

ONLINE-ONLY MATERIAL

Supplementary Table 1: Comparison of selected characteristic of infants included in and excluded from the study.

Characteristic	ENTIRE SAMPLE			ONLY AGA INFANTS			ONLY SGA INFANTS		
	Non-included N=489	Included N=321	P-value	Non-included N=360	Included N=210	P-value	Non-included N=117	Included N=111	P-value
BASELINE									
Maternal HIV infection	145 (29.7%)	70 (21.8%)	0.013 ^a	102 (28.3%)	40 (19.0%)	<0.001 ^a	42 (35.9%)	30 (27.0%)	0.150 ^a
Timing of ART initiation [n (%) of HIV-infected mothers]			0.286 ^a			0.048 ^b			0.886 ^b
- ART initiated before pregnancy	59 (40.7%)	31 (44.3%)		42 (11.7%)	21 (10.0%)		16 (13.7%)	10 (9.0%)	
- ART initiated during pregnancy	57 (39.3%)	19 (27.1%)		44 (12.2%)	8 (3.8%)		13 (11.1%)	11 (9.9%)	
- ART initiated after delivery	16 (11.0%)	10 (14.3%)		6 (1.7%)	4 (1.9%)		10 (8.5%)	6 (5.4%)	
- ART initiated not recorded	13 (9.0%)	10 (14.3%)		10 (2.8%)	7 (3.3%)		3 (2.6%)	3 (2.7%)	
Maternal parity	2 (1; 3)	2 (1; 3)	0.882 ^c	2 (2; 3)	2 (2; 3)	0.321 ^c	2 (1; 3)	2 (1; 3)	0.138 ^c
Maternal gravidity	2 (2; 3)	2 (2; 3)	0.215 ^c	2 (1; 3)	2 (1; 3)	0.780 ^c	2 (2; 3)	2 (1; 3)	0.300 ^c
Maternal age	28.7 ± 6.4	29.6 ± 7	0.059 ^c	28.5 ± 6.5	29.7 ± 6.7	0.039 ^c	28.8 ± 5.6	29.4 ± 6.6	0.678 ^c
Mother is a foreign national	139 (28.4%)	79 (24.6%)	0.260 ^a	100 (27.8%)	42 (20.0%)	0.049 ^a	34 (29.1%)	37 (33.3%)	0.580 ^a
Maternal conditions									
- ... of placenta, cord, membranes	16 (3.3%)	15 (4.7%)	0.407 ^a	12 (3.3%)	11 (5.2%)	0.371 ^a	4 (3.4%)	4 (3.6%)	>0.999 ^b
- ... of pregnancy **	118 (24.1%)	80 (24.9%)	0.863 ^a	88 (24.4%)	52 (24.8%)	>0.999 ^a	27 (23.1%)	28 (25.2%)	0.823 ^a
- ... of labor and delivery	104 (21.3%)	69 (21.5%)	>0.999 ^a	82 (22.8%)	54 (25.7%)	0.489 ^a	19 (16.2%)	15 (13.5%)	0.695 ^a
- Medical and surgical conditions	219 (44.8%)	121 (37.7%)	0.054 ^a	156 (43.3%)	76 (36.2%)	0.113 ^a	59 (50.4%)	45 (40.5%)	0.172 ^a
Sex (male)	260 (53.2%)	159 (49.5%)	0.347 ^a	186 (51.7%)	105 (50.0%)	0.766 ^a	66 (56.4%)	54 (48.6%)	0.298 ^a
GA (weeks)	33.3 ± 2.4	32.8 ± 2.4	0.001 ^c	32.9 ± 2.4	32.5 ± 2.4	0.022 ^c	34.4 ± 2.0	33.3 ± 2.3	<0.001 ^c
Birth weight (kg)	1.81 ± 0.51	1.64 ± 0.48	<0.001 ^c	1.84 ± 0.47	1.77 ± 0.46	0.154 ^c	1.62 ± 0.37	1.39 ± 0.43	<0.001 ^c
