**Table S1: Results of univariate Kaplan-Meier analysis**

|  |  |  |
| --- | --- | --- |
|  | Results classified by median | *P*-value |
| N/L | <3.6464 | 0.002 |
| ≥3.6464 |
| CRP (mg/dL) | <2.555 | <0.001 |
| ≥2.555 |
| AST (U/L) | <23.000 | 0.001 |
| ≥23.000 |
| ALB (g/L) | <38.600 | 0.002 |
| ≥38.600 |
| sCr (μmol/L) | <66.300 | 0.120 |
| ≥66.300 |
| BUN (mmol/L) | <4.1900 | <0.001 |
| ≥4.1900 |
| D-dimer (μg/mL) | <0.8300 | <0.001 |
| ≥0.8300 |
| Age (years) | <56.000 | <0.001 |
| ≥56.000 |
| T2DM | N/A | 0.012 |
| Hypertension | N/A | <0.001 |
| CHD | N/A | 0.255 |

Abbreviations: N/L, ratio of neutrophils to lymphocytes; CRP, C-reactive protein; AST, aspartate aminotransferase; ALB, serum albumin; sCr, serum creatinine; BUN, blood urea nitrogen; T2DM, type 2 diabetes mellitus; CHD, coronary heart disease.

**Table S2: Baseline characteristics of critically ill patients**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Survivors(n = 55) | Non-survivors(n = 50) | *P*-value |
| Males (%)  | 34 (61.82%) | 31 (62%) | 1.000 |
| Age (years) | 60.82 (11.66) | 67.82 (15.73) | 0.011 |
| Onset time (days) | 7.11 (3.91) | 6.54 (3.71) | 0.447 |
| Hypertension (%) | 25 (45.45%) | 37 (74%) | 0.005 |
| T2DM (%) | 16 (29.09%) | 17 (34%) | 0.675 |
| CHD (%) | 5 (9.09%) | 7 (14%) | 0.544 |
| COPD (%) | 2 (3.64%) | 3 (6%) | 0.667 |
| WBC (109) | 5.66 (3.92–7.04) | 5.73 (4.18–7.95) | 0.388 |
| N/L | 6.31 (3.12) | 9.24 (7.84) | 0.016 |
| ALT (U/L) | 25.80 (15.20–38.70) | 21.05 (14.33–29.48) | 0.096 |
| AST (U/L) | 29.40 (25.00–50.60) | 31.50 (22.40–44.33) | 0.646 |
| ALB (g/L) | 36.80 (5.18) | 35.55 (4.30) | 0.183 |
| sCr (μmol/L) | 72.30 (59.30–85.30) | 76.00 (58.00–109.20) | 0.233 |
| BUN (mmol/L) | 4.94 (3.50–6.60) | 6.60 (4.60–10.58) | <0.001 |
| CRP (mg/dL) | 6.10 (2.78–8.20) | 6.10 (3.53–8.84) | 0.669 |
| D-dimer (μg/mL) | 2.65 (0.66–8.48) | 6.21 (1.27–19.73) | 0.007 |
| corticosteroid use (d) | 10.60 (7.14) | 7.98 (5.43) | 0.036 |
| Mean corticosteroid (mg/d) | 44.57 (30.86) | 49.34 (31.80) | 0.437 |
| APACHE II score | 8.51 (3.32) | 12.44 (3.41) | <0.001 |

Abbreviations: Onset time, time from onset to admission (days); T2DM, type 2 diabetes mellitus; CHD, coronary heart disease; COPD, chronic obstructive pulmonary disease; WBC, white blood cell count; N/L, ratio of neutrophils to lymphocytes; ALT, alanine transaminase; AST, aspartate aminotransferase; ALB, serum albumin; sCr, serum creatinine; BUN, blood urea nitrogen; CRP, C-reactive protein; corticosteroid use (d), duration of methylprednisolone use (days); Mean corticosteroid, average daily dose of methylprednisolone; APACHE II, Acute Physiology And Chronic Health Evaluation II.

