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

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Shanghai</th>
<th>Others</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 63</td>
<td>n = 31</td>
<td></td>
</tr>
<tr>
<td>Age, median (IQR), days</td>
<td>15 (8–20)</td>
<td>9 (6–18)</td>
<td>0.097a</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>31 (49.2)</td>
<td>19 (61.3)</td>
<td>0.270b</td>
</tr>
<tr>
<td>Female</td>
<td>32 (50.8)</td>
<td>12 (38.7)</td>
<td></td>
</tr>
<tr>
<td>Fever</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>11 (17.5)</td>
<td>5 (16.1)</td>
<td>0.872b</td>
</tr>
<tr>
<td>Yes</td>
<td>52 (82.5)</td>
<td>26 (83.9)</td>
<td></td>
</tr>
<tr>
<td>History of seizure before or at the time of presentation</td>
<td>16 (25.4)</td>
<td>5 (16.1)</td>
<td>0.310b</td>
</tr>
<tr>
<td>Peripheral blood, median (IQR), × 10⁹ cells/L</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WBC</td>
<td>11.3 (4.8–17.2)</td>
<td>8.0 (5.0–15.3)</td>
<td>0.632a</td>
</tr>
<tr>
<td>ANC</td>
<td>6.5 (2.5–10.8)</td>
<td>4.7 (2.7–8.9)</td>
<td>0.702a</td>
</tr>
<tr>
<td>Cerebrospinal fluid, median (IQR)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WBC, × 10⁶ cells/L</td>
<td>1080 (180–3600)</td>
<td>2572 (380–5910)</td>
<td>0.157a</td>
</tr>
<tr>
<td>ANC, × 10⁶ cells/L</td>
<td>863.3 (93.6–2400.0)</td>
<td>1755 (234–4964.4)</td>
<td>0.173a</td>
</tr>
<tr>
<td>Protein, mg/L</td>
<td>2710 (1680–4270)</td>
<td>2762 (1652–3920)</td>
<td>0.971a</td>
</tr>
<tr>
<td>Positive cerebrospinal fluid Gram stain</td>
<td>34 (54.0)</td>
<td>16 (51.6)</td>
<td>0.830b</td>
</tr>
<tr>
<td>Pathogenic bacteria</td>
<td></td>
<td></td>
<td>0.098b</td>
</tr>
<tr>
<td>Group B streptococcus</td>
<td>37</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Escherichia coli</td>
<td>20</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>6</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Outcome</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neuroimaging deficits*</td>
<td>26 (41.3)</td>
<td>14 (45.2)</td>
<td>0.720b</td>
</tr>
</tbody>
</table>

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.

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

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