Table-1. Evaluation of variables affecting 1-month and 3-month mortality

|  |  |  |
| --- | --- | --- |
|  | **1 Month Mortality** | **3 Month Mortality** |
| **(-)** | **(+)** | **p** | **(-)** | **(+)** | **p** |
| **Median / IQR** | **Median/ IQR** | **Median/ IQR** | **Median/ IQR** |
| Age (year) | 72.50/ 19.00 | 74.00/ 18.00 | 0.245 | 71.00/ 18.50 | 74.50/ 19.00 | 0.134 |
| BMI (kg/m2) | 25.90/ 6.90 | 24.20/ 5.17 | **0.001** | 26.20/ 8.20 | 24.20/ 5.34 | **<0.001** |
| CCIS | 6.00/ 4.00 | 7.00/ 3.00 | **<0.001** | 6.00/ 4.00 | 7.00/ 2.00 | **0.001** |
| CURB-65 | 3.00/ 2.00 | 4.00/ 1.00 | **<0.001** | 3.00/ 1.00 | 4.00/ 1.00 | **<0.001** |
| APACHE II | 23.00/ 8.00 | 27.00/ 9.00 | **<0.001** | 22.00/ 7.00 | 27.00/ 9.00 | **<0.001** |
| SOFA | 6.00/ 3.00 | 8.00/ 4.00 | **0.001** | 6.00/ 3.50 | 8.00/ 4.00 | **<0.001** |
| Length of stay in ICU (day) | 5.00/ 13.00 | 4.50/ 9.00 | 0.111 | 4.00/ 9.00 | 5.50/ 13.00 | 0.562 |
| Duration of MV (day) | 0.00/ 6.00 | 2.00/ 5.00 | **<0.001** | 0.00/ 4.00 | 2.00/ 7.00 | **<0.001** |
|  | **n (%)** |  | **n (%)** |  |
| **Gender** | Male | 64 **(**46.4%) | 67(72.8%) | **<0.001** | 49(43.8%) | 82(69.5%) | **<0.001** |
| Female | 74 **(**53.6%) | 25(27.2%) | 63(56.3%) | 36(30.5%) |
| **Sepsis/Septic shock** | Sepsis | 112(81.2%) | 34(37.0%) | **<0.001** | 100(89.3%) | 46(39.0%) | **<0.001** |
| Septic shock | 26(18.8%) | 58(63.0%) | 12(10.7%) | 72(61.0%) |
| **Discharge**  | No | 5(3.6%) | 75(81.5%) | **<0.001** | 2(1.8%) | 78(66.1%) | **<0.001** |
| Yes  | 133(96.4%) | 17(18.5%) | 110(98.2%) | 40(33.9%) |
| Need for RRT | No | 113(81.9%) | 72(78.3%) | 0.497 | 95(84.8%) | 90(76.3%) | 0.102 |
| Yes | 25(18.1%) | 20(21.7%) | 17(15.2%) | 28(23.7%) |
| Need for inotropic support | No | 105(76.1%) | 28(30.4%) | **<0.001** | 98(87.5%) | 35(29.7%) | **<0.001** |
| Yes | 33(23.9%) | 64(69.6%) | 14(12.5%) | 83(70.3%) |
| Antibiyotic | Monotherapy | 68(49.3%) | 45(48.9%) | 0.957 | 59(52.7%) | 54(45.8%) | 0.294 |
| Combined therapy | 70 (50.7%) | 47 (51.1%) | 53(47.3%) | 64(54.2%) |
| *Continuous variables are expressed as median (IQR),Mann Whitney u Test p=Level of Significance, p<0,05**Categorical variables are expressed as either frequency (percentage). Chi square Test p=Level of Significance, p<0,05*BMI: Body Mass Index; CCIS: Charlson Comorbidity Index score; CURB-65:confusion, urea, respiratory rate, blood pressure, age ⩾65; APACHE-II: Acute Physiologic and Chronic Health Evaluation-II, SOFA: Sequential Organ Failure Assessment; ICU: Intensive Care Unit; MV: Mechanical Ventilation; RRT: Renal Replacement Therapy |