Birth weight z-score (IG-NBS)	-0.62 ± 0.94 ^c	-0.86 ± 1.04	0.013 ^a	-0.31 ± 0.58	-0.26 ± 0.61	0.333 ^c	-1.85 ± 0.38	-2.00 ± 0.69	0.554 ^c
Infant feeding in KMC unit									
- Mother's own breast milk	473 (96.7%)	314 (97.8%)	0.495 ^a	352 (97.8%)	205 (97.6%)	>0.999 ^a	110 (94.0%)	109 (98.2%)	0.172 ^b
- Donor breast milk	3 (0.6%)	6 (1.9%)	0.167 ^b	0 (0.0%)	3 (1.4%)	0.050 ^c	3 (2.6%)	3 (2.7%)	>0.999 ^b

Characteristic	ENTIRE SAMPLE			ONLY AGA INFANTS			ONLY SGA INFANTS		
	Non-included N=489	Included N=321	P-value	Non-included N=360	Included N=210	P-value	Non-included N=117	Included N=111	P-value
- Breast milk substitute	12 (2.5%)	9 (2.8%)	0.936 ^a	9 (2.5%)	8 (3.8%)	0.528 ^a	3 (2.6%)	1 (0.9%)	0.622 ^b
Infant morbidities *									
- Congenital heart defects	121 (24.7%)	100 (31.2%)	0.045 ^a	89 (24.7%)	54 (25.7%)	0.870 ^a	32 (27.4%)	46 (41.4%)	0.036 ^a
- Twins	89 (18.2%)	53 (16.5%)	0.600 ^a	65 (18.1%)	33 (15.7%)	0.549 ^a	22 (18.8%)	20 (18.0%)	>0.999 ^a
- Neonatal jaundice	254 (51.9%)	191 (59.5%)	0.041 ^a	191 (53.1%)	129 (61.4%)	0.064 ^a	59 (50.4%)	62 (55.9%)	0.491 ^a
- Respiratory distress syndrome	279 (57.1%)	180 (56.1%)	0.832 ^a	216 (60.0%)	116 (55.2%)	0.306 ^a	55 (47.0%)	64 (57.7%)	0.140 ^a
- Chronic lung disease	15 (3.1%)	19 (5.9%)	0.072 ^a	10 (2.8%)	9 (4.3%)	0.468 ^a	5 (4.3%)	10 (9.0%)	0.240 ^a
- Infant sepsis	98 (20.0%)	61 (19.0%)	0.785 ^a	71 (19.7%)	35 (16.7%)	0.428 ^a	23 (19.7%)	26 (23.4%)	0.596 ^a
- Other infant infections	40 (8.2%)	35 (10.9%)	0.236 ^a	29 (8.1%)	23 (11.0%)	0.304 ^a	10 (8.5%)	12 (10.8%)	0.723 ^a
- Anemia requiring transfusion	28 (5.7%)	29 (9.0%)	0.097 ^a	22 (6.1%)	12 (5.7%)	0.992 ^a	6 (5.1%)	17 (15.3%)	0.020
EARLY GROWTH									
LAZ (IG-PPGS)	-1.16 ± 1.49	-1.22 ± 1.72	0.926	-0.92 ± 1.38	-0.52 ± 1.30	0.003 ^c	-2.15 ± 1.28	-2.55 ± 1.63	0.182 ^c
WAZ (IG-PPGS)	-0.64 ± 1.30	-0.56 ± 1.50	0.197	-0.42 ± 1.22	0.07 ± 1.09	< 0.001 ^c	-1.58 ± 1.03	-1.74 ± 1.46	0.391 ^d
WAZ change on IG-PPGS	-0.09 ± 1.19	-0.23 ± 1.23	0.124	-0.15 ± 1.20	-0.37 ± 1.18	0.038 ^c	0.23 ± 1.04	0.02 ± 1.29	0.213 ^d
HCZ on IG-PPGS	0.17 ± 1.40	0.34 ± 1.58	0.073	0.34 ± 1.39	0.94 ± 1.22	<0.001 ^c	-0.59 ± 1.11	-0.82 ± 1.55	0.253 ^d
LAST RECORDED VISIT									
Actual age (days)	144.1 ± 102.6	381.8 ± 19.1	<0.001	140.6 ± 100.8	382.5 ± 19.0	<0.001 ^c	158.3 ± 108.5	380.5 ± 19.3	<0.001 ^c
