**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