

Table S1 The comparison of epidemiological characteristics between two groups

Epidemiological characteristics	Complete cases (deleted missing data) (N=104)	Total cases (with imputed data) (N=121)	χ^2	P
Sex			0.161	0.668
Male	60	73		
Female	44	48		
Season			0.646	0.886
Spring	45	50		
Summer	37	41		
Autumn	8	9		
Winter	14	21		
Vintage			0.144	0.986
2022	1	1		
2023	3	3		
2024	18	23		
2025	82	94		
Group			0.002	0.969
Sever group	47	55		
Non-sever group	57	66		
Other pathogens			0.018	0.8921
Yes	67	79		
No	37	42		
Imaging manifestations			0.092	0.762
Cellulose	17	18		
Consolidation	87	103		
Total	104	121		

Table S2 Comparison of clinical, laboratory indexes and imaging characteristics between two groups (deleted missing data)

Index	CPP group (n=57)	SCPP group (n=47)	Z/t	P (n=104)	P (n=121)
Fever time (days)	1 [0, 4.5]	1 [0, 3]	0.508	0.612	0.764
Hospital stays (days)	5 [4, 6]	6 [4, 7]	2.832	0.005*	0.017*
Age (years)	8 [10, 12]	11 [8, 13]	1.228	0.219	0.126
WBC ($\times 10^9/L$)	8.00 [6.29, 9.61]	8.53 [6.97, 10.83]	1.427	0.154	0.087
N (%)	54.96 $\pm$ 12.49	60.75 $\pm$ 10.47	2.530	0.013*	0.002*
CRP (mg/L)	3 [3, 8]	5 [3, 19]	1.426	0.154	0.102
PCT (ng/mL)	0.20 [0.20, 0.30]	0.30 [0.30, 0.50]	2.308	0.021*	0.011*
LDH (U/L)	267 [245, 305]	280 [232, 327]	0.800	0.424	0.652
Ferritin (ng/mL)	106.80 [69.45, 147.75]	139.90 [78.20, 193.80]	2.305	0.042*	0.010*
D-D (mg/L)	0.35 [0.24, 0.45]	0.38 [0.28, 0.66]	2.026	0.043*	0.016*
Fib (g/L)	3.60 $\pm$ 1.06	4.20 $\pm$ 1.07	2.838	0.005*	0.021*
IL-6 (pg/mL)	1.00 [1.00, 2.93]	2.82 [1.00, 4.52]	2.165	0.014*	0.011*
IL-1 β (pg/mL)	1.00 [1.00, 6.99]	2.58 [1.00, 12.31]	1.977	0.048*	0.047*
IL-10 (pg/mL)	1.00 [1.00, 1.00]	1.00 [1.00, 1.00]	0.848	0.397	0.147
IL-8 (pg/mL)	8.78 [1.00, 33.48]	17.26 [1.00, 43.41]	0.932	0.351	0.071
CD3 ⁺ lymphocytes (%)	69.40 [65.33, 75.29]	69.08 [63.51, 73.01]	1.169	0.563	0.173
CD4 ⁺ lymphocytes (%)	35.76 $\pm$ 6.73	35.29 $\pm$ 6.80	0.354	0.724	0.728
CD8 ⁺ lymphocytes (%)	27.79 $\pm$ 6.10	25.80 $\pm$ 4.73	1.826	0.071	0.076
CD16 ⁺ 56 ⁺ /CD3 ⁺ lymphocytes (%)	11.93 [7.25, 19.49]	11.70 [7.66, 15.44]	0.587	0.563	0.950
CD19 ⁺ lymphocytes (%)	14.87 [12.25, 18.19]	16.89 [13.44, 23.63]	2.776	0.006*	0.033*
CD4 ⁺ /CD8 ⁺ ratio (%)	1.27 [1.03, 1.52]	1.41 [1.21, 1.77]	2.165	0.030*	0.039*
IgG (g/L)	10.92 $\pm$ 2.35	11.71 $\pm$ 2.65	1.622	0.108	0.600
IgA (g/L)	1.65 [1.07, 2.10]	1.74 [1.18, 1.94]	0.366	0.715	0.365
IgM (g/L)	1.57 [1.20, 1.91]	1.55 [1.17, 2.10]	0.464	0.643	0.387
IgE (IU/mL)	149.00 [41.50, 350.00]	271.00 [107.00, 630.00]	2.456	0.014*	0.007*
C3 (g/L)	1.20 $\pm$ 0.22	1.35 $\pm$ 0.24	3.323	0.001*	<0.001*
C4 (g/L)	0.25 $\pm$ 0.09	0.33 $\pm$ 0.09	4.107	<0.001*	<0.001*

Data are presented as median [interquartile range] or mean $\pm$ standard deviation. *, P<0.05. C3, complement 3; C4, complement 4; CPP, *Chlamydia pneumoniae* pneumonia; CRP, C-reactive protein; D-D, D-dimer; Fib, fibrinogen; Ig, immunoglobulin; IL, interleukin; LDH, lactate dehydrogenase; N%, neutrophil percentage; PCT, procalcitonin; SCPP, severe *Chlamydia pneumoniae* pneumonia; WBC, white blood cell count.