

Appendix

Table A1: Comparison of baseline characteristics of study participants included and excluded in the analysis stratified by birth period

	Included		Excluded			p^{Y1}
	Pre-OB+	OB+	Pre-OB+	OB+	Unknown	
			(n = 1,318)	(n = 8,008)	(n = 29)	
HIV result						
Infected/unknown		NA	NA	721 (54.7)	3,583 (44.7)	0
Uninfected	784 (100.0)	6,061 (100.0)		597 (45.3)	4,425 (55.3)	29 (100.0)
Age at enrolment (months), median (IQR)	4.0 (2.0-9.0)	2.0 (1.0-2.0)	8.0 (4.0-13.0)	2.0 (1.0-3.0)		0 <0.0001
Gender						
Male	393 (50.1)	2,997 (49.5)		618 (46.9)	3,514 (43.9)	13 (44.8)
Female	391 (49.9)	3,064 (50.6)		620 (47.0)	3,697 (46.2)	12 (41.4)
Unknown		NA	NA	80 (6.1)	797 (10.0)	4 (13.8) 0.452
PEP at birth						
No	136 (17.4)	398 (6.6)		315 (23.9)	987 (12.3)	5 (17.2)
Yes	596 (76.0)	5,403 (89.1)		831 (63.1)	6,459 (80.7)	17 (58.6)
Unknown	52 (6.6)	260 (4.3)		172 (13.1)	562 (7.0)	7 (24.1) <0.0001
Birth weight (kg)						
<2.5	97 (12.4)	726 (12.0)		74 (5.6)	480 (6.0)	3 (10.3)
≥2.5	687 (87.6)	5,335 (88.0)		536 (40.7)	3,274 (40.9)	13 (44.8)
Unknown		NA	NA	708 (53.7)	4,254 (53.1)	13 (44.8) 0.275
Median (IQR)	3.0 (2.8-3.4)	3.0 (2.7-3.4)		3.0 (2.8-3.5)	3.0 (2.7-3.4)	3.0 (2.8-4.0) 0.138
In-utero antiretroviral exposure,						
No antiretrovirals	109 (13.9)	355 (5.9)		280 (21.2)	915 (11.4)	3 (10.3)
Mono- or dual-therapy at any stage	125 (15.9)		NA	273 (20.7)	NA	2 (6.9)
ART <4 weeks at any stage	172 (21.9)	665 (11.0)		266 (20.2)	906 (11.3)	2 (6.9)
ART ≥4 weeks at any stage	331 (42.2)	4,489 (74.1)		372 (28.2)	5,187 (64.8)	15 (51.7)
Unknown	47 (6.0)	552 (9.1)		127 (9.6)	1,000 (12.5)	7 (24.1) <0.0001
Mother's postpartum status						
No ART	84 (10.7)	93 (1.5)		298 (22.6)	346 (4.3)	2 (6.9)
ART	590 (75.3)	5,686 (93.8)		818 (62.1)	6,751 (84.3)	11 (37.9)
ART with interruptions [#]	102 (13.0)	262 (4.3)		109 (8.3)	245 (3.1)	0
Died	3 (0.4)	6 (0.1)		6 (0.5)	56 (0.7)	0 <0.0001

¹ For simplicity, we only show the p-values comparing included and excluded infants combining both periods, but exactly the same variables were significantly different also if we restricted the comparison to either birth period

Unknown	5 (0.6)	14 (0.2)	87 (6.6)	610 (7.6)	16 (55.2)
Outcome at end of follow-up					
Lost to follow-up	379 (48.3)	1,906 (31.5)	888 (67.4)	3,426 (42.8)	0
Discharged	362 (46.2)	975 (16.1)	236 (17.9)	711 (8.9)	0
Dead	6 (0.8)	21 (0.4)	11 (0.8)	57 (0.7)	0
Transferred out	13 (1.7)	114 (1.9)	19 (1.4)	101 (1.3)	0
Under follow-up	24 (3.1)	3,045 (50.2)	164 (12.4)	3,713 (46.4)	29 (100.0)
					<0.0001
Facility type					
Central hospital	100 (12.8)	537 (8.8)	137 (10.4)	802 (10.0)	3 (10.3)
Health centre	60 (7.7)	943 (15.6)	161 (12.2)	956 (11.9)	5 (17.2)
Faith-based hospital	105 (13.4)	520 (8.6)	66 (5.0)	468 (5.8)	4 (13.8)
District hospital	519 (66.2)	4,061 (67.0)	954 (72.4)	5,782 (72.2)	17 (58.6)
					<0.0001

ART: Antiretroviral therapy; PEP: Post exposure prophylaxis (children received zidovudine (AZT) in pre-Option B+ and nevirapine (NVP) during Option B+); IQR: Interquartile range.

