

Supplementary Table 1 Independent predictors of viral load suppression <80, <400 and <1000 copies/ml at 36, 48 and 144 weeks after ART initiation

Factor	36 weeks (n=314, Arms A/B/C)						48 weeks (n=213, Arms A/B)						144 weeks (n=221, Arms A/B)						
	<80 copies/ml		<400 copies/ml		<1000 copies/ml		<80 copies/ml		<400 copies/ml		<1000 copies/ml		<80 copies/ml		<400 copies/ml		<1000 copies/ml		
	aOR [95% CI]	P	aOR [95% CI]	P	aOR [95% CI]	p	aOR [95% CI]	P	aOR [95% CI]	p	aOR [95% CI]	P	aOR [95% CI]	P	aOR [95% CI]	p	aOR [95% CI]	P	
VL at ART initiation																			
Per log ₁₀ higher if taking efavirenz	1.01 [0.58-1.76]	0.96	0.83 [0.38-1.82]	0.64	0.88 [0.39-1.98]	0.75	0.76 [0.39-1.49]	0.42	0.96 [0.38-2.41]	0.93	0.74 [0.24-2.27]	0.60	0.59 [0.35-1.00]	0.05	0.35 [0.17-0.70]	0.003	0.34 [0.16-0.72]	0.005	
Per log ₁₀ higher if taking nevirapine	0.29 [0.15-0.56]	<0.001	0.33 [0.14-0.79]	0.01	0.24 [0.08-0.68]	0.007	0.33 [0.13-0.86]	0.02	0.21 [0.06-0.76]	0.02	0.21 [0.06-0.77]	0.02							
Heterogeneity		0.003		0.11		0.04		0.15		0.05		0.13							
Efavirenz, vs. nevirapine if VL 200,000 copies/ml at ART initiation	2.55 [1.29-5.03]	0.007	2.29 [0.86-6.07]	0.097	1.81 [0.59-5.54]	0.30	0.62 [0.27-1.43]	0.27	0.92 [0.27-3.14]	0.90	1.28 [0.35-4.61]	0.71							
Efavirenz, vs. nevirapine if aged 10 years at ART initiation													1.14 [0.43-3.08]	0.79	1.19 [0.38-3.74]	0.76	1.12 [0.34-3.75]	0.85	
Age at ART initiation																			
Per year older if taking efavirenz													0.79 [0.69-0.90]	<0.001	0.74 [0.64-0.87]	<0.001	0.72 [0.61-0.85]	<0.001	
Per year older if taking nevirapine													0.94 [0.79-1.11]	0.46	0.88 [0.72-1.08]	0.23	0.85 [0.69-1.06]	0.14	
Heterogeneity													0.09		0.15		0.19		
Age at ART initiation, vs 5-9years		0.02		0.003		0.0006		0.09		0.009		0.03							
3-4	0.73 [0.36-1.46]	0.37	0.94 [0.33-2.67]	0.91	0.92 [0.27-3.11]	0.89	0.47 [0.19-1.15]	0.10	0.37 [0.09-1.55]	0.17	0.48 [0.11-2.07]	0.32							
10+	0.34 [0.16-0.73]	0.006	0.22 [0.08-0.61]	0.004	0.16 [0.05-0.50]	0.002	0.38 [0.14-1.00]	0.05	0.12 [0.03-0.53]	0.005	0.15 [0.03-0.68]	0.01							
3TC/ABC/NNRTI throughout (Arm A), vs additional 36 weeks ZDV induction*													0.52** [0.27-1.00]	0.05	0.39** [0.18-0.85]	0.02	0.33** [0.14-0.78]	0.01	
Missed any doses in last 4 weeks, vs not missed any doses													0.51 [0.17-1.52]	0.23	0.33 [0.11-1.01]	0.05	0.37 [0.11-1.17]	0.09	
% visits to date with missed doses in last 4 weeks (per 10% higher)							0.76 [0.57-1.00]	0.05	0.72 [0.50-1.03]	0.07	0.69 [0.48-1.00]	0.05	0.84 [0.59-1.21]	0.36	0.70 [0.47-1.05]	0.08	0.62 [0.40-0.95]	0.03	
Centre, vs. A		0.47		0.07		0.002													
B	1.00 [0.45, 2.25]	0.99	0.47 [0.16-1.41]	0.18	0.19 [0.05-0.73]	0.02													
C	0.58 [0.28-1.23]	0.16	0.29 [0.10-0.83]	0.02	0.15 [0.04-0.54]	0.004													
D	0.69 [0.31-1.49]	0.34	0.85 [0.25-2.93]	0.80	0.72 [0.14-3.62]	0.69													
Overall efavirenz vs nevirapine (incorporating interaction effects above)		0.0004		0.07		0.07		0.26		0.15		0.25		0.05		0.12		0.22	
Hosmer-Lemeshow goodness-of-fit***		0.56		0.89		0.85		0.70		0.93		0.37		0.60		0.94		0.43	

Predictors of viral load suppression <80 copies/ml as per Table 2

aOR=adjusted odds ratio, n=n complete cases

*Only including Arm A/B receiving long-term NNRTIs from week 48 onwards. At 36 weeks, children in both Arm B and C had both received 36 weeks 3TC/ABC/ZDV/NNRTI, and were therefore pooled in analysis.

** There was no evidence of interaction between NNRTI and allocated ART strategy (p>0.1).

*** Calculated using 10 groups. p>0.05 indicates good model fit.