**Table S3: Baseline characteristics of critically ill patients with and without hypertension**

|  | Before PSM | After PSM |
| --- | --- | --- |
|  | Non-hypertension (n = 43) | Hypertension(n = 62) | *P*-value | Non-hypertension(n = 31) | Hypertension(n = 31) | *P*-value |
| Males (%) | 27 (62.79%) | 38 (61.29%) | 1.000 | 18 (58.06%) | 20 (64.52%) | 0.795 |
| Age (years) | 58.53 (13.51) | 68.05 (13.30) | 0.001 | 60.00 (12.98) | 62.74 (14.49) | 0.436 |
| Onset time (day) | 7.09 (4.01) | 6.66 (3.68) | 0.570 | 7.26 (4.33) | 6.29 (3.80) | 0.353 |
| T2DM (%) | 7 (16.28%) | 26 (41.94%) | 0.006 | 7 (22.58%) | 10 (32.26%) | 0.570 |
| CHD (%) | 4 (9.30%) | 8 (12.90%) | 0.757 | 3 (9.68%) | 2 (6.45%) | 1.000 |
| COPD (%) | 1 (2.33%) | 4 (6.45%) | 0.646 | 0.00 | 2.00 | N/A |
| WBC (109) | 5.26 (3.64–6.70) | 6.06 (4.30–7.43) | 0.116 | 5.66 (3.67–7.51) | 6.15 (4.31–7.49) | 0.583 |
| N/L | 5.97 (4.44–8.75) | 6.18 (3.70–10.05) | 0.820 | 5.81 (4.13–8.61) | 7.16 (4.51–12.71) | 0.418 |
| ALT (U/L) | 27.30 (16.70–38.70) | 19.40 (14.05–29.48) | 0.013 | 25.20 (15.50–34.20) | 23.70 (14.20–36.90) | 0.414 |
| AST (U/L) | 33.00 (27.10–58.60) | 28.50 (22.00–42.15) | 0.017 | 32.80 (27.10–45.60) | 29.40 (21.00–44.70) | 0.208 |
| ALB (g/L) | 36.60 (5.39) | 35.93 (4.36) | 0.481 | 35.74 (4.65) | 36.45 (4.73) | 0.554 |
| sCr (μmol/L) | 71.60 (59.90–77.60) | 77.10 (57.53–111.50) | 0.144 | 68.50 (57.90–76.00) | 80.90 (58.00–114.30) | 0.108 |
| BUN (mmol/L) | 5.20 (3.80–6.60) | 5.85 (4.12–9.04) | 0.077 | 5.49 (3.80–6.40) | 5.80 (4.14–8.46) | 0.360 |
| CRP (mg/dL) | 6.10 (3.56–7.55) | 6.10 (3.15–9.01) | 0.338 | 6.10 (3.56–7.56) | 6.10 (3.29–8.49) | 0.612 |
| D-dimer (μg/mL) | 3.38 (0.83–12.16) | 3.31 (1.14–9.71) | 0.767 | 2.21 (0.83–9.06) | 4.28 (1.54–11.93) | 0.151 |
| corticosteroid use (d) | 11.00 (9.00–17.00) | 7.00 (2.00–12.00) | 0.002 | 10.00 (6.00–14.00) | 10.00 (7.00–12.00) | 0.667 |
| Mean corticosteroid (mg/day) | 48.89 (40.00–66.67) | 40.00 (33.31–60.71) | 0.042 | 47.27 (40.00–67.27) | 40.00 (38.33–57.14) | 0.173 |
| APACHE II score | 8 (6–11) | 11 (9–14) | <0.001 | 8 (6–12) | 10 (8–13) | 0.086 |

Abbreviations: Onset time, time from onset to admission (days); T2DM, type 2 diabetes mellitus; CHD, coronary heart disease; COPD, chronic obstructive pulmonary disease; WBC, white blood cell count; N/L, ratio of neutrophils to lymphocytes; ALT, alanine transaminase; AST, aspartate aminotransferase; ALB, serum albumin; sCr, serum creatinine; BUN, blood urea nitrogen; CRP, C-reactive protein; corticosteroid use (d), duration of methylprednisolone use (days); Mean corticosteroid, average daily dose of methylprednisolone; APACHE II, Acute Physiology And Chronic Health Evaluation II.