**Supplemental Material**

**Suppl. Table 1. Further laboratory results and clinical characteristics**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **All (n=1248)** | | **No AKI (n=761)** | | **All AKI (n=487)** | | **AKI1 (n=248)** | | **AKI2 (n=64)** | | **AKI3 (n=175)** | | **p\*** | | **p**⁋ **for trend** | |
| **Laboratory results** | |  | |  | |  | |  | |  | |  | |  | |  | |
| **Urea**(mmol/l),Median (IQR) | 7.1 (4.6, 11.8) | | 5.6 (4.0, 8.1) | | 11.8 (7.2, 19.5) | | 11.6 (7.1, 16.7) | | 16.1 (9.8, 24.1) | | 10.5 (6.0, 21.2) | | < 0.001 | | < 0.001 | |
| **Sodium**(mmol/l), Median (IQR) | 137 (134, 140) | | 137 (134, 140) | | 137.0 (134.0, 141.0) | | 137.0 (134.0, 141.0) | | 138.0 (134.8, 146.2) | | 137.0 (133.0, 141.0) | | 0.09 | | 0.117 | |
| **Peak D-dimer**(mg/l),Median (IQR) (n=529) | 1553 (800, 3821) | | 1219 (670, 2222) | | 3310 (1330, 6660) | | 1865 (831, 3513) | | 2006 (1009, 4270) | | 5780 (3360, 7939) | | < 0.001 | | < 0.001 | |
| **Peak troponin**(ng/l),Median (IQR) (n=520) | 30.5 (13.0, 80.0) | | 19.0 (8.0, 39.0) | | 59.0 (28.2, 132.0) | | 38.0 (20.0, 94.5) | | 47.0 (31.0, 86.0) | | 86.0 (36.0, 220.0) | | < 0.001 | | < 0.001 | |
| **Peak CK, (UI/l)** Median (IQR) (n=350) | 228.5 (85.0, 649.2) | | 128.0 (68.0, 312.5) | | 381.0 (164.2, 1405.8) | | 262.0 (121.5, 535.5) | | 240.0 (111.0, 774.5) | | 626.0 (231.2, 2123.0) | | < 0.001 | | < 0.001 | |
| **Abnormal chest radiograph,** n (%) | 1077 (86.8%) | | 640 (84.8%) | | 437 (89.9%) | | 219 (88.7%) | | 56 (87.5%) | | 162 (92.6%) | | 0.029 | | 0.157 | |
| **ICU cohort,** n (%) (data available for n=131) |  | |  | |  | |  | |  | |  | |  | |  | |
| Mechanical ventilation | 127 (96.9%) | | 23 (92.0%) | | 104 (98.1%) | | 4 (100.0%) | | 3 (75.0%) | | 97 (99.0%) | | 0.11 | | 0.018 | |
| Vasopressors or inotropes | 82 (88.2%) | | 16 (76.2%) | | 66 (91.7%) | | 1 (33.3%) | | 3 (100.0%) | | 62 (93.9%) | | 0.053 | | 0.003 | |
| ECMO | 10 (7.6%) | | 0 (0.0%) | | 10 (9.4%) | | 1 (25.0%) | | 0 (0.0%) | | 9 (9.2%) | | 0.11 | | 0.218 | |

AKI, acute kidney injury;IQR, interquartile range; CK, creatine kinase; PE, pulmonary embolism; DVT, deep vein thrombosis; ICU, intensive care unit; ECMO, Extracorporeal membrane oxygenation

**\***comparison between AKI vs non-AKI

⁋comparison across AKI stage subgroups

**Suppl. Table 2. Univariate and multivariate Cox regression analyses of risk factors associated with mortality at 30 days**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variable** | **Unadjusted HR** | **95% CI** | **p value** | **Adjusted HR** | **95% CI** | **p value** |
| **Age** | 1.04 | 1.04-1.05 | 0.0000 | 1.04 | 1.03-1.05 | 0.0000 |
| **Male sex** | 1.36 | 1.09-1.71 | 0.0076 | 1.40 | |  |  | | --- | --- | | 1.10-1.78 | 1.80 | | 0.0055 |
| **Race: White ethnicity** | Ref | Ref | Ref | Ref | Ref | Ref |
| **Black** | 0.66 | 0.50-0.86 | 0.0023 | 0.87 | 0.65-1.18 | 0.3852 |
| **Asian** | 0.72 | 0.47-1.09 | 0.1232 | 0.95 | 0.62-1.47 | 0.8326 |
| **Mixed/Other** | 0.67 | 0.41-1.08 | 0.1020 | 1.11 | 0.66-1.87 | 0.6914 |
| **Unknown** | 0.56 | 0.36-0.88 | 0.0122 | 0.85 | 0.53-1.36 | 0.5016 |
| **CKD** | 2.32 | 1.86-2.9 | 0.0000 | 1.40 | 1.09-1.79 | 0.0090 |
| **Hypertension** | 1.49 | 1.19-1.86 | 0.0005 | 0.84 | 0.66-1.08 | 0.1764 |
| **CVD** | 1.77 | 1.42-2.20 | 0.0000 | 1.00 | 0.79-1.28 | 0.9715 |
| **Diabetes** | 1.07 | 0.85-1.34 | 0.5870 |  |  |  |
| **Malignancy** | 1.72 | 1.33-2.22 | 0.0000 | 1.26 | 0.96-1.66 | 0.1022 |
| **Neurological disease** | 2.09 | 1.71-2.94 | 0.0000 | 1.66 | 1.30-2.12 | 0.0000 |
| **Lung disease** | 1.21 | 0.96-1.54 | 0.1130 | 1.32 | 1.03-1.70 | 0.0286 |
| **Albumin** | 0.90 | 0.89-0.92 | 0.0000 | 0.94 | 0.92-0.97 | 0.0000 |
| **CRP** | 1.00 | 1.00-1.00 | 0.0000 | 1.00 | 1.00-1.0 | 0.0004 |
| **Neutrophil: Lymphocyte ratio** | 1.03 | 1.02-1.04 | 0.0000 | 1.00 | 0.99-1.01 | 0.7664 |

CKD, Chronic Kidney Disease; CVD, cardiovascular disease; ACE-I, angiotensin-converting enzyme inhibitor; ARB, angiotensin II receptor blocker; CI, confidence interval; HR, hazard ratio.

CKD was defined as baseline eGFR< 60ml/min/1.73m2

aVariables were entered into the model when the a level of risk factor was less than 0.1.