Title:
Association between Mortality and Low-dose Continuous Kidney Replacement Therapy in Critically Ill Patients with Acute Kidney Injury: A Single-center Retrospective Cohort Study

Running title: Mortality and Low-dose CKRT

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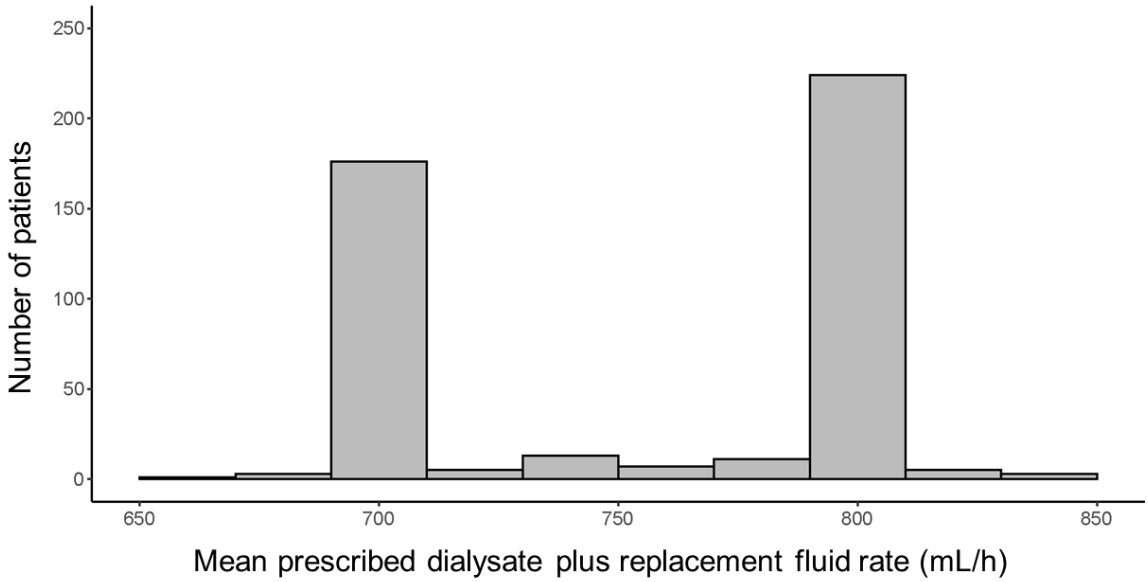
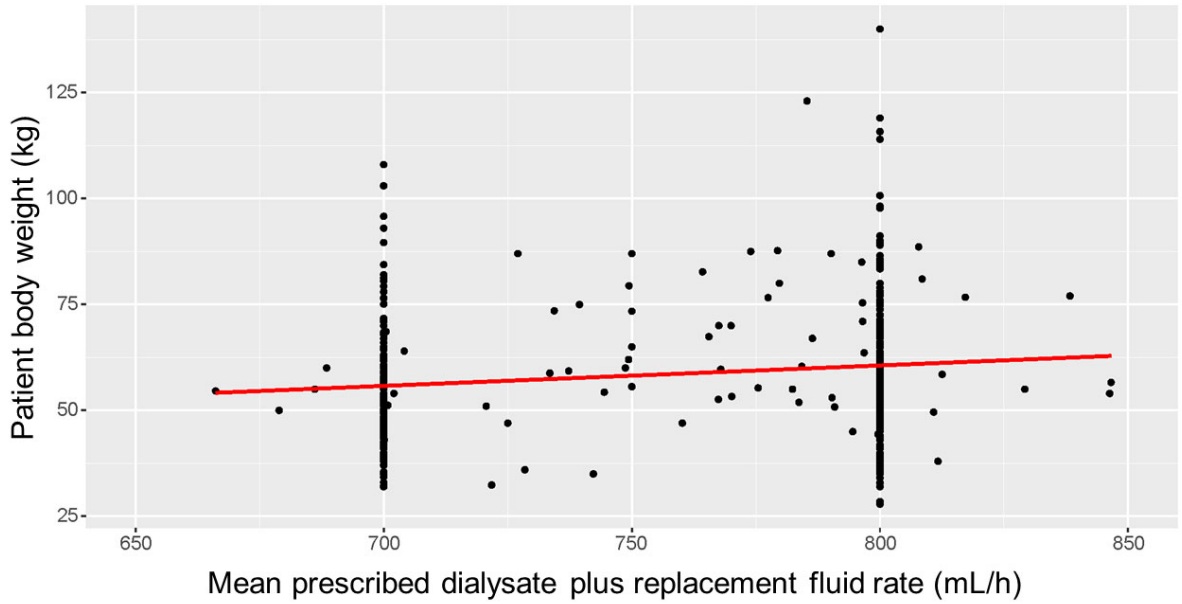
Figure S1: Histogram of the mean prescribed dialysate plus replacement fluid rate.