Corrected age (days)	96.8 ± 103.2	331.5 ± 22.9	<0.001	90.7 ± 101.2	330.5 ± 23.3	<0.001 ^c	118.9 ± 108.6	333.4 ± 22.1	<0.001 ^c
WLZ (WHO)	0.19 ± 1.24	-0.16 ± 1.31	<0.001	0.25 ± 1.25	0.11 ± 1.24	0.226 ^d	-0.06 ± 1.17	-0.66 ± 1.31	<0.001 ^d
LAZ (WHO, using CA)	-1.02 ± 1.37	-0.91 ± 1.16	0.258	-0.79 ± 1.29	0.60 ± 1.06	0.072 ^d	-1.77 ± 1.21	-1.50 ± 1.11	0.097 ^d
WAZ (WHO, using CA)	-0.56 ± 1.32	-0.59 ± 1.36	0.835	-0.34 ± 1.26	0.22 ± 1.24	0.603 ^c	-1.33 ± 1.08	-1.26 ± 1.32	0.687 ^d
BMIZ (WHO, using CA)	0.01 ± 1.23	-0.09 ± 1.30	0.319	0.14 ± 1.22	0.16 ± 1.23	0.873 ^d	-0.49 ± 1.12	-0.55 ± 1.31	0.710 ^c
HCZ (WHO, using CA)	0.23 ± 1.13	0.21 ± 1.28	0.467	0.37 ± 1.14	0.43 ± 1.15	0.792 ^c	-0.23 ± 0.97	-0.21 ± 1.41	0.595 ^c
^a Chi-squared test									
^b Fisher's exact test (one or more subgroup n ≤ 5 – interpret with caution)									
^c Mann-Whitney U test									
^d Independent samples t-test									
AGA = appropriate for gestational age; SGA = small for gestational age; HIV = human immunodeficiency virus; ART = antiretroviral therapy; IG-NBS = INTERGROWTH-21 ST Newborn Size Standards; IG-PPGS = INTERGROWTH-21 ST Postnatal Growth Standards for Preterm Infants; LAZ = length-for-age z-score; WAZ = weight-for-age z-score; HCZ = head circumference for age z-score; WLZ = weight-for-length z-score; BMIZ = body mass index-for-age z-score; WHO = World									

Characteristic	ENTIRE SAMPLE			ONLY AGA INFANTS			ONLY SGA INFANTS		
	Non-included N=489	Included N=321	P-value	Non-included N=360	Included N=210	P-value	Non-included N=117	Included N=111	P-value
<i>Health Organization Growth Standards; CA = corrected age.</i>									

Supplementary Table 2: Comparison of selected characteristic of infants included in the study, infants excluded due to early loss to follow-up, and infants excluded due to being discharged from the clinic before 1 year of age

Characteristic	WHOLE SAMPLE					AGA INFANTS ONLY					SGA INFANTS ONLY				
	0=Lost (N=390)	1=D/C <1yr (N=99)	2=Included (N=321)	P-value	Post-hoc	0= Lost (N=292)	1=D/C <1yr (N=68)	2=Included (N=210)	P-value	Post-hoc	0= Lost (N=87)	1=D/C <1yr (N=30)	2=Included (N=111)	P-value	Post-hoc
Sex (m)	208 (53.3%)	52 (52.5%)	158 (49.4%)	0.567 ^a		151 (51.7%)	35 (51.5%)	104 (49.8%)	0.908 ^a		50 (57.5%)	16 (53.3%)	54 (48.6%)	0.465 ^a	
