

Table 1 The aetiological distribution in 269 children with PB

pathogens	patients (n)	infection rate(%)
MP	202	75.1
Candida albicans	2	0.7
Influenzae	2	0.7
ADV	1	0.4
Streptococcus	1	0.4
no clear pathogens	6	2.2
MP + Staphylococcus	8	3.0
MP + Streptococcus	23	8.6
MP + Acinetobacter baumannii	4	1.5
MP + Haemophilus influenzae	2	0.7
MP + ADV	9	3.3
MP + Influenzae	9	3.3

Table 2 Clinical characteristics of PB in children

Clinical characteristics	Patients (n=269)	Patients with single FOB (n=144)	Patients with multiple FOB (n=125)	P
Age, years	6.7±2.8	6.5±3.0	6.9±2.5	0.301
Sex(male/female)	137/132	70/74	67/58	0.414
Fever (n,%)	269(100%)	144(100%)	125(100%)	1.000
Cough (n, %)	269(100%)	144(100%)	125(100%)	1.000
Peak body temperature, °C	40.0±0.6	39.9±0.6	40.2±0.6	0.001
Duration of fever, days	10.6±3.7	9.7±3.3	11.6±3.9	0.000
Duration of hospitalization, days	9.3±3.2	8.1±2.6	10.7±3.3	0.000
Hypoxemia (n,%)	42(15.6%)	7(4.9%)	35(28%)	0.000
Pulmonary embolism (n,%)	3 (1.1%)	0 (0%)	3 (2.4%)	0.062
Necrotizing pneumonia (n,%)	15(5.6%)	4(2.8%)	11(8.8%)	0.032
Complications of extrapulmonary (n,%)	170(63.2%)	81(56.3%)	89(71.2%)	0.011
Blood system (n,%)	16(5.9%)	9(6.3%)	7(5.6%)	0.822
Digestive system (n,%)	62(23%)	26(18.1%)	36(28.8%)	0.037
Cardiovascular system (n,%)	24(8.9%)	10(6.9%)	14(11.2%)	0.222
Rash (n,%)	40(14.9%)	22(15.3%)	18(14.4%)	0.840
Central nervous system (n,%)	21(7.8%)	6(5.6%)	10(10.4%)	0.140
Electrolyte disorder (n,%)	27(10%)	10(6.9%)	17(13.7%)	0.067

Data are presented as mean±SD, or *n* (%). Differences between groups were determined by independent group *t* tests(mean) and Chi-squared tests or Fisher exact test (proportions).

Table 3 laboratory characteristics of PB in children

Laboratory information	Patients (n=269)	Patients with single FOB (n=144)	Patients with multiple FOB (n=125)	P
WBC($\times 10^9/L$)	8.6 \pm 4.4	8.2 \pm 4.4	9.1 \pm 4.5	0.108
N%	71.2 \pm 11.5	67.7 \pm 11.7	75.2 \pm 9.9	0.000
L%	21.1 \pm 9.6	23.9 \pm 10.1	17.9 \pm 7.7	0.000
PLT($\times 10^9/L$)	263.4 \pm 88.8	260 \pm 98.2	265.9 \pm 76.2	0.592
ESR, mm/h	30.0(21.0-42.3)	30.0(22.0-41.5)	29.0(21.0-44.0)	0.800
CRP, mg/L	39.4(19.0-76.0)	31.4(16.2-62.4)	58.3(29.8-86.2)	0.003
PCT, ng/ml	0.25(0.12-0.65)	0.20(0.10-0.49)	0.35(0.15-0.86)	0.001
IL-6, pg/ml	42.4(24.2-79.2)	38.1(20.6-71.1)	52.6(30.4-92.9)	0.010
LA, mol/l	2.67(2.11-3.29)	2.52(2.07-3.15)	2.76(2.25-3.43)	0.047
AST, U/L	39.0(30.0-58.0)	36.0(29.0-54.0)	43.0(31.0-61.0)	0.033
ALT, U/L	17.0(13.0-34.0)	15.0(12.0-26.0)	21.0(13.0-38.8)	0.018
LDH, U/L	532.0(396.0-706.0)	460.0(358.5-573.8)	625.0(460.0-809.0)	0.000
FER, ng/L	157.1(79.2-311.2)	106.0(63.9-193.3)	233.8(121.6-412.1)	0.000
FG, g/L	4.2(3.5-4.6)	4.2(3.5-4.6)	4.2(3.4-4.6)	0.896
D-dimer, mg/L	0.3(0.2-0.8)	0.2(0.1-0.5)	0.5(0.2-1.1)	0.000

Data are presented as mean \pm SD and median (25th–75th percentile). Differences between groups were determined by the independent group *t* tests(mean \pm SD) and Mann-Whitney *U* test (medians). WBC White blood cell, N Peripheral neutrophils, L Peripheral lymphocytes, PLT Platelets, ESR Erythrocyte sedimentation rate, CRP C-reactive protein, PCT Procalcitonin, IL-6 Interleukin (IL)-6, LA Lactic acid, AST Aspartate aminotransferase, ALT Alanine aminotransferase, LDH Lactic dehydrogenase, FER Ferritin, FG Fibrinogen.

Table 4 Imaging characteristics of PB in children.

Imaging features	Patients (n=269)	Patients with single FOB (n=144)	Patients with multiple FOB (n=125)	p
Consolidation (n,%)	262(97.4%)	137(95.1%)	125(100%)	0.012
Atelectasis (n,%)	125(46.5%)	64(44.4%)	61(48.8%)	0.475
Pleural effusion (n,%)	127(47.9%)	56(38.9%)	71(56.8%)	0.003
Pleural thickening (n,%)	170(63.2%)	89(61.8%)	81(64.8%)	0.612

Data are presented as *n* (%). Differences between groups were determined by Chi-squared tests

Table 5 Management of PB in children

Management	Patients (n=269)	Patients with single FOB (n=144)	Patients with multiple FOB (n=125)	p
Macrolides (n,%)	269(100%)	144(100%)	125(100%)	1.000
Combined application of antibiotics (n, %)	261(97%)	138(95.8%)	123(98.4%)	0.216
Glucocorticoid (n,%)	257(95.5%)	133(92.4%)	123(98.4%)	0.021
IVIG (n,%)	55(20.4%)	21(14.6%)	34(27.2%)	0.010
Admission to ICU (n,%)	12(4.5%)	8(5.6%)	4(3.2%)	0.351
Mechanical ventilation (n,%)	35(13.0%)	11(9.7%)	24(16.8%)	0.085

Data are presented as *n* (%). Differences between groups were determined by Chi-squared tests

Table 6 Multivariate logistic regression analysis for factors in patients with multiple FOB therapy

Variable	B	S.E.	Wald	P-value	OR	95%CI	
						Lower	Upper
N>75.5%	1.329	0.31	18.427	0.000	3.777	2.059	6.930
LDH>598.5U/L	1.004	0.335	8.974	0.003	2.729	1.415	5.263
DD>0.45mg/L	0.821	0.317	6.721	0.01	2.272	1.222	4.226