DATA SUPPLEMENT

Randomized Trial of Azithromycin to Eradicate *Ureaplasma* Respiratory Colonization in Preterm Infants: Two Year Outcomes

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Supplemental Table S1. Pulmonary and Neurodevelopmental Outcomes at 22-26 Months Corrected Age Stratified by Race

	White (N=51)			Non-White (N=70)		
Outcome	Azithromycin (N=36)	Placebo (N=15)	P value*	Azithromycin (N=24)	Placebo (N=46)	P value*
PMA at discharge to home, wks, median (IQR)[a]	40.8 (38.3, 45.9)	39.7 (38.6, 41.7)	0.19	37.3 (36.4, 40.9)	38.4, (37.0, 42.9)	0.20
PMA when supplemental O2 discontinued, wks, median (IQR)[a]	40.8 (33.6, 67.1)	38.3 (35.0, 74.3)	0.77	34.9 (31.6, 42.4)	36.0 (31.6, 55.0)	0.40
Death or serious respiratory morbidity, N (%)[b]	12.6 (35%)	4.4 (29%)	0.80	8.3 (35%)	14.2 (31%)	0.72
All cause mortality before 26 months corrected age, N (%)	5/36 (14%)	2/15 (13%)	1.0	1/24 (4%)	4/46 (9%)	0.65
Mortality from respiratory cause before 26 months corrected age, N (%)	2/36 (6%)	1/15 (7%)	1.0	1/24 (4%)	1/46 (2%)	1.0
Serious respiratory morbidity, N (%)[c]	7.6 (25%)	2.4 (18%)	0.83	7.3 (32%)	10.2 (24%)	0.46
Death or moderate to severe NDI, N (%)[d]	14/32 (44%)	5/11 (45%)	0.40	11/22 (50%)	12/42 (29%)	0.13
BSIDIII cognitive composite score<85 or ASQ3 <2SD any domain, N (%)[d]	8/27 (30%)	3/9 (33%)	1.0	10/20 (50%)	8/37 (22%)	0.084
BSIDIII cognitive score <85[d]	4/10 (40%)	2/6 (33%)	1.0	3/7 (43%)	5/19 (26%)	0.64
BSIDIII cognitive score <70[d]	1/10 (10%)	1/6 (17%)	1.0	3/7 (43%)	2/19 (11%)	0.10
Moderate to severe CP with GMFCS level ≥2, N (%)[d]	4/27 (15%)	0/9 (0%)	0.55	3/20 (15%)	2/38 (5%)	0.33
Blindness, N (%)[d]	0/27 (0%)	0/9 (0%)	NA	0/21 (0%)	0/38 (0%)	N/A
Deafness, N (%)[d]	0/27 (0%)	0/9 (0%)	1.0	0/20 (5%)	0/38 (0%)	N/A

*P-values are based on GEE to account for twins, except for binary variables with expected cell counts less than 5, in which case they were based on Fisher's Exact Test.

[a] 11 patients who died before discharge were given the worst value in calculating the medians,

[b] The numerators for these variables are not always integers due to the fact that we used multiple imputation of these outcomes for 11 patients who were missing information on the 24-month follow-up.

[c] Based on survivors.

[d]Based on those who had a 24-month neurodevelopment assessment.

Table 2S. Pulmonary and neurodevelopmental outcomes at 22-26 months corrected age of placebo-assigned tracheal aspirate *Ureaplasma*-negative and tracheal aspirate *Ureaplasma*-positive participants.