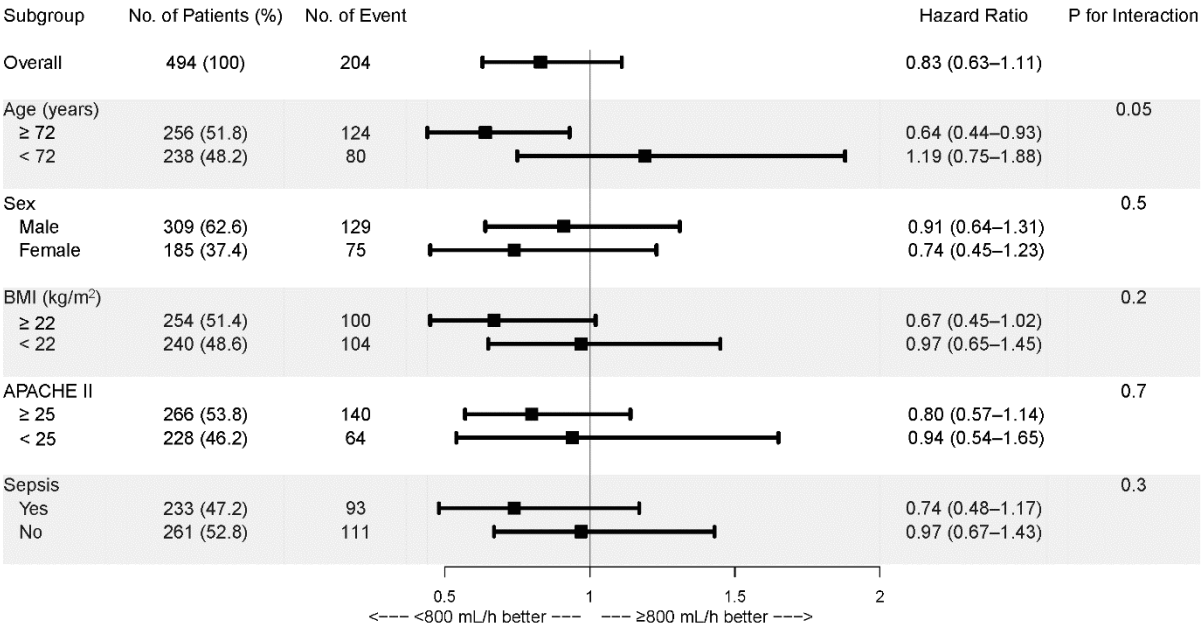
The histogram of the mean prescribed dialysate plus replacement fluid rate showed that most patients had a mean prescribed rate of either 700 or 800 mL/h.

Figure S2: Scatter plots of Pearson correlation coefficient between the mean prescribed dialysate plus replacement fluid rate and patients' body weight.



The Pearson correlation coefficient indicated statistically significant but little correlation between the mean prescribed dialysate plus replacement fluid rate and patients' body weight (correlation coefficient 0.12, P = 0.007).

Figure S3: Subgroup analyses comparing prescribed dialysate plus replacement fluid rates of ≥800 mL/h versus <800 mL/h.



The positions of the squares represent adjusted HRs, and the error bars crossing the squares indicate the corresponding 95% confidence intervals. The HRs were adjusted for age, sex, MAP, BMI, urine output, APACHE II score, presence of sepsis, mechanical ventilation use, hemoglobin, serum albumin, BUN, serum creatinine, and CRP. These covariates were the same as in the primary analysis, except for the below or above the median of the delivered CKRT dose, replacing the prescribed dialysate plus replacement fluid rate (≥800 or <800 mL/h).