Data represent number (%) of women unless otherwise indicated

*P values from Chi-square test compares baseline characteristics of included and excluded infants. Missing values were excluded when calculating the p-values

#Represents women who missed some ART visits to the health facility

Table A2 a: Linear regression analysis of WAZ at birth: Pre-Option B+

	Univariable (n=784)			Multivariable (n=737)		
	β	95% CI	P-value [#]	β	95% CI	P-value [#]
Gender						
Male	0		0.987	0		0.740
Female	-0.002	-0.201; 0.198		-0.035	-0.242; 0.172	
In-utero antiretroviral exposure						
No antiretrovirals	0		0.433	0		0.283
Mono- or dual-therapy at any stage	0.278	-0.088; 0.644		0.342	-0.033; 0.716	
ART <4weeks at any stage	0.137	-0.205; 0.479		0.157	-0.185; 0.500	
ART ≥4weeks at any stage	0.068	-0.240; 0.377		0.089	-0.222; 0.400	
Facility type						
Central hospital	0		0.225	0		0.112
Health centre	0.454	-0.001; 0.909		0.526	0.052; 1.001	
Faith based hospital	0.044	-0.345; 0.434		0.001	-0.400; 0.401	
District hospital	0.134	-0.170; 0.438		0.165	-0.148; 0.478	

ART: Antiretroviral therapy; CI: Confidence interval

[#] P values from likelihood ratio test

Table A2 b: Linear regression analysis of WAZ at birth: Option B+

	Univariable (n=6,061)			Multivariable (n=5,509)		
	β	95% CI	P-value [#]	β	95% CI	P-value [#]
Gender						
Male	0		0.917	0		0.857
Female	0.004	-0.067; 0.074		-0.007	-0.079; 0.066	
In-utero antiretroviral exposure						
No antiretrovirals	0		0.157	0		0.147
ART <4weeks at any stage	-0.156	-0.333; 0.022		-0.161	-0.338; 0.016	
ART ≥4weeks at any stage	-0.142	-0.291; 0.006		-0.144	-0.293; 0.005	
Facility type						
Central hospital	0		0.001	0		0.001
Health centre	0.251	0.104; 0.399		0.264	0.116; 0.413	
Faith based hospital	0.016	-0.152; 0.185		0.030	-0.141; 0.201	
District hospital	0.158	0.032; 0.283		0.135	0.009; 0.261	

ART: Antiretroviral therapy; CI: Confidence interval

[#] P values from likelihood ratio test

Table A3 a: Mixed-effects model of weight-for-age z-scores (WAZ) over time (0-24 months): Pre-Option B+

	Univariable*			Multivariable**		
	β	95% CI	P-value [#]	β	95% CI	P-value [#]
Gender						
Male	0		0.269	0		0.073
Female	0.096	-0.074; 0.266		0.157	-0.014; 0.329	
Birth weight						
<2.5kg	0		<0.0001	0		<0.0001
$\geq 2.5\text{kg}$	0.759	0.504; 1.015		0.759	0.495; 1.022	
In-utero antiretroviral exposure						
No antiretrovirals	0		0.161	0		0.118
Mono- or dual-therapy at any stage	0.140	-0.173; 0.453		0.118	-0.195; 0.432	
ART <4weeks at any stage	0.081	-0.211; 0.373		0.040	-0.246; 0.327	
ART $\geq 4\text{ weeks}$ at any stage	-0.124	-0.386; 0.139		-0.153	-0.411; 0.106	
Facility type						
Central hospital	0		0.404	0		0.218
Health centre	0.193	-0.199; 0.585		0.138	-0.257; 0.532	
Faith based hospital	-0.147	-0.480; 0.186		-0.259	-0.591; 0.072	
District hospital	-0.009	-0.269; 0.251		-0.059	-0.317; 0.199	

ART: Antiretroviral therapy; 95% CI: 95% confidence interval

* P values from a likelihood ratio test

† The univariable model assessed the association between WAZ and each variable individually with inclusion of the polynomial transformation of age.

** The multivariable model assessed the association between WAZ and birth period adjusting for all independent variables and the polynomial transformation of age.

Table A3 b: Mixed-effects model of weight-for-age z-scores (WAZ) over time (0-24 months): Option

B+

	Univariable*			Multivariable**		
	β	95% CI	P-value [#]	β	95% CI	P-value [#]
Gender						
Male	0		0.0003	0		<0.0001
Female	0.109	0.052; 0.166		0.123	0.066; 0.181	
Birth weight						
<2.5kg	0		<0.0001	0		<0.0001
≥2.5kg	1.132	1.048; 1.215		1.141	1.053; 1.230	
In-utero antiretroviral exposure						
No antiretrovirals	0		0.196	0		0.185
ART <4weeks at any stage	0.040	-0.108; 0.187		0.057	-0.084; 0.197	
ART ≥4weeks at any stage	-0.043	-0.167; 0.081		-0.026	-0.144; 0.092	
Facility type						
Central hospital	0		<0.0001	0		<0.0001
Health centre	-0.096	-0.216; 0.023		-0.098	-0.215; 0.018	
Faith based hospital	-0.325	-0.460; -0.189		-0.314	-0.449; -0.180	
District hospital	-0.130	-0.231; -0.030		-0.152	-0.251; -0.054	

ART: Antiretroviral therapy; CI: Confidence interval

[#] P values from a likelihood ratio test

*The univariable model assessed the association between WAZ and each variable individually with inclusion of the polynomial transformation of age.

** The multivariable model assessed the association between WAZ and birth period adjusting for all independent variables and the polynomial transformation of age.