### Supplementary Table 1. Cox regression analysis of predictors for 28-day mortality excluding liver transplant recipients

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Univariable analysis</th>
<th>Multivariable analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HR (95% CI)</td>
<td>p-value</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Younger-old</td>
<td>Reference</td>
<td></td>
</tr>
<tr>
<td>Older-old</td>
<td>0.68 (0.45–1.04)</td>
<td>0.07</td>
</tr>
<tr>
<td>Male sex</td>
<td>0.83 (0.54–1.29)</td>
<td>0.41</td>
</tr>
<tr>
<td>Body mass index</td>
<td>1.03 (0.98–1.08)</td>
<td>0.24</td>
</tr>
<tr>
<td><strong>Comorbidities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatobiliary origin disease</td>
<td>2.28 (1.39–3.71)</td>
<td>0.001</td>
</tr>
<tr>
<td>Liver cirrhosis</td>
<td>2.30 (1.15–4.58)</td>
<td>0.02</td>
</tr>
<tr>
<td>Cancer</td>
<td>1.40 (0.92–2.14)</td>
<td>0.12</td>
</tr>
<tr>
<td>Heart failure</td>
<td>0.98 (0.58–1.66)</td>
<td>0.93</td>
</tr>
<tr>
<td>Ischemic heart disease</td>
<td>1.14 (0.63–2.05)</td>
<td>0.66</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>1.08 (0.68–1.72)</td>
<td>0.74</td>
</tr>
<tr>
<td>Cerebrovascular disease</td>
<td>1.18 (0.57–2.44)</td>
<td>0.66</td>
</tr>
<tr>
<td>Hypertension</td>
<td>1.07 (0.70–1.62)</td>
<td>0.77</td>
</tr>
<tr>
<td><strong>Disease severities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean blood pressure</td>
<td>1.01 (0.99–1.02)</td>
<td>0.46</td>
</tr>
<tr>
<td>Usage of ventilator</td>
<td>0.74 (0.49–1.12)</td>
<td>0.16</td>
</tr>
<tr>
<td>Usage of vasopressor</td>
<td>1.22 (0.80–1.86)</td>
<td>0.36</td>
</tr>
<tr>
<td>Urine output on the day of CRRT initiation</td>
<td>1.00 (1.00–1.00)</td>
<td>0.01</td>
</tr>
<tr>
<td><strong>Operation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any type of operation</td>
<td>0.59 (0.36–0.95)</td>
<td>0.03</td>
</tr>
<tr>
<td>Cardiac surgery</td>
<td>0.50 (0.16–1.57)</td>
<td>0.23</td>
</tr>
<tr>
<td><strong>Mechanical cardiac support</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IABP</td>
<td>2.86 (1.05–7.79)</td>
<td>0.04</td>
</tr>
<tr>
<td>LVAD</td>
<td>2.15 (0.30–15.46)</td>
<td>0.45</td>
</tr>
<tr>
<td>ECMO</td>
<td>1.10 (0.40–3.00)</td>
<td>0.85</td>
</tr>
<tr>
<td><strong>Medications</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAS blocker</td>
<td>1.01 (0.66–1.53)</td>
<td>0.98</td>
</tr>
<tr>
<td>Diuretics</td>
<td>0.93 (0.58–1.49)</td>
<td>0.75</td>
</tr>
<tr>
<td>Statin</td>
<td>0.93 (0.59–1.46)</td>
<td>0.74</td>
</tr>
<tr>
<td><strong>Biochemical data at the time of CRRT initiation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hemoglobin</td>
<td>1.00 (0.87–1.15)</td>
<td>0.98</td>
</tr>
<tr>
<td>BUN</td>
<td>1.00 (1.00–1.01)</td>
<td>0.74</td>
</tr>
<tr>
<td>Creatinine</td>
<td>1.01 (0.90–1.13)</td>
<td>0.89</td>
</tr>
<tr>
<td>Albumin</td>
<td>1.01 (0.68–1.51)</td>
<td>0.95</td>
</tr>
<tr>
<td>Bilirubin</td>
<td>1.04 (1.02–1.07)</td>
<td>0.002</td>
</tr>
<tr>
<td>ALT</td>
<td>1.00 (1.00–1.00)</td>
<td>0.77</td>
</tr>
<tr>
<td>PT-INR</td>
<td>1.22 (0.93–1.60)</td>
<td>0.16</td>
</tr>
<tr>
<td>Sodium</td>
<td>0.98 (0.94–1.01)</td>
<td>0.15</td>
</tr>
<tr>
<td>Potassium (mmol/L)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;3.5</td>
<td>0.72 (0.44–1.17)</td>
<td>0.18</td>
</tr>
<tr>
<td>3.5–4.5</td>
<td>Reference</td>
<td></td>
</tr>
<tr>
<td>&gt;4.5</td>
<td>1.08 (0.60–1.94)</td>
<td>0.81</td>
</tr>
<tr>
<td>Chloride</td>
<td>0.96 (0.92–0.99)</td>
<td>0.02</td>
</tr>
<tr>
<td>Calcium</td>
<td>1.02 (0.86–1.22)</td>
<td>0.81</td>
</tr>
<tr>
<td>Phosphorous (mg/dL)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;2.5</td>
<td>1.67 (0.66–4.23)</td>
<td>0.28</td>
</tr>
<tr>
<td>2.5–4.49</td>
<td>Reference</td>
<td></td>
</tr>
<tr>
<td>≥4.5</td>
<td>1.75 (0.68–4.46)</td>
<td>0.24</td>
</tr>
<tr>
<td>Magnesium</td>
<td>1.16 (0.74–1.82)</td>
<td>0.53</td>
</tr>
<tr>
<td>Uric acid</td>
<td>1.00 (0.94–1.06)</td>
<td>0.90</td>
</tr>
</tbody>
</table>

ALT, alanine transaminase; BUN, blood urea nitrogen; CI, confidence interval; CRRT, continuous renal replacement therapy; ECMO, extracorporeal membrane oxygen; HR, hazard ratio; IABP, intra-aortic ballooning pump; INR, international normalized ratio; LVAD, left ventricular assist device; PT, prothrombin time; RAS, renin-angiotensin system.