Abbreviations: BMI, body mass index; APACHE, acute physiology and chronic health evaluation; HR, hazard ratio; MAP, mean arterial pressure; BUN, blood urea nitrogen; CRP, C-reactive protein; CKRT, continuous kidney replacement therapy.

Table S1: CKRT machines and solution used during the study periods.

CKRT machine						
Product name				**Manufacturer**		
JUN 55X[a]				JUNKEN MEDICAL Co., Ltd.		
Acufil Multi 55X-II[a]				JUNKEN MEDICAL Co., Ltd.		
Acufil Multi 55X-III[a]				Toray Medical Co., Ltd.		
CKRT solution						
Product name				**Manufacturer**		
SUBLOOD® Substitution Fluid for Hemofiltration BSG				Fuso Pharmaceutical Industries, Ltd.		
Composition (mEq/L)						
Sodium	Potassium	Chloride	Acetate	Bicarbonate	Calcium	Glucose (mg/dL)
140.0	2.0	111.5	0.5	35	3.5	100.0

Note: [a]JUN 55X, Acufil Multi 55X-II, and Acufil Multi 55X-III perform CKRT in a similar manner and require the same blood circuits.
Abbreviations: CKRT, continuous kidney replacement therapy.

Table S2: Vasopressor standardization to norepinephrine equivalents.

Drug	Dose	Norepinephrine equivalent
Epinephrine	0.1 mcg/kg/min	0.1 mcg/kg/min
Norepinephrine	0.1 mcg/kg/min	0.1 mcg/kg/min
Dopamine	15 mcg/kg/min	0.1 mcg/kg/min
Phenylephrine	1.0 mcg/kg/min	0.1 mcg/kg/min
Vasopressin	0.04 U/min	0.1 mcg/kg/min

Note: The vasopressors were standardized based on the conversion scale provided above, which was adopted from a previous study.[1]

Table S3: Parameter estimates for each independent variable of multivariable Cox regression analysis for the primary analysis.

Independent variable	Hazard ratio	Lower 95% CI	Upper 95% CI	P
Below median (vs Above median)	1.73	1.19	2.51	0.004
Age (per 10 years older)	1.12	0.99	1.25	0.05
Female (vs Male)	1.00	0.73	1.38	0.9
MAP (per 10 mmHg higher)	0.97	0.90	1.05	0.4
BMI (per 5 kg/m^2 higher)	0.88	0.73	1.07	0.2
Urine output (per 100 mL/day greater)	0.94	0.91	0.98	<0.001
APACHE II (per 5 higher)	1.21	1.08	1.36	0.001
Sepsis, Yes (vs No)	0.97	0.71	1.31	0.8
Mechanical ventilation, Yes (vs No)	2.14	1.39	3.30	0.001
Hemoglobin (per 5 g/dL higher)	0.88	0.64	1.20	0.4
Serum albumin (per 1 g/dL higher)	0.73	0.56	0.95	0.02
BUN (per 10 mg/dL higher)	1.11	1.05	1.16	<0.001
Serum creatinine (per 1 mg/dL higher)	0.72	0.63	0.82	<0.001
CRP (per 5 mg/dL higher)	0.90	0.84	0.98	0.01

Note: The dependent variable in the multivariable Cox regression analysis was all-cause death within 90 days after CKRT initiation. Fourteen independent variables were included in the analysis: delivered CKRT dose above versus below the median, age, sex, MAP at the time of CKRT initiation, BMI, urine output on the day of CKRT initiation, APACHE II score, presence of sepsis, mechanical ventilation use at the time of CKRT initiation, as well as the levels of hemoglobin, serum albumin, BUN, serum creatinine, and CRP.
Abbreviations: CI, confidence interval; MAP, mean arterial pressure; BMI, body mass index; APACHE, acute physiology and chronic health evaluation; BUN, blood urea nitrogen; CRP, C-reactive protein.

Table S4: Baseline patient characteristics comparing prescribed dialysate plus replacement fluid rates of ≥800 mL/h versus <800 mL/h.