GA (weeks)	33.1 ± 2.5	33.9 ± 1.8	32.8 ± 2.4	<0.001 ^b	2<0, 2<1, 0<1	32.7 ± 2.5	33.7 ± 1.7	32.5 ± 2.4	0.004 ^b	1>0; 1>2	34.4 ± 2.0	34.2 ± 2.0	33.3 ± 2.3	<0.001 ^b	2<0; 2<1
BW (kg)	1.81 ± 0.53	1.85 ± 0.42	1.64 ± 0.49	<0.001 ^b	2<0, 2<1	1.81 ± 0.49	1.94 ± 0.34	1.77 ± 0.46	0.036 ^b	1>0; 1>2	1.63 ± 0.37	1.58 ± 0.40	1.39 ± 0.43	<0.001 ^b	2<0; 2<1
BWZ (IG-NBS)	-0.56 ± 0.95	-0.87 ± 0.87	-0.87 ± 1.04	<0.001 ^b	0<1; 0<2	-0.28 ± 0.59	-0.47 ± 0.54	-0.27 ± 0.60	0.031 ^b	1<0; 1<2	-1.83 ± 0.39	-1.88 ± 0.36	-2.00 ± 0.69	0.703 ^b	
Maternal HIV	117 (30.0%)	28 (28.3%)	69 (21.6%)	0.036 ^a		84 (28.8%)	18 (26.5%)	39 (18.7%)	0.033 ^a		32 (36.8%)	10 (33.3%)	30 (27.0%)	0.333 ^a	
ART initiated				0.425 ^c					0.146 ^c					0.773 ^c	
- Pre-pregnancy	47 (40.2%)	12 (42.9%)	31 (44.9%)			34 (11.6%)	8 (11.8%)	21 (10.0%)			12 (13.8%)	4 (13.3%)	10 (9.0%)		
- During pregnancy	44 (37.6%)	13 (46.4%)	18 (26.1%)			36 (12.3%)	8 (11.8%)	7 (3.3%)			8 (9.2%)	5 (16.7%)	11 (9.9%)		
- After delivery	14 (12.0%)	2 (7.1%)	10 (14.5%)			5 (1.7%)	1 (1.5%)	4 (1.9%)			9 (10.3%)	1 (3.3%)	6 (5.4%)		
- Not recorded	12 (10.3%)	1 (3.6%)	10 (14.5%)			9 (3.1%)	1 (1.5%)	7 (3.3%)			3 (3.4%)	0 (0.0%)	3 (2.7%)		
Infant feeding in KMC															
- Mother's breast milk	377 (96.7%)	96 (97.0%)	313 (97.8%)	0.803 ^c		285 (97.6%)	67 (98.5%)	204 (97.6%)	0.930 ^c		82 (94.3%)	28 (93.3%)	109 (98.2%)	0.235 ^c	
- Donor breast milk	2 (0.5%)	1 (1.0%)	6 (1.9%)	0.222 ^c		0 (0.0%)	0 (0.0%)	3 (1.4%)	0.137 ^c		2 (2.3%)	1 (3.3%)	3 (2.7%)	>0.999 ^c	
- Breast milk substitute	10 (2.6%)	2 (2.0%)	9 (2.8%)	>0.999 ^c		8 (2.7%)	1 (1.5%)	8 (3.8%)	0.729 ^c		2 (2.3%)	1 (3.3%)	1 (0.9%)	0.470 ^c	
Gravidity	2 (2; 3)	2 (1; 3.75)	2 (2; 3)	0.986 ^b		2 (2; 3)	2 (1; 4)	2 (2; 3)	0.588 ^b		2 (2; 3)	2 (1.25; 3)	2 (1; 3)	0.548 ^b	
Parity	2 (1; 3)	2 (1; 3)	2 (1; 3)	0.430 ^b		2 (1; 3)	2 (1; 3)	2 (1; 3)	0.931 ^b		2 (1; 3)	2 (1; 3)	2 (1; 3)	0.321 ^b	
Maternal age	28.7 ± 6.3	28.5 ± 6.6	29.6 ± 6.7	0.157 ^b		28.5 ± 6.4	28.7 ± 7.0	29.7 ± 6.7	0.112 ^b		29.2 ± 5.6	27.8 ± 5.6	29.4 ± 6.6	0.599 ^b	
Foreign national	121 (31.0%)	18 (18.2%)	79 (24.7%)	0.018 ^a		86 (29.5%)	14 (20.6%)	42 (20.1%)	0.039 ^a	0>1; 0>2	31 (35.6%)	3 (10.0%)	37 (33.3%)	0.018 ^c	
Maternal conditions															