Table 2. Evaluation of CRP PCT and leukocyte values ​​for 1-month and 3-month mortality

|  |  |  |
| --- | --- | --- |
|  |  **1 Month Mortality** |  **3 Month Mortality** |
| (-) | (+) |  p | (-) | (+) |  p |
| **Median / IQR** | **Median / IQR** | **Median / IQR** | **Median / IQR** |
| CRP Day 1 (mg/L) | 98.90/ 138.00 | 128.40/ 125.50 | **0.049** | 98.00/ 147.50 | 117.00/ 115.00 | **0.028** |
| CRP Day 3 (mg/L) | 108.00/ 88.50 | 145.00/ 135.00 | **0.008** | 99.20/ 94.00 | 134.00/ 129.00 | **0.001** |
| CRP Day 7 (mg/L) | 78.00/ 88.00 | 68.80/ 161.00 | 0.176 | 68.15/ 104.70 | 92.45/ 131.00 | **0.008** |
| CRP Day 10 (mg/L) | 78.00/ 113.70 | 68.00/ 186.00 | 0.793 | 56.00/ 64.50 | 84.00/ 150.00 | **0.021** |
| PCT Day 1 (ng/mL) | 0.87/ 2.55 | 1.15/ 10.40 | 0.066 | 0.77/ 2.59 | 1.15/ 7.99 | **0.019** |
| PCT Day 3 (ng/mL) | 0.50/ 2.59 | 3.40/ 13.30 | **<0.001** | 0.42/ 2.42 | 2.40/ 9.20 | **<0.001** |
| PCT Day 7 (ng/mL) | 0.55/ 1.79 | 1.03/ 3.18 | 0.126 | 0.45/ 1.91 | 0.95/ 3.16 | **0.027** |
| PCT Day 10 (ng/mL) | 0.79/ 1.56 | 2.55/ 6.41 | **0.020** | 0.79/ 1.19 | 1.75/ 4.87 | **0.048** |
| Leukocyte Day 1 (x103 µL) | 11.50/ 10.10 | 11.60/ 11.80 | 0.429 | 10.80/ 7.80 | 12.85/ 12.30 | **0.049** |
| Leukocyte Day 3 (x103 µL) | 10.01/ 6.50 | 13.90/ 11.80 | **0.018** | 9.55/ 5.30 | 13.80/ 10.90 | **<0.001** |
| Leukocyte Day 7 (x103 µL) | 9.40/ 5.00 | 11.70/ 9.36 | 0.062 | 8.90/ 4.00 | 11.85/ 8.60 | **0.002** |
| Leukocyte Day 10 (x103 µL) | 8.60/ 7.70 | 15.75/ 5.70 | **<0.001** | 7.20/ 4.10 | 15.50/ 7.80 | **<0.001** |
| Hemoglobin(g/dL) | 10.60/ 3.50 | 10.20/ 3.30 | 0.998 | 10.65/ 3.30 | 10.20/ 3.40 | 0.885 |
| Platelet (x103 µL) | 216.00 /120.00 | 221.00/ 174.00 | 0.270 | 217.00/ 102.00 | 208.00/ 167.00 | 0.753 |
|  GFR(mL/dk) | 64.00/ 57.00 | 53.50/ 54.70 | 0.420 | 62.00/ 57.00 | 61.00/ 56.00 | 0.873 |
| Creatinine (mg/dL) | 1.07/ 1.00 | 1.20/ 1.12 | 0.319 | 1.10/ 1.00 | 1.01/ 1.14 | 0.589 |
| BUN (mg/dL) | 56.50/ 70.00 | 53.00/ 34.50 | 0.698 | 56.00/ 61.70 | 54.00/ 37.00 | 0.161 |
| AST (IU/L) | 22.50/ 18.00 | 23.00/ 40.00 | 0.097 | 19.50/ 14.50 | 25.50/ 25.00 | **0.001** |
| ALT (IU/L) | 14.50/ 14.00 | 18.00/ 45.00 | **0.039** | 14.00/ 11.00 | 18.00/ 32.00 | **0.028** |
| Total Bilirubin (mg/dL) | 0.50/ 0.60 | 1.15/ 1.40 | **<0.001** | 0.50/ 0.50 | 1.00/ 1.10 | **<0.001** |
| Albumin (g/L) | 24.00/ 27.90 | 3.30/ 22.30 | **<0.001** | 27.00/ 30.25 | 23.45/ 22.40 | **<0.001** |
| *Continuous variables are expressed as median (IQR),Mann Whitney u Test p=Level of Significance, p<0,05*CRP: C-reactive protein; PCT: Procalcitonin; GFR: Glomerular Filtration Rate; BUN: Blood Urea Nitrogen; AST: Aspartate Aminotransferase; ALT: Alanine Aminotransferase |