Characteristics	Overall (n = 494)	<800 mL/h (n = 238)	≥800 mL/h (n = 256)	P
Age (years)	72 [62, 81]	73 [62, 81]	72 [61, 79]	0.6
Sex (Male, n (%))	309 (62.6)	137 (57.6)	172 (67.2)	0.03
Body mass index (kg/m^2)	22.1 [19.5, 25.2]	22.1 [19.5, 25.4]	22.1 [19.6, 25.1]	0.8
Body weight (kg)	56.5 [48.0, 67.0]	55.5 [47.0, 63.9]	57.9 [49.0, 67.9]	0.05
Mean arterial pressure (mmHg)	76 [64, 90]	76 [63, 93]	76 [64, 88]	0.7
Urine output (mL/day)	322 [107, 729]	320 [100, 666]	327 [112, 750]	0.8
APACHE II score	25 [19, 30]	24 [19, 29]	27 [20, 31]	0.004
Hypertension, n (%)	253 (51.2)	128 (53.8)	125 (48.8)	0.3
Diabetes mellitus, n (%)	135 (27.3)	61 (25.6)	74 (28.9)	0.4
Baseline serum creatinine (mg/dL)	0.9 [0.7, 1.3]	0.9 [0.7, 1.3]	0.9 [0.7, 1.3]	0.4
Cause of AKI, n (%)				0.4
Acute tubular injury	404 (81.8)	190 (79.8)	214 (83.6)	
Nephrotoxic agent	29 (5.9)	18 (7.6)	11 (4.3)	
Cardiorenal	9 (1.8)	4 (1.7)	5 (2.0)	
Hepatorenal	10 (2.0)	3 (1.3)	7 (2.7)	
Other	15 (3.0)	9 (3.8)	6 (2.3)	
Unknown	27 (5.5)	14 (5.9)	13 (5.1)	
Sepsis, n (%)	233 (47.2)	110 (46.2)	123 (48.0)	0.7
Hemoglobin (g/dL)	10.1 [8.6, 12.2]	9.9 [8.3, 12.2]	10.3 [8.8, 12.1]	0.4
C-reactive protein (mg/dL)	10.0 [2.7, 19.8]	9.1 [2.7, 18.3]	10.5 [2.8, 21.2]	0.3
Serum albumin (g/dL)	2.7 [2.3, 3.2]	2.6 [2.2, 3.2]	2.8 [2.4, 3.2]	0.02
Blood urea nitrogen (mg/dL)	49 [30, 73]	52 [29, 76]	48 [31, 71]	0.9
Serum creatinine (mg/dL)	2.5 [1.7, 3.7]	2.5 [1.5, 3.7]	2.5 [1.8, 3.7]	0.7
Serum potassium (mEq/L)	4.4 [3.8, 5.2]	4.4 [3.7, 5.0]	4.5 [3.9, 5.4]	0.02
pH on ABG	7.35 [7.27, 7.41]	7.35 [7.28, 7.41]	7.34 [7.26, 7.41]	0.6
Bicarbonate on ABG (mEq/L)	19.0 [15.7, 22.7]	19.3 [15.7, 22.9]	18.6 [15.6, 22.2]	0.4
Mechanical ventilation, n (%)	347 (70.2)	167 (70.2)	180 (70.3)	0.9
Vasopressor, n (%)	358 (72.5)	162 (68.1)	196 (76.6)	0.04

Note: Data are shown as median [interquartile range] or number (percentage). The number of missing values is as follows: Baseline serum creatinine, 35.2%; Serum albumin, 0.6%; all others have no missing values.
Abbreviations: APACHE, acute physiology and chronic health evaluation; AKI, acute kidney injury; ABG, arterial blood gas.

Table S5: Baseline CKRT characteristics comparing prescribed dialysate plus replacement fluid rates of ≥800 mL/h versus <800 mL/h.

