s-table 2: Additional demographics and clinical parameters in survivors and non-survivors

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| --- | --- | --- | --- | --- |
| Cohort | All (n=172) | Died (n=70) | Survived (n=102) | p-value |
| **Demographics** |  |  |  |  |
| Charlson Comorbidity Index | 3 (1 – 4) | 3 (2 – 4) | 3 (1 – 3) | 0.340 |
| Clinical Frailty Score | 2 (2 – 2) | 2 (1 – 3) | 2 (1 – 2) | 0.146 |
| BMI | 29 (26 – 34) | 29 (27 – 33) | 30 (26 – 35) | 0.353 |
| Comorbidities |  |  |  | 0.292 |
|  Diabetes mellitus | 54 (31.4) | 27 (38.6) | 27 (26.5) |  |
|  Obesity | 68 (39.5) | 22 (31.4) | 46 (45.1) |  |
|  Hypertension | 63 (36.6) | 26 (37.1) | 37 (36.3) |  |
|  Ischaemic heart disease | 17 (9.9) | 8 (11.4) | 9 (8.8) |  |
|  COPD / Asthma | 26 (15.1) | 8 (11.4) | 18 (17.7) |  |
|  Chronic kidney disease | 17 (9.9) | 9 (12.9) | 8 (7.8) |  |
|  None | 51 (29.7) | 17 (24.3) | 34 (33.3) |  |
| Ethnicity |  |  |  | 0.278 |
|  White | 93 (54.1) | 42 (60.0) | 51 (50.0) |  |
|  Asian | 57 (33.1) | 20 (28.6) | 37 (36.3) |  |
|  Black | 11 (6.4) | 5 (7.1) | 6 (5.9) |  |
|  Mixed race | 3 (1.7) | 2 (2.9) | 1 (1.0) |  |
|  Other | 8 (4.7) | 1 (1.4) | 7 (6.9) |  |
| SOFA score | 8 (3 – 12) | 8 (4 – 12) | 7 (4 – 9) | 0.079 |
| **ARDS severity** |  |  |  | 0.017 |
| Mild | 29 (16.9) | 7 (10.0) | 22 (21.6) |  |
| Moderate | 101 (58.7) | 39 (55.7) | 62 (60.8) |  |
| Severe | 42 (24.4) | 24 (34.3) | 18 (17.7) |  |
| **Clinical parameters** |  |  |  |  |
| MAP (mmHg) | 73 (68 – 81) | 71 (65 – 79) | 75 (69 – 85) | 0.013 |
| Heart rate (beats/minute) | 89 (74 – 102) | 90 (71 – 101)  | 89 (78 – 101) | 0.778 |
| PaO2:FiO2 ratio | 19 (14 – 24) | 17 (13 – 22) | 21 (16 – 26) | 0.00070 |
| PaCO2 (kPa) | 7.8 (6.4 – 9.4) | 8.9 (7.2 – 10.3) | 7.1 (6.1 – 8.9) | <0.0001 |
| pH  | 7.31 (7.26–7.38) | 7.29 (7.23–7.34) | 7.35 (7.29–7.40) | <0.0001 |
| CXR opacification score (0-16) | 8 (6 – 8) | 8 (8 – 10) | 8 (6 – 8) | <0.0001 |
| Cumulative fluid balance (mL) | -166 (+723 - -911) | -831 (-64 - -1500) | +312 (+944 - -391) | <0.0001 |
| WBC (x 109 L-1, n=172) | 13 (10 – 16) | 14 (10 – 18) | 13 (9 – 16) | 0.230 |
| CRP (mg mL-1, n=169) | 167 (107 – 252) | 175 (115–266) | 153 (95–239) | 0.187 |
| HS troponin-I (ng L-1, n=127) | 29 (9 – 243) | 54 (12 – 370) | 25 (8 – 158) | 0.087 |
| D-dimer (ng mL-1, n=137) | 1580 (658 – 3839) | 2285 (691 – 5547) | 1131 (634 – 3292) | 0.067 |
| **Ventilatory parameters** |  |  |  |  |
| Mean tidal volume (mL kg-1 PBW) | 7.1 (6.6 – 7.8) | 7.1 (6.7 – 7.9) | 7.0 (6.5 – 7.8) | 0.982 |
| Percentage time TV between 6-8mLs kg-1 PBW (%) | 66 (52 – 76) | 67 (53 – 86) | 65 (51 – 75) | 0.059 |
| Ventilator rate (breaths min-1) | 20 (19 – 22) | 20 (20 – 24) | 20 (18 – 22) | <0.0001 |
| PEEP (cm H2O) | 8 (6 – 10) | 10 (8 – 10) | 8 (5 – 10) | 0.012 |
