

Supplementary Appendix

This appendix has been provided by the authors to give readers additional information about their work.

Supplement to: Oldenburg C, Ouattara M, Bountogo M, et al. Mass azithromycin distribution to prevent child mortality: a randomized trial.

Table S1. Treatment coverage during each twice-yearly treatment round. Study treatments were delivered to each study community during each twice yearly (approximately 6 months apart) census and treatment round.

Treatment Round	Azithromycin		Placebo	
	n/N	% coverage (SD)	n/N	% coverage (SD)
Overall	--	90.1% (16.0%)	--	89.8% (17.1%)
Month 0	22,105/25,067	86.4% (20.1%)	21,470/25,464	84.4% (23.8%)
Month 6	21,204/24,453	87.0% (17.2%)	20,853/24,123	86.4% (15.7%)
Month 12	21,925/23,354	93.3% (9.3%)	21,632/21,632	94.1% (4.6%)
Month 18	22,782/23,731	94.5% (14.5%)	22,554/23,334	96.6% (5.6%)
Month 24	20,521/22,512	91.1% (12.1%)	19,857/22,518	88.3% (21.4%)
Month 30	18,924/21,155	88.6% (18.2%)	18,154/20,124	89.4% (17.7%)

Abbreviations: n: number of treatments distributed; N: number of children in the community; SD, standard deviation

Table S2. Children who moved or had an unknown vital status by arm across all study phases. By design, no attempt was made to follow children who moved out of the study community.

Status	Azithromycin (%) N = 44286	Placebo (%) N = 44513	P-value
Moved	4785 (10.8%)	4290 (9.6%)	0.48
Unknown	111 (0.3%)	104 (0.2%)	0.66

Table S3. Adjusted estimate of the Incidence Rate Ratio (IRR) for Azithromycin vs Placebo all-cause mortality among children 1-59m. The IRR was estimated using a modified Poisson generalized linear model of child-phase level 6-month risk periods with death as a binary outcome in each period (N=237,434 periods at risk). 95% Confidence Intervals (CI) estimated using robust, sandwich standard errors, clustered at the community level. The model-based P-value for Azithromycin vs. Placebo was 0.06, and the Permutation-based P-value was 0.07 (10,000 permutations).

	IRR	(95% CI)
Azithromycin (vs Placebo)	0.823	(0.670, 1.010)
Age (months)	0.981	(0.977, 0.984)
Female (vs male)	0.882	(0.777, 1.001)
Distance to CSPS (km)	1.022	(0.994, 1.051)
Cluster size (n children)	1.002	(1.000, 1.003)
Month of the year (Jan ref)		
Feb	2.109	(1.411, 3.154)
Mar	0.691	(0.452, 1.059)
Apr	1.135	(0.765, 1.683)
May	1.366	(0.940, 1.986)
Jun	0.859	(0.615, 1.199)
Jul	1.103	(0.805, 1.511)
Aug	1.091	(0.835, 1.425)
Sep	0.955	(0.730, 1.250)
Oct	1.002	(0.791, 1.268)
Nov	1.091	(0.844, 1.412)
Dec	1.075	(0.779, 1.483)

Table S4. Adverse events among infants <6 months of age participating in the first treatment round in the trial in a subset of 48 study clusters. Adverse events were collected via caregiver survey approximately two weeks following distribution of the treatment dose.

Symptom	Azithromycin	Placebo
N interviewed	269	199
Diarrhea	30 (11.2%)	5 (2.5%)
Abdominal pain	19 (7.1%)	6 (3.0%)
Vomiting	11 (4.1%)	0 (0%)
Constipation	10 (3.7%)	0 (0%)
Hemorrhoids	5 (1.9%)	3 (1.5%)
Rash	2 (0.7%)	0 (0%)