



Figure S1 Heart Rate n-Variability and definition of RR intervals (27). Reprinted with permission from the copyright owner, under the terms of the Creative Commons Attribution License.

Table S1 HRnV parameters that were associated with SBIs

Variable	SBI, median (IQR)	No SBI, median (IQR)	P value
HR ₂ V ₁ pNN50	0.00 (0.00–0.00)	0.00 (0.00–0.13)	0.008
HR ₂ V ₁ NN50	0.00 (0.00–0.00)	0.00 (0.00–1.00)	0.008
HR ₃ V pNN50	0.00 (0.00–0.26)	0.00 (0.00–1.10)	0.030
HR ₃ V ₁ pNN50	0.00 (0.00–0.00)	0.00 (0.00–0.30)	0.037
HR ₃ V NN50	0.00 (0.00–1.00)	0.00 (0.00–3.00)	0.037
HR ₂ V pNN50	0.00 (0.00–0.28)	0.00 (0.00–0.89)	0.038
HR ₃ V LF (ms)	473.89 (300.87–857.65)	718.25 (310.83–1654.17)	0.041
HR ₃ V Poincare' SD2 (ms)	69.79 (49.40–121.84)	89.68 (64.09–143.13)	0.042
HR ₂ V LF (ms)	317.31 (207.10–576.77)	494.84 (208.57–1107.65)	0.042
HR ₃ V ₁ NN50	0.00 (0.00–0.00)	0.00 (0.00–1.00)	0.043
HR ₂ V Poincare' SD2 (ms)	47.58 (34.67–82.77)	60.87 (43.70–96.59)	0.043
HR ₃ V ₂ LF (ms)	1,412.79 (911.82–2,568.93)	2,136.07 (923.26–4,926.39)	0.044
HR ₃ V ₂ Poincare' SD2 (ms)	71.67 (52.22–124.34)	91.60 (65.49–145.02)	0.044
HR ₂ V SDNN (ms)	35.77 (25.88–59.51)	44.62 (31.04–69.69)	0.044
HR ₃ V SDNN (ms)	53.25 (37.04–88.61)	65.42 (46.46–103.47)	0.045
HR ₃ V ₁ Poincare' SD2 (ms)	70.51 (51.46–123.95)	90.50 (65.17–144.28)	0.045
HR ₃ V ₁ LF (ms)	707.26 (458.57–1380.68)	1,061.59 (460.96–2,486.16)	0.045
HR ₂ V ₁ LF (ms)	635.81 (428.80–1156.78)	975.11 (416.68–2,224.80)	0.046
HR ₂ V ₁ Poincare' SD2 (ms)	50.34 (35.54–83.49)	62.10 (43.76–98.14)	0.046
HR ₃ V ₂ SDNN (ms)	53.24 (37.34–88.24)	65.14 (46.36–103.12)	0.046
HR ₃ V ₁ SDNN (ms)	53.15 (37.33–88.43)	65.43 (46.36–103.48)	0.047
HR ₂ V ₁ SDNN (ms)	35.82 (25.92–59.36)	44.52 (31.01–69.50)	0.047
HR ₂ V ₁ TP (ms)	3,106.02 (1,758.79–8,860.95)	4,987.25 (2,631.89–11,820.92)	0.048
HR ₂ V TP (ms)	1,613.44 (851.36–4,423.94)	2,503.83 (1,318.70–5,965.87)	0.048
HR ₃ V TP (ms)	2,425.59 (1,281.45–6,587.07)	3,755.83 (1,968.65–9,015.68)	0.049
HR ₃ V ₂ TP (ms)	6,966.85 (3,876.32–19,847.56)	11,146.49 (5,865.69–26,330.49)	0.050
HR ₂ V NN50	0.00 (0.00–1.00)	0.00 (0.00–4.00)	0.051
HR ₃ V ₁ TP (ms)	3,530.68 (1,886.68–9,898.59)	5,614.97 (2,940.40–13,276.64)	0.052
HR ₃ V ₂ pNN50	0.00 (0.00–0.00)	0.00 (0.00–0.00)	0.060
HR ₃ V ₂ NN50	0.00 (0.00–0.00)	0.00 (0.00–0.00)	0.065
HR ₃ V ₂ VLF (ms)	4,850.13 (2,331.44–15,497.07)	8,198.39 (3,715.38–20,152.63)	0.067
HR ₂ V ₁ VLF (ms)	2,154.44 (1,037.49–6,897.84)	3,656.31 (1,652.82–8,966.29)	0.068
HR ₂ V VLF (ms)	1,078.23 (517.88–3,457.54)	1,833.51 (825.91–4,476.60)	0.068
HR ₃ V VLF (ms)	1,617.49 (776.58–5,191.72)	2,755.37 (1,234.00–6,717.32)	0.068
HR ₃ V ₁ VLF (ms)	2,432.54 (1,146.71–7,778.92)	4,137.30 (1,852.93–10,072.15)	0.070
HR ₃ V SDHR (bpm)	2.58 (1.95–3.75)	3.07 (2.19–4.26)	0.117
HR ₂ V SDHR (bpm)	4.00 (3.00–5.88)	4.65 (3.35–6.42)	0.118