Outcome	Number of Participants (%)		P value*
	TA *Ureaplasma* Negative (N=23)	TA *Ureaplasma* Positive (N=11)	
PMA at discharge to home, median (IQR)[a]	41.1 (38.7, 49.6)	52.4 (43.9, ??)	0.014
PMA when supplemental O2 discontinued, wks, median (IQR)[a]	42.7 (35.0, 76.1)	50.9 (41.6, ??)	0.15
Death or serious respiratory morbidity, N (%)[b]	9.1 (39%)	6.1 (56%)	0.38
All cause mortality before 26 months corrected age, N (%)	2/23 (9%)	4/11 (36%)	0.070
Mortality from respiratory cause before 26 months corrected age, N (%)	0/23 (0%)	2/11 (18%)	0.098
Serious respiratory morbidity, N (%)[b,c]	7.1 (34%)	2.1 (30%)	0.87
Parental report chronic wheezing or chronic cough, N (%) [b,c]	7.2 (34%)	0.2 (2%)	0.26
≥1 hospitalization in the first 22-26 months corrected age, N (%) [b,c]	7.4 (35%)	0.2 (2%)	0.25
Respiratory Medication Use, N (%)[b,c]	13.3 (63%)	5.4 (77%)	0.54
Death or moderate to severe NDI, N (%)[d]	7/18 (39%)	5/9 (56%)	0.45
BSIDIII cognitive composite score<85 or ASQ3 < 2SD any domain, N (%)[d]	5/16 (31%)	1/5 (20%)	1.0
BSIDIII cognitive score <85[d]	4/8 (50%)	1/ 2 (50%)	1.0
BSIDIII cognitive score <70[d]	2/8 (25%)	0/2 (0%)	1.0
moderate to severe CP with GMFCS level ≥2, N (%)[d]	1/16 (6%)	0/6 (0%)	1.0
Blindness, N (%) [d]	0/16 (0%)	0/6 (0%)	N/A
Deafness, N (%)[d]	0/16 (0%)	0/6 (0%)	N/A

*P-values are based on GEE to account for twins, except for binary variables with expected cell counts less than 5, in which case they were based on Fisher's Exact Test, and except for comparing medians which was based on the Wilcoxon test

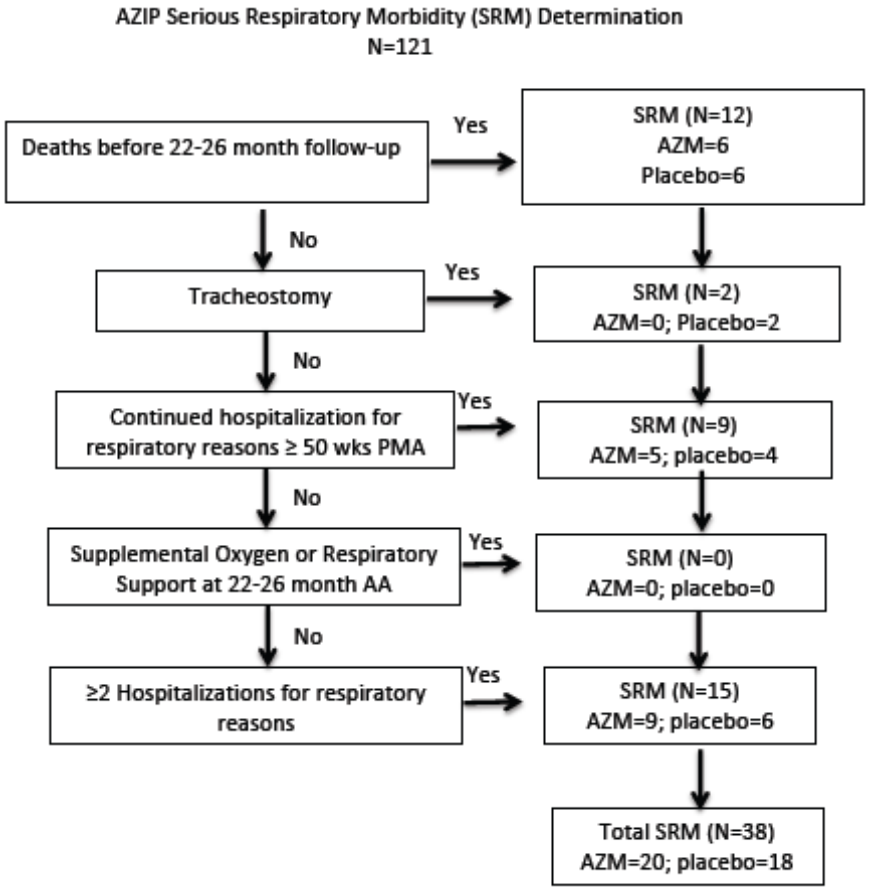
[a]6 patients who died before discharge were given the worst value in calculating the medians. For that reason, the 3rd quartile could not be calculated for some subgroups.

[b] The numerators for these variables are not always integers due to the fact that we used multiple imputation of these outcomes for patients who were missing information on the 22-26-month follow-up.

[c]Based on survivors (N=21 TA *Ureaplasma*-negative; N=7 TA *Ureaplasma*-positive).

