**Table S2. The clinical features for predicting renal replacement therapy-free survival (RRTFS).**

|  |  |
| --- | --- |
| * Age (years) * Gender (male, female) * Ethnicity (Asian, Black, Hispanic, White, other, unknown) * Medication list * Dose of vasopressors\*: dopamine, dobutamine, norepinephrine, epinephrine, phenylephrine, vasopressin, milrinone * Duration of loop diuretic use (days) * Mean dose of received loop diuretic (mg/day) * Simplified Acute Physiology Score (SAPS) II (0-119) * Charlson comorbidities index (0-37) * Weight\* (kg), height (inch) * Initial CRRT modes: CVVH, CVVHD, CVVHDF, unknown * Ventilator duration (days) * Urine output\* (mL per 6 hours interval) * Glasgow coma scale\* (3-15) * Body temperature\* (Fahrenheit), heart rate\* (beat per minute), arterial and non-arterial blood pressure\* (systolic, diastolic, mean; mmHg), respiratory rate\* (per minute) * Serum sodium\*, potassium\*, chloride\*, bicarbonate\* (mmol/L) * Serum calcium\*, phosphate\*, magnesium\* (mg/dL) * Blood urea nitrogen\* (mg/dL) * Serum creatinine\* (mg/dL) * Blood glucose\* (mg/dL) * Serum albumin\*, globulin\* (g/dL) * Aspartate aminotransferase\*, alanine aminotransferase\*, alkaline phosphatase\*, gamma glutamyl transferase\* (U/L) * Direct bilirubin\*, indirect bilirubin\*, total bilirubin\* (mg/dL) * Hematocrit\* (%), hemoglobin\* (g/dL) * White blood cell count\*, platelet count\* (x 109/L) * International normalized ration (INR)\* * Prothrombin time (PT)\*, partial thromboplastin time (PTT)\* (seconds) * D-dimer\* (ng/mL) * pH\* * PaCO2\*, PaO2\* (mmHg), oxygen alveolar-arterial gradient\* (mmHg) * Arterial\*, venous\*, central venous oxygen saturation\* (%) * Fractional of inspired oxygen (FiO2)\* (%) * Serum lactate\* (mmol/L) | * Comorbidities   + Hypertension   + Diabetes required insulin treatment   + Diabetes required oral medication treatment   + Coronary artery disease   + Congestive heart failure   + Arrhythmias   + Anemia   + Chronic obstructive pulmonary disease   + Alcoholism   + Liver failure   + Myocardial infarction   + Smoker   + Gastrointestinal bleeding   + Hepatitis   + Asthma |

\*The time-dependent features for long short-term memory with multilayer perceptron (MLP+LSTM) model

CRRT, continuous renal replacement therapy; CVVH, continuous veno-venous hemofiltration; CVVHD, continuous veno-venous hemodialysis; CVVHDF, continuous veno-venous hemodiafiltration; HIV, human immunodeficiency virus