Characteristics	Overall (n = 494)	<800 mL/h (n = 238)	≥800 mL/h (n = 256)	P
CKRT modality (CVVHDF, n (%))	491 (99.4)	237 (99.6)	254 (99.2)	0.6
Catheter placement, n (%)				0.2
Right internal jugular vein	196 (39.7)	89 (37.4)	107 (41.8)	
Right femoral vein	196 (39.7)	99 (41.6)	97 (37.9)	
Left femoral vein	76 (15.4)	42 (17.6)	34 (13.3)	
Left internal jugular vein	14 (2.8)	5 (2.1)	9 (3.5)	
Right subclavian vein	1 (0.2)	0 (0.0)	1 (0.4)	
Left subclavian vein	1 (0.2)	1 (0.4)	0 (0.0)	
ECMO circuit	10 (2.0)	2 (0.8)	8 (3.1)	
Anticoagulation, n (%)				0.3
Nafamostat Mesylate	444 (89.9)	219 (92.0)	225 (87.9)	
Heparin	20 (4.0)	6 (2.5)	14 (5.5)	
Heparin + Nafamostat Mesylate	17 (3.4)	7 (2.9)	10 (3.9)	
Argatroban Hydrate	1 (0.2)	1 (0.4)	0 (0.0)	
None	12 (2.4)	5 (2.1)	7 (2.7)	
Net ultrafiltration intensity (mL/kg/h)[a]	0.15 [0.00, 0.80]	0.23 [0.00, 0.88]	0.07 [0.00, 0.77]	0.1
Net ultrafiltration rate (mL/day)	190.2 [0.0, 1131.0]	297.9 [0.0, 1206.0]	93.0 [0.0, 1066.9]	0.2
Prescribed CKRT dose (mL/kg/h)	13.9 [11.8, 16.5]	13.2 [11.5, 15.4]	14.7 [12.3, 17.5]	<0.001
Delivered CKRT dose (mL/kg/h)	13.2 [11.3, 16.2]	12.4 [10.8, 14.8]	14.2 [11.8, 17.0]	<0.001
CKRT dose delivered (%)	99.0 [95.7, 100]	99.0 [94.3, 100]	99.0 [96.3, 100]	0.4
CKRT dose range, n (%)				<0.001
<10 mL/kg/h	67 (13.6)	42 (17.6)	25 (9.8)	
10–14.9 mL/kg/h	266 (53.8)	142 (59.7)	124 (48.4)	
15–19.9 mL/kg/h	123 (24.9)	47 (19.7)	76 (29.7)	
20–25 mL/kg/h	30 (6.1)	6 (2.5)	24 (9.4)	
>25 mL/kg/h	8 (1.6)	1 (0.4)	7 (2.7)	
Filtration fraction (%)[b]	10.2 [7.8, 12.0]	9.2 [7.6, 11.6]	10.6 [8.3, 12.5]	0.001

Note: Data are shown as median [interquartile range] or number (percentage). There are no missing values for any variables.

[a]Net UF intensity was calculated as the net UF rate (fluid removal rate) in mL/h divided by patients' body weight (kg).

[b]Filtration fraction for post-dilution CVVHDF and CVVHD was calculated by dividing the total ultrafiltration rate by the plasma flow rate at the time of CKRT initiation, expressed as a percentage. The plasma flow rate was calculated as the blood flow rate multiplied by (1 − hematocrit).

Abbreviations: CKRT, continuous kidney replacement therapy; CVVHDF, continuous venovenous hemodiafiltration; ECMO, extracorporeal membrane oxygenation; CVVHD, continuous venovenous hemodialysis.

Table S6: Parameter estimates for each independent variable of multivariable Cox regression analysis comparing prescribed dialysate plus replacement fluid rates of ≥800 mL/h versus <800 mL/h.

Independent variable	Hazard ratio	Lower 95% CI	Upper 95% CI	P
<800 mL/h (vs ≥800 mL/h)	0.83	0.63	1.11	0.2
Age (per 10 years older)	1.13	1.01	1.27	0.04
Female (vs Male)	0.92	0.67	1.26	0.6
MAP (per 10 mmHg higher)	0.96	0.89	1.04	0.3
BMI (per 5 kg/m^2 higher)	1.04	0.90	1.22	0.6
Urine output (per 100 mL/day greater)	0.94	0.91	0.98	<0.001
APACHE II (per 5 higher)	1.20	1.07	1.36	0.002
Sepsis, Yes (vs No)	0.94	0.69	1.27	0.7
Mechanical ventilation, Yes (vs No)	2.04	1.32	3.14	0.001
Hemoglobin (per 5 g/dL higher)	0.91	0.66	1.24	0.5
Serum albumin (per 1 g/dL higher)	0.69	0.53	0.90	0.006
BUN (per 10 mg/dL higher)	1.09	1.04	1.15	0.001
Serum creatinine (per 1 mg/dL higher)	0.74	0.64	0.84	<0.001
CRP (per 5 mg/dL higher)	0.90	0.84	0.98	0.01

