

## **Supplemental Table**

### **Heterogeneity of Rotavirus Vaccine Efficacy among Infants in Developing Countries**

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Supplemental Table1. Distribution of covariates with significant imbalance within a stratum of a factor of interest by country.

Country	Factor of Interest Strata	Imbalanced Covariate	Covariate Distribution by Vaccination Status			
			Placebo N (%)	RotaTeq™ N (%)	P†	Std proportion Difference‡
Ghana	Stunted Z-Score < -2 at enrollment N= 109	Concomitant vaccines			0.049	0.383
		No	14 (25%)	22 (42%)		
		Yes	43 (75%)	30 (58%)		
		Underweight Z-Scores at enrollment			0.054	0.378
		Z-Score ≥ -2	23 (40%)	12 (23%)		
		Z-Score < -2	34 (60%)	40 (77%)		
		Wasting Z-Scores at enrollment			0.063	0.362
		Z-Score ≥ -2	45 (79%)	32 (63%)		
		Z-Score < -2	12 (21%)	19 (37%)		
Kenya	Stunted Z-Score < -2 at enrollment N=300	Co-infection at enrollment			0.072	0.208
		Absent	141 (93%)	130 (87%)		
		Present	10 (7%)	19 (13%)		
		Gender			0.084	0.201
		Male	85 (56%)	69 (46%)		
		Female	66 (44%)	80 (54%)		
		Co-administration of OPV near dose			0.063	0.217
Mali	Age at first dose ≥ 8 weeks N=397	No	60 (40%)	44 (30%)		
		Yes	90 (60%)	104 (70%)		
		Birth Weight				
		≥ 2.5 kg	83 (100%)	73 (92%)		0.405
		< 2.5 kg		6 (8%)		
		Co-administration of OPV			0.047	0.201
		No	182 (91%)	189 (96%)		
		Yes	18 (9%)	8 (4%)		
		Co-administration of OPV near dose			0.001	0.343
		No	39 (20%)	68 (35%)		
		Yes	161 (81%)	129 (65%)		
	Non-Exclusive breastfeeding at enrollment N=161	Birth Weight				
		≥ 2.5 kg	37 (95%)	40 (100%)		0.329
		< 2.5 kg	2 (5%)			
		Severe Stunted Z-Scores at enrollment			0.156	0.221
		Z-Score ≥ -3	68 (93%)	86 (98%)		
		Z-Score < -3	5 (7%)	2 (2%)		

		Wasting Z-Scores at enrollment			0.085	0.28
		Z-Score $\geq$ -2	69 (95%)	76 (86%)		
		Z-Score < -2	4 (5%)	12 (14%)		
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Stunted Z-Score < -2 at enrollment N=126	Age at first dose				0.129	0.273
	$\geq$ 6 weeks		53 (84%)	46 (73%)		
	< 6 weeks		10 (16%)	17 (27%)		
	Co-administration of OPV				0.028	0.398
	No		56 (89%)	62 (98%)		
		Yes	7 (11%)	1 (2%)		
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Underweight Z-Score < -2 at enrollment N=130	Age at first dose				0.064	0.328
	$\geq$ 6 weeks		60 (88%)	47 (76%)		
	< 6 weeks		8 (12%)	15 (24%)		
	Birth Weight				0.257	0.368
	$\geq$ 2.5 kg		15 (88%)	20 (74%)		
	< 2.5 kg		2 (12%)	7 (26%)		
	Co-administration of OPV near dose				0.06	0.334
		No	15 (22%)	23 (37%)		
		Yes	53 (78%)	39 (63%)		
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Wasting Z-Score < -2 at enrollment N=170	Birth Weight					0.343
	$\geq$ 2.5 kg		30 (100%)	34 (94%)		
	< 2.5 kg			2 (6%)		
	Malaria					0.216
	Negative		82 (100%)	86 (98%)		
	Positive			2 (2%)		
	Breastfeeding Practices at enrollment				0.051	0.306
	Exclusive		78 (95%)	76 (86%)		
	Non-Exclusive		4 (5%)	12 (14%)		
	Severe Wasting Z-Scores at enrollment				0.123	0.239
		Z-Score $\geq$ -3	56 (68%)	50 (57%)		
		Z-Score < -3	26 (32%)	38 (43%)		
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Bangladesh	Non-Exclusive breastfeeding at enrollment N=113	Age at first dose			0.18	0.255
		$\geq$ 8 weeks	37 (60%)	24 (47%)		
		< 8 weeks	25 (40%)	27 (53%)		
		Co-infection at enrollment			0.109	0.297
		Absent	61 (98%)	47 (92%)		
		Present	1 (2%)	4 (8%)		

Underweight Z-Score < -2 at enrollment N=115	Birth Weight			0.147	0.519
	≥ 2.5 kg	18 (75%)	14 (93%)		
	< 2.5 kg	6 (25%)	1 (7%)		
	Severe Underweight Z-Scores at enrollment			0.248	0.225
	Z-Score ≥ -3	58 (94%)	50 (98%)		
	Z-Score < -3	4 (6%)	1 (2%)		
	Co-infection at enrollment			0.203	0.242
	Absent	56 (93%)	54 (98%)		
	Present	4 (7%)	1 (2%)		
	Birth Weight			0.327	0.314
	≥ 2.5 kg	6 (30%)	9 (45%)		
	< 2.5 kg	14 (70%)	11 (55%)		
	Medicines for infection taken near enrollment			0.018	0.458
	No	46 (77%)	51 (93%)		
	Yes	14 (23%)	4 (7%)		
	Breastfeeding Practices at enrollment			0.228	0.228
	Exclusive	50 (83%)	50 (91%)		
	Non-Exclusive	10 (17%)	5 (9%)		

† P-value from Chi-Square test

‡ Standardized proportion difference was calculated as  $(p1 - p2)/\sqrt{(p1(1 - p1) + p2(1 - p2))/2}$  where p1 is the proportion (or mean) of the binary covariate in the vaccinated group and p2 is the proportion in the placebo group. A standardized proportion difference of  $\geq 0.2$  was considered a significant imbalance of covariates between vaccine and placebo groups.