

Supplemental Information

SUPPLEMENTAL TABLE 8 EOS Organisms for Infants With EOS in the Low-Risk Group

Organism(s); Blood	n (%)
Gram-negative	
<i>E coli</i>	9 (31.0)
<i>Acinetobacter</i> sp.	1 (3.4)
<i>Capnocytophaga</i> sp.	1 (3.4)
<i>Eikenella corrodens</i>	1 (3.4)
<i>Haemophilus</i> sp.	1 (3.4)
<i>Klebsiella</i> sp.	1 (3.4)
<i>Neisseria</i> sp.	1 (3.4)
<i>Pseudomonas aeruginosa</i>	1 (3.4)
Gram-positive	
<i>Staphylococcus aureus</i>	3 (10.3)
Viridans streptococci	3 (10.3)
Group B <i>Streptococcus</i>	2 (6.9)
<i>Actinomyces odontolyticus</i>	1 (3.4)
Group A <i>Streptococcus</i>	1 (3.4)
<i>Streptococcus bovis</i> , <i>Corynebacterium</i> sp. ^a	1 (3.4)
Fungi	
<i>Candida albicans</i>	1 (3.4)
<i>Saccharomyces</i> sp.	1 (3.4)
Total no. cases	29

No infants in the low-risk group had a positive CSF result.

^a This case was included per the rule that cultures that grew >1 organism were included if at least 1 organism was considered a true pathogen. The infant was treated with antibiotics for ≥ 5 d.

SUPPLEMENTAL TABLE 9 EOS Organisms for Infants With EOS in the Comparison Group

Organism(s); Blood	Organism(s); CSF	n (%)
Gram-negative		
<i>E coli</i>	<i>E coli</i>	1 (0.5)
<i>E coli</i>	<i>E coli</i>	6 (2.9)
<i>Haemophilus</i> sp.	—	93 (44.5)
<i>Klebsiella</i> sp.	—	17 (8.1)
<i>Morganella morganii</i>	—	4 (1.9)
<i>Bacteroides</i> sp.	—	4 (1.9)
<i>Citrobacter</i> sp.	—	3 (1.4)
<i>Acinetobacter</i> sp.	—	3 (1.4)
<i>Campylobacter</i> sp.	—	1 (0.5)
<i>Capnocytophaga</i> sp.	—	1 (0.5)
<i>Enterobacter</i> sp.	—	1 (0.5)
<i>Prevotella</i> sp.	—	1 (0.5)
<i>P aeruginosa</i>	—	1 (0.5)
<i>Pseudomonas</i> sp.	—	1 (0.5)
<i>Sphingomonas paucimobilis</i>	—	1 (0.5)
Gram-positive		
	<i>Enterococcus</i> sp.	1 (0.5)
	Viridans streptococci	1 (0.5)
Group B <i>Streptococcus</i>	—	38 (18.2)
<i>Streptococcus pneumoniae</i>	—	5 (2.4)
Viridans streptococci	—	4 (1.9)
<i>Enterococcus</i> sp.	—	2 (1.0)
Group A <i>Streptococcus</i>	—	2 (1.0)
<i>S aureus</i> (methicillin-resistant)	—	2 (1.0)
α hemolytic streptococci	—	1 (0.5)
<i>Listeria</i> sp.	—	1 (0.5)
Polymicrobial		
	<i>Micrococcus</i> sp., <i>Acinetobacter baumannii</i> , <i>Acinetobacter iwoffii</i> ^a	1 (0.5)
<i>Klebsiella</i> sp., <i>C albicans</i>	—	1 (0.5)
Group B <i>Streptococcus</i> , <i>E coli</i>	—	1 (0.5)
<i>E coli</i> , CONS	—	1 (0.5)
<i>E coli</i> , Viridans streptococci	—	1 (0.5)
<i>Neisseria</i> sp., <i>Haemophilus</i> sp.	—	1 (0.5)
Fungi		
<i>C albicans</i>	—	1 (0.5)
Organism type not specified		
Other bacteria	—	2 (1.0)
Missing ^b	—	4 (1.9)
Total no. cases	—	209

—, not applicable.

^a This case was included per the rule that cultures that grew >1 organism were included if at least 1 organism was considered a true pathogen. The infant was treated with antibiotics for ≥ 5 d.

^b The organism was coded as permanently missing for 4 infants.