HR ₃ V ₂ SDHR (bpm)	2.58 (1.94–3.76)	3.06 (2.18–4.25)	0.122
HR ₂ V ₁ SDHR (bpm)	3.99 (2.97–5.90)	4.65 (3.35–6.42)	0.123
HR ₃ V ₁ SDHR (bpm)	2.58 (1.95–3.77)	3.07 (2.18–4.26)	0.123
HR ₃ V HF (ms)	97.80 (51.10–286.60)	155.12 (56.77–399.27)	0.125
HR ₃ V ₂ kurtosis	0.28 (0.00–1.22)	0.48 (0.00–3.12)	0.130
HR ₂ V ₁ Poincare' SD1	5.94 (4.25–9.80)	7.35 (4.52–13.32)	0.136
HR ₂ V ₁ RMSSD	8.40 (6.02–13.85)	10.39 (6.39–18.82)	0.136
HR ₂ V HF (ms)	62.33 (33.88–181.06)	92.36 (38.19–248.84)	0.143
HR ₃ V RMSSD	22.66 (16.17–36.55)	27.67 (16.01–45.18)	0.147
HR ₃ V Poincare' SD1	16.04 (11.45–25.90)	19.58 (11.33–32.00)	0.148
HR ₃ V ₁ HF (ms)	124.07 (58.87–368.79)	176.91 (70.15–445.68)	0.149
HR ₂ V RMSSD	13.01 (10.14–22.15)	16.46 (10.37–28.52)	0.156
HR ₂ V Poincare' SD1	9.21 (7.17–15.68)	11.65 (7.34–20.19)	0.156
HR ₂ V RR Triangular Index	8.40 (5.90–11.40)	9.40 (6.30–14.10)	0.163
HR ₃ V ₂ HF (ms)	246.37 (117.30–674.09)	333.83 (135.20–837.68)	0.163
HR ₃ V ₁ RMSSD	16.38 (12.08–27.80)	19.74 (12.00–33.51)	0.165
HR ₃ V ₁ Poincare' SD1	11.59 (8.55–19.68)	13.97 (8.49–23.72)	0.165
HR ₂ V ₁ RR Triangular Index	8.40 (6.20–12.80)	9.50 (6.40–14.20)	0.166
HR ₂ V ₁ HF (ms)	124.03 (61.37–349.70)	174.08 (69.90–434.24)	0.167
HR ₃ V ₂ skewness	3.00 (0.00–9.00)	4.00 (0.00–28.00)	0.176
HR ₂ V ₁ kurtosis	0.17 (0.00–1.04)	0.36 (0.00–2.32)	0.187
HR ₃ V ₂ RR Triangular Index	12.00 (8.60–16.70)	13.10 (8.90–19.50)	0.187
HR ₃ V ₂ Poincare' SD1	6.90 (5.10–11.63)	8.64 (5.32–14.51)	0.192
HR ₃ V ₂ RMSSD	9.75 (7.21–16.44)	12.21 (7.53–20.51)	0.192
HR ₃ V kurtosis	3.39 (1.25–15.47)	6.25 (1.39–19.66)	0.194
HR ₂ V ₁ skewness	2.00 (0.00–9.00)	3.00 (0.00–21.00)	0.216
HR ₃ V ₁ kurtosis	1.26 (0.48–6.54)	2.70 (0.25–10.60)	0.238
HR ₃ V skewness	11.00 (5.00–41.00)	19.00 (5.00–58.00)	0.247
HR ₂ V kurtosis	0.85 (0.24–4.27)	1.30 (0.20–7.84)	0.255
HR ₃ V ₂ mean NN (ms)	1,110.56 (1,052.84–1,216.75)	1,122.29 (1,057.45–1,253.98)	0.284
HR ₂ V ₁ mean NN (ms)	740.33 (701.91–811.14)	748.16 (704.98–836.04)	0.285
HR ₃ V mean NN (ms)	1,110.49 (1,052.84–1,216.60)	1,122.15 (1,056.47–1,254.02)	0.285
HR ₂ V mean NN (ms)	740.31 (701.91–811.08)	748.12 (704.82–835.96)	0.285
HR ₃ V ₁ mean NN (ms)	1,110.65 (1,053.21–1,216.54)	1,122.03 (1,057.30–1,253.93)	0.288
HR ₃ V ₁ skewness	7.00 (2.00–29.00)	12.00 (1.00–47.00)	0.293
HR ₃ V AVHR	54.21 (49.34–57.12)	53.65 (47.99–57.00)	0.295
HR ₃ V ₂ AVHR	54.21 (49.34–57.12)	53.65 (48.01–56.99)	0.295
HR ₂ V ₁ AVHR	81.32 (74.01–85.68)	80.48 (72.01–85.50)	0.298
HR ₂ V AVHR	81.33 (74.01–85.68)	80.48 (72.00–85.50)	0.298
HR ₃ V ₁ AVHR	54.21 (49.34–57.09)	53.64 (47.99–57.00)	0.299
HR ₂ V skewness	4.00 (1.00–21.00)	6.00 (1.00–32.00)	0.325
HR ₃ V RRR Triangular Index	11.40 (8.50–15.70)	12.20 (8.50–16.50)	0.366
HR ₃ V ₁ RR Triangular Index	11.60 (8.80–16.10)	12.30 (8.70–18.60)	0.376
HR ₃ V ₂ DFA α 1	1.65 (1.52–1.79)	1.68 (1.56–1.78)	0.383

