Supplemental Table 1. Baseline characteristics among children who were and were not included in the 12-month mortality outcome analysis

| | Included in analysis (N=19097) | Excluded from analysis (N=2733) |
|-------------------------|-----------------------------------|---------------------------------|
| Age (days) | | |
| Median (Q1 to Q3) | 11.0 (9.00 to 14.0) | 11.0 (9.00 to 16.0) |
| Missing | 0 (0%) | 1 (0.0%) |
| Sex | | |
| Female | 9455 (49.5%) | 1389 (50.8%) |
| Male | 9642 (50.5%) | 1344 (49.2%) |
| Region | | |
| Centre | 1837 (9.6%) | 33 (1.2%) |
| Boucle du Mouhoun | 2031 (10.6%) | 597 (21.8%) |
| Cascade | 3490 (18.3%) | 495 (18.1%) |
| Centre Ouest | 2184 (11.4%) | 244 (8.9%) |
| Hauts-Bassins | 9555 (50.0%) | 1363 (49.9%) |
| Missing | 0 (0%) | 1 (0.0%) |
| Birthweight (g) | | |
| Median (Q1 to Q3) | 3000 (2700 to 3270) | 3000 (2700 to 3200) |
| Missing | 471 (2.5%) | 40 (1.5%) |
| Pregnancy type | | |
| Singleton | 18765 (98.3%) | 2688 (98.4%) |
| Multiple | 328 (1.7%) | 44 (1.6%) |
| Missing | 4 (0.0%) | 1 (0.0%) |
| Mother's age | | |
| Median (Q1 to Q3) | 25.0 (21.0 to 30.0) | 25.0 (20.0 to 30.0) |
| Missing | 5 (0.0%) | 1 (0.0%) |
| Mother's education | | |
| None | 10383 (54.4%) | 1555 (56.9%) |
| Primary | 3502 (18.3%) | 465 (17.0%) |
| Secondary or above | 5208 (27.3%) | 712 (26.1%) |
| Missing | 4 (0.0%) | 1 (0.0%) |
| No. of antenatal visits | | |
| Median (Q1 to Q3) | 4.00 (3.00 to 5.00) | 4.00 (3.00 to 5.00) |
| Missing | 31 (0.2%) | 3 (0.1%) |

Supplemental Table 2. Mortality among all children with any vital status measurement regardless of timing of assessment

| | Azithromycin | | Placeb | Placebo | | | | |
|--------------------|--------------|----|--------|---------|----|------|---------------------|----------|
| 12-month mortality | Ν | n | % | Ν | n | % | HR (95% CI) | P-value* |
| | 10508 | 52 | 0.5% | 10582 | 64 | 0.7% | 0.82 (0.57 to 1.18) | 0.40 |

Abbreviations: HR, hazards ratio; CI, confidence interval *Permutation P-value (10,000 replications) **Fever in the absence of another diagnosis

Supplemental Table 3. Average age of death in days by cause of death as determined by verbal autopsy

| Cause of death | Ν | Mean age at death, days (standard deviation) |
|-----------------------------|----|--|
| Malaria | 38 | 157 (85) |
| Acute respiratory infection | 28 | 115 (71) |
| Other infectious cause | 21 | 116 (79) |
| Neonatal sepsis | 9 | 20 (5) |
| Diarrheal disease | 5 | 121 (61) |
| Acute abdomen | 5 | 89 (35) |
| Severe acute malnutrition | 2 | 226 (151) |
| Accident | 3 | 40 (21) |
| HIV/AIDS | 1 | 66 (NA) |