Table-3. Logistic Regression Analysis to Determine the Factors Affecting 1-Month Mortality

|  |  |  |
| --- | --- | --- |
|  | **Univariate Logistic Regression** | **Multivariate Logistic Regression** |
| **Wald** | **p** | **OR** | **95% C.I. for OR** | **Wald** | **p** | **OR** | **95% C.I. for OR** |
| **Lower** | **Upper** | **Lower** | **Upper** |
| Age (year) | 4.180 | **0.041** | 1.019 | 1.001 | 1.037 | 3.805 | 0.051 | 0.973 | 0.947 | 1.000 |
| BMI (kg/m2) | 9.469 | **0.002** | 0.936 | 2.897 | 2.976 | 11.665 | **0.001** | 0.916 | 0.871 | 0.963 |
| Gender (ref kat:female) | 15.217 | **<0.001** | 3.099 | 1.755 | 5.470 | 14.542 | **<0.001** | 4.285 | 2.028 | 9.051 |
| CCIS | 12.877 | **<0.001** | 1.227 | 1.097 | 1.372 | 9.995 | **0.002** | 1.334 | 1.116 | 1.596 |
| CURB-65 | 31.581 | **<0.001** | 2.600 | 1.863 | 3.629 | 14.525 | **<0.001** | 2.470 | 1.551 | 3.932 |
| APACHE-II | 20.952 | **<0.001** | 1.096 | 1.054 | 1.140 | 5.007 | **0.025** | 1.077 | 1.009 | 1.149 |
| SOFA | 14.854 | **<0.001** | 1.180 | 1.085 | 1.284 | 0.005 | 0.942 | 0.995 | 0.871 | 1.137 |
| LOS ICU | 5.114 | **0.024** | 0.962 | 2.931 | 2.995 | 10.329 | **0.001** | 0.924 | 0.880 | 0.970 |
| Need for RRT | 2.459 | 0.498 | 1.256 | 2.650 | 2.425 |  |  |  |  |  |
| Antibiyotic Mono /Comb | 2.003 | 0.957 | 1.015 | 2.599 | 1.720 |  |  |  |  |  |
| CRP Day 1(mg/L) | 2.427 | 0.119 | 1.002 | 2.999 | 1.005 | 0.005 | 0.943 | 1.000 | 0.996 | 1.004 |
| PCT Day 1 (ng/mL) | 2.571 | 0.109 | 1.017 | 2.996 | 1.039 | 0.378 | 0.539 | 0.990 | 0.957 | 1.023 |
| Leukocyte Day 1(x103 µL) | 3.927 | **0.048** | 1.034 | 1.000 | 1.069 | 0.321 | 0.571 | 1.012 | 0.971 | 1.054 |
| *Wald: test statistics, OR: odds radio, CI: Confidence interval. Statistically significant p-values are in bold*BMI: Body Mass Index; CCIS: Charlson Comorbidity Index score; CURB-65:confusion, urea, respiratory rate, blood pressure, age ⩾65; APACHE-II: Acute Physiologic and Chronic Health Evaluation-II, SOFA: Sequential Organ Failure Assessment; LOS ICU: Length of stay in Intensive Care Unit; RRT: Renal Replacement Therapy; Mono/Comb: Monotherapy/ Combined therapy; CRP: C-reactive protein; PCT: Procalcitonin |

