Supplementary Material

Figure S1 Flow chart of the inclusion process of the study population

Abbreviations: CRF, case record file; ID, identification.

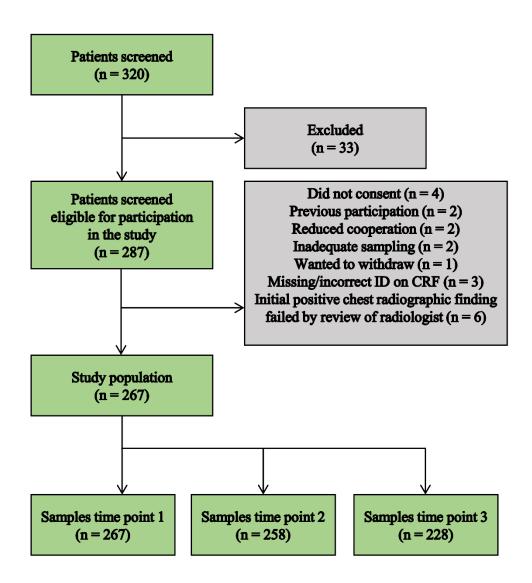


Table S1 Baseline characteristics of 267 hospitalized patients with community-acquired pneumonia

| Characteristics | Patients | Missing data |
|--------------------------------------|------------|--------------|
| Demographics | | |
| Age, (years) | 66 (52-78) | |
| Male gender, n (%) | 140 (52.4) | |
| Active smoker, n (%) | 65 (24.4) | 1 |
| Nursing home resident, n (%) | 4 (1.5) | |
| Comorbid conditions, n (%) | 172 (64.4) | |
| Cardiovascular disease ^a | 74 (27.7) | |
| COPD | 60 (22.5) | |
| Immunocompromised ^b | 48 (18.0) | |
| Autoimmune disease ^c | 34 (12.7) | |
| Diabetes mellitus | 33 (12.4) | |
| Renal disease | 32 (12.0) | |
| Neurological disease ^d | 19 (7.1) | |
| Dementia | 15 (5.6) | |
| Liver disease | 4 (1.5) | |
| Vaccination status, n (%) | | |
| Influenza vaccination (<1 year) | 66 (33.3) | 69 |
| Pneumococcal vaccination (<10 years) | 25 (12.5) | 68 |
| Severity of illness, n (%) | | |
| CURB-65 ≥3 | 97 (37.9) | 11 |
| ICU admission | 48 (18.0) | |
| Etiology, n (%) | | |

| Bacterial | 75 (28.1) |
|-----------------|------------|
| Viral | 41 (15.4) |
| Viral-bacterial | 51 (19.1) |
| Unknown 1 | 100 (37.5) |

Data are presented as medians (25th - 75th percentile) or No. (%). Abbreviations: COPD, chronic obstructive pulmonary disease; CURB-65, Confusion, Urea, Respiratory rate, Blood pressure, Age≥65; ICU, intensive care unit.

^aHeart failure, coronary heart disease, cerebrovascular disease and/or peripheral artery disease.

^bPrimary or secondary immunodeficiency, active malignancy, immunosuppressive drugs.

^cRheumatoid arthritis, systemic lupus erythematosus, inflammatory bowel disease, autoimmune hepatitis, Sjogren's disease, psoriasis.

^dCentral nervous disease, neuromuscular disease.

Table S2 Biomarker levels at hospital admission in 267 hospitalized patients with community-acquired pneumonia, stratified by short-term outcome

| Biomarker | Adverse outcome Non-adverse outcome | | p-value |
|--------------------------|-------------------------------------|-------------------|---------|
| | (n = 215) | (n = 51) | |
| WBC (10 ⁹ /L) | 12.2 (9.6-16.9) | 12.2 (9.1-16.4) | 0.792 |
| CRP (mg/L) | 249 (161-313) | 213 (143-284) | 0.072 |
| PCT (ng/mL) | 2.98 (0.52-6.79) | 0.56 (0.20-3.33) | 0.001 |
| Calprotectin (ug/L) | 3804 (2329-5776) | 4125 (2855-5259) | 0.754 |
| PTX3 (ng/mL) | 7.47 (4.41-10.69) | 4.23 (2.31-7.42) | < 0.001 |
| Presepsin (ng/mL) | 132.2 (36.3-345.3) | 42.1 (20.0-136.9) | 0.002 |

Data presented as medians (25th-75th percentile). Missing data on outcome in 1 patient.

Comparison performed with Mann-Whitney U test. Abbreviations: CRP, C-reactive protein, PCT, procalcitonin, PTX3, pentraxin 3, WBC, white blood cells