SUPPLEMENTAL TABLE 10 Performance of Risk Categorization in Which Delivery With Low Risk of EOS Criteria to Predict the Absence of EOS Is Used

	No EOS (N = 13 824)	EOS (N = 238)
Low-risk group, N = 5640	5611	29
Comparison group, N = 8422	8213	209
Sensitivity (probability of being in the low-risk group among those with no EOS)	$5611 / (5611 + 8213) \times 100 = 40.6\%$	
Specificity (probability of being in the comparison group among those with EOS)	$209 / (29 + 209) \times 100 = 87.8\%$	
Positive predictive value (probability of no EOS among those in the low-risk group)	$5611 / (5611 + 29) \times 100 = 99.5\%$	
Negative predictive value (probability of EOS among those in the comparison group)	$209 / (8213 + 209) \times 100 = 2.5\%$	
Positive likelihood ratio (probability of being in the low-risk group among those with no EOS compared with the probability of being in the low-risk group among infants with EOS)	Sensitivity / (1 - specificity) = 3.3	
Clinical interpretation: being low risk increases the chances of absent disease		
Negative likelihood ratio (the probability of being in the comparison group among infants with no EOS compared with the probability of being in the comparison group among those with EOS)	(1 - sensitivity) / specificity = 0.7	
Clinical interpretation: being in the comparison group decreases the chances of absent disease		

SUPPLEMENTAL TABLE 11 Maternal Characteristics for Infants in the Low Risk of EOS Group Who Survived >12 Hours, Excluding Infants With a Positive Blood or CSF Culture Result and/or NEC or SIP ≤ 7 Days

<i>N</i> (Column %) or as Shown ^a	Prolonged Early Antibiotics (<i>N</i> = 1771)	No Early Antibiotics ≥ 5 d (<i>N</i> = 3563)	<i>P</i> ^b
Study criteria for low risk of EOS			
CD	1771 (100.0)	3563 (100.0)	—
ROM before delivery	0 (0.0)	0 (0.0)	—
Maternal clinical chorioamnionitis	0 (0.0)	0 (0.0)	—
Placental pathology performed	1507 (85.5)	3029 (85.2)	.74
Histologic chorioamnionitis reported	360/1503 (24.0)	589/3020 (19.5)	<.001
Maternal and delivery characteristics			
Maternal age, y, median (IQR)	28 (23–32)	28 (23–32)	.87
Gravida			.47
1	581 (32.8)	1157 (32.5)	
2	431 (24.3)	835 (23.4)	
3	284 (16.0)	632 (17.7)	
4+	475 (26.8)	939 (26.4)	
Maternal race and/or ethnicity			.71
African American, non-Hispanic	645 (36.6)	1337 (37.6)	
White, non-Hispanic	750 (42.5)	1488 (41.9)	
Hispanic	269 (15.2)	549 (15.5)	
Other	100 (5.7)	179 (5.0)	
At least 1 prenatal visit	1709 (96.5)	3421 (96.0)	.41
Maternal insulin dependent diabetes	105 (5.9)	208 (5.8)	.89
Maternal hypertension	822 (46.4)	1679 (47.2)	.62
Antepartum hemorrhage	267 (15.1)	566 (15.9)	.44
Maternal antibiotics during delivery admission	959 (54.5)	1909 (53.7)	.60
Antenatal steroids	1548 (87.8)	3171 (89.1)	.15
Magnesium sulfate during delivery admission ^c	510/687 (74.2)	1238/1618 (76.5)	.24
Multiple birth	584 (33.0)	1210 (34.0)	.47

Of the 5640 infants in the low risk of EOS group who survived >12 h, the following 306 infants were excluded: 50 with a positive blood or CSF culture result within 72 h of age (29 counted as EOS cases and 21 with an organism considered a contaminant: 17 *CONS*, 3 *Bacillus* sp., 1 *Micrococcus* sp.), 44 with NEC ≤ 7 d, 79 with SIP ≤ 7 d, 113 with LOS on days 4–7, and 20 with ≥ 2 of NEC, SIP, or LOS ≤ 7 d. IQR, interquartile range; —, not applicable.

^a Information was missing as follows: placental pathology performed, 16 infants; histologic chorioamnionitis, 13 infants; maternal age, 1 infant; maternal race and/or ethnicity, 17 infants; prenatal care, 1 infant; maternal insulin dependent diabetes, 2 infants; maternal hypertension, 4 infants; antepartum hemorrhage, 1 infant; maternal antibiotics, 18 infants; antenatal steroids, 11 infants; magnesium sulfate, 6 infants.

^b *P* value by the χ^2 test (categorical variables) or the Wilcoxon test (median maternal age).

^c Maternal magnesium sulfate use was collected beginning April 1, 2011.