



Original Article

Association Between Pre-Admission 48-Hour Fever Burden and Outcomes in Pediatric Mycoplasma Pneumoniae Infection

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Supplementary files

Supplementary Table S1. Baseline characteristics of included versus excluded eligible hospitalizations.

| Variable | Included (n=648) | Excluded (n=72) | p |
|----------------------------------------------|------------------|-----------------|------|
| Age, y (mean ± SD) | 6.8 ± 2.9 | 6.6 ± 3.0 | 0.56 |
| Male, n (%) | 337 (52.0%) | 36 (50.0%) | 0.74 |
| Illness days at admission (median [IQR]) | 4.8 [3.0–6.0] | 4.7 [3.0–6.0] | 0.68 |
| SpO ₂ at admission, % (mean ± SD) | 96.4 ± 2.4 | 96.1 ± 2.6 | 0.29 |
| Imaging severity (moderate/severe), n (%) | 241 (37.2%) | 29 (40.3%) | 0.61 |

Note: Excluded eligible hospitalizations include those without analyzable -48 to 0 h temperature windows, those without a complete admission laboratory panel, and those meeting SMPP criteria at presentation; comparisons use available baseline data at admission.

Supplementary Table S2. Pre-admission temperature sampling characteristics and covariate missingness after exclusions.

| Domain | Metric/Variable | Value |
|-----------------------|-----------------------------------------------------------------------|----------------|
| Temperature sampling | Temperature measurements per child in -48 to 0 h window, median [IQR] | 7 [5–10] |
| Temperature sampling | Maximum gap between adjacent measurements, hours, median [IQR] | 7.0 [4.5–10.5] |
| Temperature sampling | Any inter-measurement gap >12 h, n (%) | 66 (10.2%) |
| Temperature sampling | Source of temperature readings: outpatient/ED/hospital records, % | 59.0 |
| Temperature sampling | Source of temperature readings: caregiver logs, % | 41.0 |
| Temperature sampling | Measurement site documented for ≥1 reading, n (%) | 401 (61.9%) |
| Covariate missingness | SpO ₂ at admission | 8 (1.2%) |
| Covariate missingness | Illness days at admission | 5 (0.8%) |
| Covariate missingness | Prior macrolide exposure | 7 (1.1%) |
| Covariate missingness | Antipyretic exposure (-48 to 0 h) | 10 (1.5%) |
| Covariate missingness | Pre-admission systemic steroid exposure | 6 (0.9%) |

| | | |
|------------------------------|---------------------------------------------|-----------------------------------|
| Covariate missingness | Imaging severity category | 0 (0.0%) |
| Covariate missingness | Admission laboratories (LDH, NLR, CRP, PCT) | 0 (0.0%) (required for inclusion) |

Note: Values shown are for the analysis cohort (n=648) prior to multiple imputation; temperature sampling metrics are based on the observed -48 to 0 h window after deduplication and time alignment.

Supplementary Table S3. Composite and SMPP event rates by FBI48 tertile

| FBI48 tertile (cut-points, °C·h) | n | Composite n (%) | SMPP n (%) |
|-----------------------------------------|----------|------------------------|-------------------|
| T1 (≤ 32) | 216 | 36 (16.7%) | 8 (3.7%) |
| T2 (33–55) | 216 | 53 (24.5%) | 14 (6.5%) |
| T3 (≥ 56) | 216 | 87 (40.3%) | 30 (13.9%) |

Supplementary Table S4. Sensitivity (alternative fever thresholds for FBI48)

| FBI threshold (T₀) | aOR per 1 SD (95% CI) | p |
|--------------------------------------|------------------------------|----------|
| 38.0 °C (primary) | 1.45 (1.25–1.68) | <0.001 |
| 38.5 °C | 1.37 (1.18–1.61) | <0.001 |
| 39.0 °C | 1.31 (1.12–1.53) | 0.001 |

Supplementary Table S5. Secondary outcome: SMPP alone

| Predictor (scaling) | Adjusted OR (95% CI) | p | q (FDR) |
|---------------------------------------|-----------------------------|----------|----------------|
| FBI48 (per 1 SD) | 1.58 (1.21–2.06) | 0.001 | 0.004 |
| SpO ₂ (per 1% lower) | 1.22 (1.12–1.34) | <0.001 | <0.001 |
| Imaging severity (mod/severe vs mild) | 2.34 (1.24–4.40) | 0.009 | 0.020 |
| LDH (per 100 U/L higher) | 1.09 (1.00–1.19) | 0.046 | 0.069 |
| NLR (log-transformed) | 1.22 (0.97–1.53) | 0.090 | 0.120 |
| Age (per 1 y) | 1.04 (0.98–1.11) | 0.19 | 0.24 |