- of placenta, cord, membranes	15 (3.8%)	1 (1.0%)	15 (4.7%)	0.274 ^c		11 (3.8%)	1 (1.5%)	11 (5.3%)	0.424 ^c		4 (4.6%)	0 (0.0%)	4 (3.6%)	0.613 ^c	
- of pregnancy **	94 (24.1%)	24 (24.2%)	79 (24.7%)	0.984 ^a		71 (24.3%)	17 (25.0%)	51 (24.4%)	0.993 ^a		20 (23.0%)	7 (23.3%)	28 (25.2%)	0.930 ^a	
- of labor and delivery	6 (22.1%)	18 (18.2%)	69 (21.6%)	0.700 ^a		69 (23.6%)	13 (19.1%)	54 (25.8%)	0.523 ^a		4 (16.1%)	5 (16.7%)	15 (13.5%)	0.844 ^a	
- medical and surgical	174 (44.6%)	45 (45.5%)	120 (37.5%)	0.120 ^a		128 (43.8%)	28 (41.2%)	75 (35.9%)	0.202 ^a		42 (48.3%)	17 (56.7%)	45 (40.5%)	0.237 ^a	
Infant morbidities *															
- Congenital heart defects	99 (25.4%)	22 (22.2%)	100 (31.2%)	0.110 ^a		74 (25.3%)	15 (22.1%)	54 (25.8%)	0.807 ^a		25 (28.7%)	7 (23.3%)	46 (41.4%)	0.070 ^a	

Characteristic	WHOLE SAMPLE					AGA INFANTS ONLY					SGA INFANTS ONLY				
	0=Lost (N=390)	1=D/C <1yr (N=99)	2=Included (N=321)	P-value	Post-hoc	0= Lost (N=292)	1=D/C <1yr (N=68)	2=Included (N=210)	P-value	Post-hoc	0= Lost (N=87)	1=D/C <1yr (N=30)	2=Included (N=111)	P-value	Post-hoc
- Twins	73 (18.7%)	16 (16.2%)	52 (16.2%)	0.647 ^a		54 (18.5%)	11 (16.2%)	32 (15.3%)	0.633 ^a		17 (19.5%)	5 (16.7%)	20 (18.0%)	0.930 ^a	
- Neonatal jaundice	200 (51.3%)	54 (54.5%)	191 (59.7%)	0.081 ^a		150 (51.4%)	41 (60.3%)	129 (61.7%)	0.055 ^a		47 (54.0%)	12 (40.0%)	62 (55.9%)	0.296 ^a	
- Respiratory distress syndrome	235 (60.3%)	44 (44.4%)	179 (55.9%)	0.017 ^a		185 (63.4%)	31 (45.6%)	115 (55.0%)	0.014 ^a	0>1	42 (48.3%)	13 (43.3%)	64 (57.7%)	0.246 ^a	
- Chronic lung disease	13 (3.3%)	2 (2.0%)	19 (5.9%)	0.149 ^c		10 (3.4%)	0 (0.0%)	9 (4.3%)	0.234 ^c		3 (3.4%)	2 (6.7%)	10 (9.0%)	0.319 ^c	
- Infant sepsis	81 (20.8%)	17 (17.2%)	61 (19.1%)	0.682 ^a		60 (20.5%)	11 (16.2%)	35 (16.7%)	0.480 ^a		17 (19.5%)	6 (20.0%)	26 (23.4%)	0.786 ^a	
- Other infant infections	31 (7.9%)	9 (9.1%)	35 (10.9%)	0.392 ^a		22 (7.5%)	7 (10.3%)	23 (11.0%)	0.389 ^a		8 (9.2%)	2 (6.7%)	12 (10.8%)	0.861 ^c	
- Anemia requiring transfusion	25 (6.4%)	3 (3.0%)	29 (9.1%)	0.100 ^c		22 (7.5%)	0 (0.0%)	12 (5.7%)	0.034 ^c		3 (3.4%)	3 (10.0%)	17 (15.3%)	0.017 ^c	
EARLY GROWTH															
LAZ (IG-PPGS)	-1.15 ± 1.49	-1.18 ± 1.64	-1.22 ± 1.72	0.975		-0.92 ± 1.39	-0.89 ± 0.76	-0.52 ± 1.30	0.011	2>0	-2.12 ± 1.29	-2.70 ± 1.16	-2.55 ± 1.63	0.299	