| Ppeak (cm H2O) | 27 (22 – 30) | 28 (26 – 31) | 25 (20 – 30) | <0.0001 |
| Cdyn (mL cm H2O-1) | 27 (22 – 34) | 24 (21 – 28) | 31 (23 – 37) | <0.0001 |
| FiO2 (%) | 55 (45 – 65) | 60 (50 – 75) | 50 (40 – 60) | <0.0001 |
| **Additional TTE parameters** |  |  |  |  |
| RV systolic impairment (RVFAC %) |  |  |  | 0.247 |
| Mild (25 – 35) | 54 (31.4) | 25 (35.7) | 29 (28.4) |  |
| Moderate (18 – 24.9) | 24 (14.0) | 16 (22.9) | 8 (7.8) |  |
| Severe (<18) | 9 (5.2) | 5 (7.1) | 4 (3.9) |  |
| RV dilation (RVEDA cm2) |  |  |  | 0.887 |
| Mild (29 – 32) | 26 (15.1) | 12 (17.1) | 14 (13.7) |  |
| Moderate (32 – 38) | 13 (7.5) | 5 (7.1) | 8 (7.8) |  |
| Severe (>38) | 2 (1.2) | 1 (1.4) | 1 (1.0) |  |
| Tricuspid regurgitation |  |  |  | 0.270 |
| None | 57 (33.1) | 23 (32.9) | 34 (33.3) |  |
| Mild | 104 (60.5) | 40 (57.1) | 64 (62.7) |  |
| Moderate | 11 (6.4) | 7 (10.0) | 4 (3.9) |  |
| Severe | 0 | 0 | 0 |  |
| Pulmonary regurgitation |  |  |  | 0.344 |
| None | 144 (83.7) | 60 (85.7) | 84 (82.4) |  |
| Mild | 28 (16.3) | 10 (14.3) | 18 (17.6) |  |
| Moderate | 0 | 0 | 0 |  |
| Severe | 0 | 0 | 0 |  |
| LV systolic impairment |  |  |  |  |
| Mild | 6 (3.5) | 1 (1.4) | 5 (4.9) |  |
| Moderate | 5 (2.9) | 1 (1.4) | 4 (3.9) |  |
| Severe  | 5 (2.9) | 3 (4.3) | 2 (2.0) |  |
| LV end-diastolic eccentricity index | 1.03 (0.98 – 1.13) | 1.04 (0.99 – 1.13) | 1.03 (0.97 – 1.13) | 0.442 |
| LV end-systolic eccentricity index  | 1.03 (0.99 – 1.14) | 1.04 (1 – 1.14) | 1.03 (0.98 – 1.13) | 0.312 |
| **Management** |  |  |  |  |
| Vasopressor dose ($μ$g kg-1 minute-1) | 0.06 (0 – 0.17) | 0.09 (0.01 – 0.24) | 0.04 (0 – 0.11) | 0.0017 |
| Use of 2nd vasopressor / inotrope n (%) | 19 (11.0)  | 10 (14.3) | 9 (8.8) | 0.262 |
| Choice of 2nd vasopressor / inotrope n (%) |  |  |  | 0.969 |
| Vasopressin | 10 (5.8) | 5 (7.1) | 5 (5.9) |  |
| Adrenaline | 9 (5.2) | 5 (7.1) | 4 (3.9) |  |
| Milrinone | 1 (0.6) | 1 (1.4) | 0 |  |
| Tracheostomy performed n (%) | 98 (57.0) | 25 (35.7) | 73 (71.6) | <0.0001 |
| Mechanical ventilation duration (days) | 17 (10 – 24) | 14 (9 – 21) | 18 (11 – 26) | 0.064 |
| ICU length of stay (days) | 20 (12 – 29) | 14 (10 – 23) | 23 (15 – 33) | <0.0001 |

s-table 2 legend: ARDS = acute respiratory distress syndrome. MAP = Mean arterial blood pressure. PaCO2 = partial pressure of arterial carbon dioxide. PaO2 = partial pressure of arterial oxygen. FiO2 = fraction of inspired oxygen. Ppeak = peak inspiratory airway pressure. PEEP = positive end-expiratory pressure. P/F ratio = PaO2:FiO2 ratio. TV = tidal volume. WBC = white blood cell count. CRP = C-reactive protein. HS = high sensitivity. CXR = chest radiograph. PBW = predicted body weight. Cdyn = dynamic compliance. Categorical data was compared using a chi squared test. Continuous data was compared using a Mann Whitney U test.