Table-4. Logistic Regression Analysis to Determine the Factors Affecting 3-Month Mortality

|  |  |  |
| --- | --- | --- |
|  | **Univariate Logistic Regression** | **Multivariate Logistic Regression** |
| **Wald** | **p** | **OR** | **95% C.I. for OR** | **Wald** | **p** | **OR** | **95% C.I. for OR** |
| **Lower** | **Upper** | **Lower** | **Upper** |
| Age (year) | 4.744 | **0.029** | 1.019 | 1.002 | 1.036 | 4.626 | **0.031** | 0.969 | 0.942 | 0.997 |
| BMI (kg/m2) | 15.713 | **<0.001** | 0.918 | 0.879 | 0.957 | 17.269 | **<0.001** | 0.881 | 0.829 | 0.935 |
| Gender (ref kat:female) | 15.141 | **<0.001** | 2.929 | 1.705 | 5.032 | 20.324 | **<0.001** | 0.158 | 0.071 | 0.352 |
| CCIS | 11.803 | **0.001** | 1.214 | 1.087 | 1.356 | 5.349 | **0.021** | 1.261 | 1.036 | 1.535 |
| CURB-65 | 48.032 | **<0.001** | 4.009 | 2.707 | 5.937 | 25.460 | **<0.001** | 4.081 | 2.363 | 7.047 |
| APACHE-II | 26.617 | **<0.001** | 1.121 | 1.073 | 1.171 | 8.654 | **0.003** | 1.105 | 1.034 | 1.182 |
| SOFA | 17.294 | **<0.001** | 1.217 | 1.110 | 1.336 | 1.473 | 0.225 | 0.913 | 0.787 | 1.058 |
| LOS ICU | 0.582 | 0.445 | 0.991 | 0.968 | 1.015 |  |  |  |  |  |
| Need for RRT | 2.633 | 0.105 | 1.739 | 0.891 | 3.391 | 0.968 | 0.325 | 1.618 | 0.620 | 4.221 |
| Antibiyotic Mono /Comb | 1.098 | 0.295 | 1.319 | 0.786 | 2.216 |  |  |  |  |  |
| CRP Day 1(mg/L) | 1.999 | 0.157 | 1.002 | 0.999 | 1.005 | 0.008 | 0.928 | 1.000 | 0.996 | 1.004 |
| PCT Day 1 (ng/mL) | 1.184 | 0.277 | 1.012 | 0.991 | 1.033 |  |  |  |  |  |
| Leukocyte Day 1 (x103 µL) | 6.353 | **0.012** | 1.047 | 1.010 | 1.085 | 1.531 | 0.216 | 1.031 | 0.983 | 1.081 |
| *Wald: test statistics, OR: odds radio, CI: Confidence interval. Statistically significant p-values are in bold.*BMI: Body Mass Index; CCIS: Charlson Comorbidity Index score; CURB-65:confusion, urea, respiratory rate, blood pressure, age ⩾65; APACHE-II: Acute Physiologic and Chronic Health Evaluation-II, SOFA: Sequential Organ Failure Assessment; LOS ICU: Length of stay in Intensive Care Unit; RRT: Renal Replacement Therapy; Mono/Comb: Monotherapy/ Combined therapy; CRP: C-reactive protein; PCT: Procalcitonin |