WAZ (IG-PPGS)	-0.65 ± 1.31	-0.42 ± 1.13	-0.56 ± 1.50	0.373		-0.43 ± 1.24	-0.18 ± 0.51	0.07 ± 1.09	<0.001	2>0	-1.58 ± 1.04	-1.57 ± 0.98	-1.74 ± 1.46	0.722	
WAZ change on IG-PPGS	-0.10 ± 1.20	0.23 ± 0.81	-0.23 ± 1.23	0.194		-0.16 ± 1.21	0.17 ± 0.79	-0.37 ± 1.18	0.084		0.22 ± 1.04	0.46 ± 1.00	0.02 ± 1.29	0.452	
HCZ on IG-PPGS	0.19 ± 1.40	-0.24 ± 1.34	0.34 ± 1.58	0.093		0.36 ± 1.39	-0.27 ± 1.18	0.94 ± 1.22	<0.001	2>0	-0.58 ± 1.12	-0.86 ± 1.01	-0.82 ± 1.55	0.514	
LAST RECORDED VISIT															
Actual age (days)	111 ± 80	273 ± 77	382 ± 19	<0.001	2>1, 2>0, 1>0	110 ± 79	274 ± 71	383 ± 19	<0.001	0<1; 0<2; 1<2	1185 ± 84	277 ± 83	381 ± 19	<0.001	0<1; 0<2; 1<2
Corrected age (days)	63 ± 78	230 ± 78	332 ± 23	<0.001	2>1, 2>0, 1>0	58 ± 77	230 ± 71	331 ± 23	<0.001	0<1; 0<2; 1<2	78 ± 83	236 ± 86	333 ± 22	<0.001	0<1; 0<2; 1<2
WLZ (WHO)	0.16 ± 1.28	0.30 ± 1.08	-0.16 ± 1.31	<0.001	2<0, 2<1	0.20 ± 1.28	0.45 ± 1.10	0.11 ± 1.24	0.159		-0.07 ± 1.23	-0.03 ± 0.99	-0.66 ± 1.31	0.002	2<0; 2<1
LAZ (WHO, CA)	-1.13 ± 1.39	-0.64 ± 1.24	-0.91 ± 1.16	0.003	1>0	-0.90 ± 1.32	-0.40 ± 1.10	-0.60 ± 1.06	0.003	1-0; 2-0	-1.93 ± 1.19	-1.34 ± 1.17	-1.50 ± 1.11	0.018	2>0
WAZ (WHO, CA)	-0.68 ± 1.36	-0.21 ± 1.10	-0.59 ± 1.36	0.011	1>0, 1>2	-0.46 ± 1.30	0.05 ± 1.06	0.22 ± 1.24	0.023	1>0	-1.49 ± 1.13	-0.91 ± 0.84	-1.26 ± 1.32	0.082	
BMIZ (WHO, CA)	-0.06 ± 1.28	0.22 ± 1.05	-0.09 ± 1.30	0.105		0.08 ± 1.24	0.36 ± 1.11	0.16 ± 1.23	0.459		-0.62 ± 1.19	-0.15 ± 0.83	-0.55 ± 1.31	0.091	
HCZ (WHO, CA)	0.20 ± 1.16	0.34 ± 1.05	0.21 ± 1.28	0.512		0.34 ± 1.16	0.48 ± 1.08	0.43 ± 1.15	0.693		-0.31 ± 1.01	-0.03 ± 0.86	-0.21 ± 1.41	0.516	
^a Chi-Squared test															
^b Kruskal-wallis test															
^c Fisher's exact test (one or more subgroup n≤5 – interpret with caution)															
AGA = appropriate for gestational age; SGA = small for gestational age; HIV = human immunodeficiency virus; ART = antiretroviral therapy; IG-NBS = INTERGROWTH-21 ST Newborn Size Standards; IG-PPGS = INTERGROWTH-21 ST Postnatal Growth Standards for Preterm Infants; LAZ = length-for-age z-score; WAZ = weight-for-age z-score; HCZ = head circumference for age z-score; WLZ = weight-for-length z-score; BMIZ = body mass index-for-age z-score; WHO = World Health Organization Growth Standards; CA = corrected age.															