.91	(0.72-1.13)	0.391

Appropriate regimen															
Appropriate	1,977	5.35	1	—	—	1.00	—	—	9.27	1.00	—	—	1.00	—	—
Sub-optimal	126	2.77	0.53	(0.27-1.03)	0.063	0.77	(0.38-1.56)	0.471	9.84	1.08	(0.75-1.55)	0.682	1.01	(0.69-1.49)	0.954
Site Size (# ART patients aged <15 ever enrolled by December 2008)															
>100	1,210	4.63	1	—	—	1.00	—	—	5.53	1.00	—	—	1.00	—	—
≤100	900	6.19	1.09	(0.84-1.42)	0.500	1.01	(0.51-1.99)	0.976	16.48	2.72	(2.23-3.31)	<0.001	1.86	(1.20-2.90)	0.006
Nurse Satisfaction with work environment															
Yes	1,146	4.51	1	—	—	1.00	—	—	9.26	1.00	—	—	1.00	—	—
No	964	5.78	1.35	(1.04-1.75)	0.025	1.32	(0.69-2.51)	0.397	9.37	1.07	(0.87- 1.30)	0.523	1.66	(1.10-2.50)	0.015
Any stock out of ARVs (1st or 2nd line) in last year															
No	1,155	4.11	1	—	—	1.00	—	—	5.72	1.00	—	—	1.00	—	—
Yes	955	7.03	1.41	(1.09-1.82)	0.009	1.03	(0.54-1.97)	0.928	15.61	2.50	(2.05-3.05)	<0.001	1.27	(0.85-1.90)	0.243
Nutritional support at site?															
No	1,397	5.85	1	—	—	1.00	—	—	10.84	1.00	—	—	1.00	—	—
Yes	713	3.97	0.70	(0.53-0.93)	0.014	0.58	(0.31-1.09)	0.089	6.62	0.63	(0.50-0.78)	<0.001	0.66	(0.44-0.97)	0.037

Abbreviations: HR, hazards ratio; CI, confidence interval; AHR, adjusted hazards ratio; LTFU, loss to follow-up; WHO, World Health Organization; TB, tuberculosis; ARVs, antiretrovirals; ART, antiretroviral therapy.