HRnV parameters are listed in ascending P value, up to P<0.4. NN50, The number of times that the absolute difference between 2 successive R-R intervals exceeds 50 ms; pNN50, The number of times that the absolute difference between 2 successive R-R intervals exceeds 50 ms, divided by the total number of R-R intervals; LF, Low Frequency; SDNN, Standard deviation of R-R intervals; TP, Total Power; VLF, Very low frequency; SDHR, standard deviation of mean heart rate; HF, High frequency; RMSSD, Square root of the mean squared differences between R-R intervals; R-R, interval between 2 consecutive Rs; Mean NN, Average of R-R intervals; AVHR, Average heart rate; DFA α 1, Detrended fluctuation analysis α 1.

Table S2 Clinical outcomes for febrile infants with and without SBIs

Variable	Infants with SBIs (n=74)	Infants without SBIs (n=238)	P value
Admitted to ICU/high dependency, n (%)	2 (2.7)	4 (1.7)	0.813
Admitted to general ward, n (%)	70 (94.6)	229 (96.2)	
Discharged against advice or transferred, n (%)	2 (2.7)	5 (2.1)	
Received normal saline bolus resuscitation, n (%)	12 (16.2)	20 (8.4)	0.053
Received intravenous antibiotics, n (%)	72 (97.3)	181 (76.1)	<0.001
Hospital length of stay, days, median (IQR)	4.0 (3.0–5.0)	3.0 (3.0–4.0)	<0.001

SBIs, serious bacterial infections.