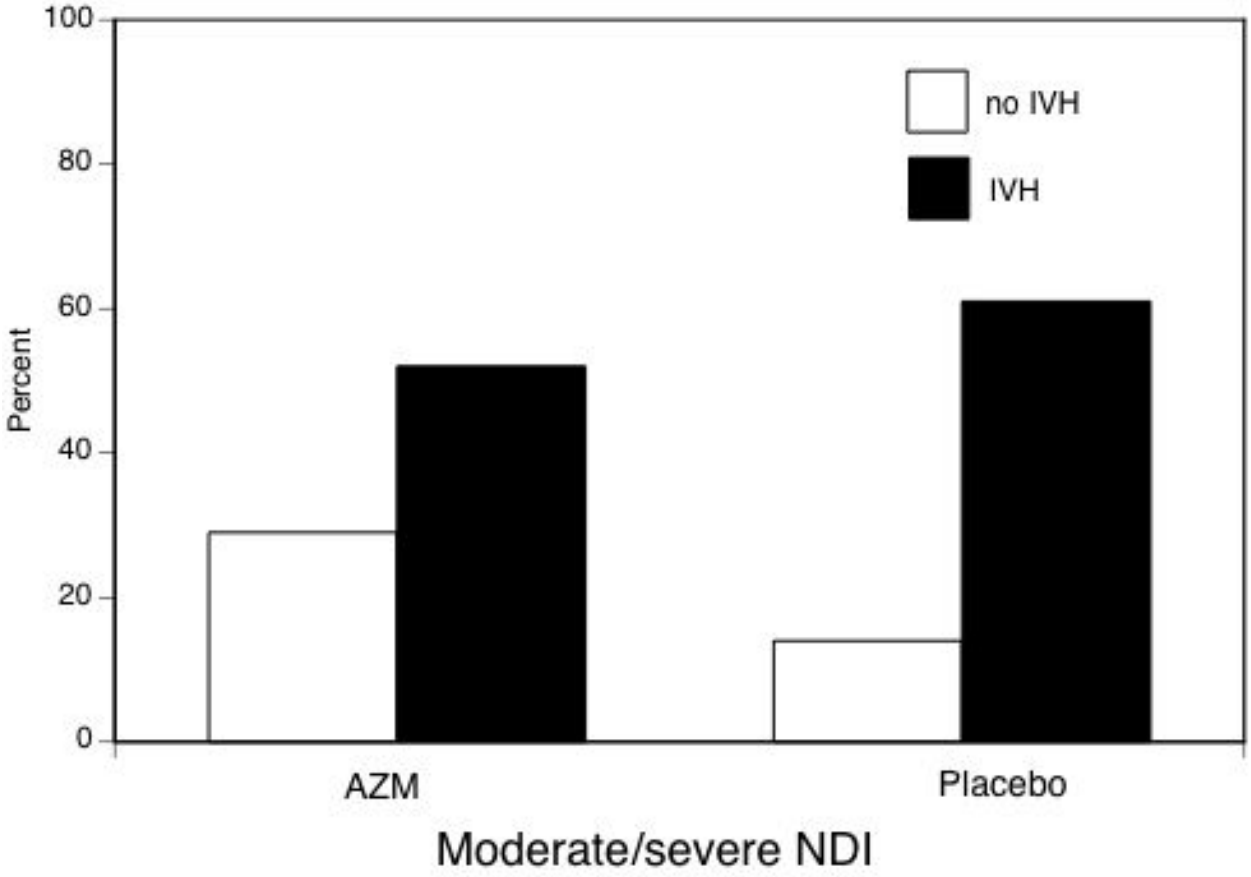
[d]Based on those who had a 24-month neurodevelopment assessment.

Supplemental Figure 1S



Supplemental Figure S1. Flow diagram of serious respiratory morbidity (SRM) determination in infants randomized to azithromycin (AZM) or placebo. SRM was defined as the occurrence of one or more of the following: tracheostomy; continued hospitalization for respiratory reasons at or beyond 50 weeks PMA, use of supplemental oxygen or respiratory support at 22-26 months adjusted age, or ≥2 rehospitalizations for respiratory illness (Jensen, E. A., et al. The Diagnosis of Bronchopulmonary Dysplasia in Very Preterm Infants. An Evidence-based Approach. *Am. J. Respir. Crit. Care Med.* **200**:751-759 (2019).

Supplemental Figure S2.



Supplemental Figure S2. Comparison of frequency of moderate-to-severe neurodevelopmental impairment in infants at 22-26 months AA randomized to azithromycin (AZM) or placebo with or without any grade IVH. Infants with any grade IVH had a significantly increased risk of moderate-to-severe NDI after controlling for treatment based on GEE logistic regression (p=0.024)