

Supplemental Table 1: Characteristics of neonatal bacterial meningitis in different regions.

Characteristics	Shanghai	Others	P
	n = 63	n = 31	
Age, median (IQR), days	15 (8–20)	9 (6–18)	0.097 ^a
Gender			
Male	31 (49.2)	19 (61.3)	0.270 ^p
Female	32 (50.8)	12 (38.7)	
Fever			
No	11 (17.5)	5 (16.1)	0.872 ^D
Yes	52 (82.5)	26 (83.9)	
History of seizure before or at the time of presentation	16 (25.4)	5 (16.1)	0.310 ^D
Peripheral blood, median (IQR), × 10 ⁹ cells/L			
WBC	11.3 (4.8–17.2)	8.0 (5.0– 15.3)	0.632 ^a
ANC	6.5 (2.5–10.8)	4.7 (2.7–8.9)	0.702 ^a
Cerebrospinal fluid, median (IQR)			
WBC, × 10 ⁶ cells/L	1080 (180–3600)	2572 (380–5910)	0.157 ^a
ANC, × 10 ⁶ cells/L	863.3 (93.6–2400.0)	1755 (234–4964.4)	0.173 ^a
Protein, mg/L	2710 (1680–4270)	2762 (1652–3920)	0.971 ^a
Positive cerebrospinal fluid Gram stain	34 (54.0)	16 (51.6)	0.830 ^D
Pathogenic bacteria			0.098 ^D
Group B streptococcus	37	12	
Escherichia coli	20	17	
Others	6	2	
Outcome			
Neuroimaging deficits*	26 (41.3)	14 (45.2)	0.720 ^D

a Wilcoxon rank-sum test b Chisq test;*Neuroimaging deficits including subdural effusion, ependymitis, encephalopathy, cerebral infarction,encephalomalacia, hydrocephalus, and encephalatrophy.WBC: white blood cell; ANC: absolute neutrophil count; n:number; IQR: interquartile range

Supplemental Table 2: The table provides data regarding the risk of bacterial meningitis in patients with 1, 2, 3 or more Bacterial Meningitis Score or refined Bacterial Meningitis Score predictors in the cohort.

Predictors Present	No. of neonates with CSF pleocytosis	No. (%) of neonates with bacterial meningitis
Bacterial Meningitis Score Predictors		
1 Predictor		
Positive CSF Gram stain	3	3 (100)
CSF ANC $\geq 1000 \times 10^6$ cells/L	0	0
CSF protein ≥ 800 mg/L	146	16 (11.0)
Peripheral blood ANC $\geq 10 \times 10^9$ cells/L	31	0
History of seizure before or at the time of presentation	3	0
2 Predictors		
Positive CSF Gram stain and CSF ANC $\geq 1000 \times 10^6$ cells/L	0	0
Positive CSF Gram stain and CSF protein ≥ 800 mg/L	11	10 (90.9)
Positive CSF Gram stain and peripheral blood ANC $\geq 10 \times 10^9$ cells/L	1	1 (100)
Positive CSF Gram stain and seizure	0	0
CSF ANC $\geq 1000 \times 10^6$ cells/L and CSF protein ≥ 800 mg/L	16	9 (56.2)
CSF ANC $\geq 1000 \times 10^6$ cells/L and peripheral blood ANC $\geq 10 \times 10^9$ cells/L	0	0
CSF ANC $\geq 1000 \times 10^6$ cells/L and seizure	0	0
CSF protein ≥ 800 mg/L and peripheral blood ANC $\geq 10 \times 10^9$ cells/L	106	10 (9.4)
CSF protein ≥ 800 mg/L and seizure	19	3 (15.8)
Peripheral blood ANC $\geq 10 \times 10^9$ cells/L and seizure	0	0
≥ 3 Predictors		
All Combinations	65	42 (64.6)
Total patients with ≥ 1 predictor	401	94 (23.4)
Refined Bacterial Meningitis Score Predictors		
1 Predictor		
Positive CSF Gram stain	3	2 (66.7)
CSF ANC $\geq 84 \times 10^6$ cells/L	45	7 (15.6)
CSF protein ≥ 1650 mg/L	40	8 (20.0)
2 Predictors		
Positive CSF Gram stain and CSF ANC $\geq 84 \times 10^6$ cells/L	13	13 (100)
Positive CSF Gram stain and CSF protein ≥ 1650 mg/L	3	3 (100)
CSF ANC $\geq 84 \times 10^6$ cells/L and CSF protein ≥ 1650 mg/L	67	29 (43.3)
3 Predictors		
Total patients with ≥ 1 predictor	205	94 (45.9)

CSF: cerebrospinal fluid; ANC: absolute neutrophil count; No: number