Note: The dependent variable in the multivariable Cox regression analysis was all-cause death within 90 days after CKRT initiation. Fourteen independent variables were included in the analysis: prescribed dialysate plus replacement fluid rate ≥800 or <800 mL/h, age, sex, MAP at the time of CKRT initiation, BMI, urine output on the day of CKRT initiation, APACHE II score, presence of sepsis, mechanical ventilation use at the time of CKRT initiation, as well as the levels of hemoglobin, serum albumin, BUN, serum creatinine, and CRP.
Abbreviations: CI, confidence interval; MAP, mean arterial pressure; BMI, body mass index; APACHE, acute physiology and chronic health evaluation; BUN, blood urea nitrogen; CRP, C-reactive protein.

Table S7: Baseline patient characteristics based on categorizing delivered CKRT doses into four groups.

Characteristics	Overall (n = 494)	<10 mL/kg/h (n = 67)	10–14.9 mL/kg/h (n = 266)	15–19.9 mL/kg/h (n = 123)	≥20 mL/kg/h (n = 38)	P
Age (years)	72 [62, 81]	59 [48, 73]	71 [63, 79]	77 [69, 83]	79 [67, 84]	<0.001
Sex (Male, n (%))	309 (62.6)	56 (83.6)	189 (71.1)	49 (39.8)	15 (39.5)	<0.001
Body mass index (kg/m^2)	22.1 [19.5, 25.2]	28.5 [25.5, 31.9]	23.1 [21.0, 25.2]	19.5 [17.8, 21.3]	16.7 [15.9, 18.0]	<0.001
Body weight (kg)	56.5 [48.0, 67.0]	82.7 [70.5, 89.1]	60.0 [53.5, 67.0]	46.0 [42.1, 51.4]	37.2 [34.5, 41.4]	<0.001
Mean arterial pressure (mmHg)	76 [64, 90]	73 [64, 91]	77 [64, 91]	76 [63, 88]	78 [66, 89]	0.7
Urine output (mL/day)	322 [107, 729]	320 [114, 775]	327 [96, 758]	345 [115, 603]	234 [120, 683]	0.9
APACHE II score	25 [19, 30]	26 [20, 31]	25 [19, 30]	26 [20, 30]	28 [20, 31]	0.4
Hypertension, n (%)	253 (51.2)	35 (52.2)	143 (53.8)	63 (51.2)	12 (31.6)	0.09
Diabetes mellitus, n (%)	135 (27.3)	20 (29.9)	77 (28.9)	31 (25.2)	7 (18.4)	0.5
Baseline serum creatinine (mg/dL)	0.9 [0.7, 1.3]	0.9 [0.8, 1.1]	0.9 [0.7, 1.4]	0.9 [0.6, 1.3]	0.7 [0.6, 1.2]	0.2
Cause of AKI, n (%)						0.9
Acute tubular injury	404 (81.8)	53 (79.1)	219 (82.3)	102 (82.9)	30 (78.9)	
Nephrotoxic agent	29 (5.9)	7 (10.4)	13 (4.9)	7 (5.7)	2 (5.3)	
Cardiorenal	9 (1.8)	0 (0.0)	6 (2.3)	2 (1.6)	1 (2.6)	
Hepatorenal	10 (2.0)	2 (3.0)	7 (2.6)	1 (0.8)	0 (0.0)	
Other	15 (3.0)	1 (1.5)	8 (3.0)	4 (3.3)	2 (5.3)	
Unknown	27 (5.5)	4 (6.0)	13 (4.9)	7 (5.7)	3 (7.9)	
Sepsis, n (%)	233 (47.2)	25 (37.3)	126 (47.4)	66 (53.7)	16 (42.1)	0.2
Hemoglobin (g/dL)	10.1 [8.6, 12.2]	10.7 [9.0, 13.5]	10.5 [8.7, 12.2]	9.7 [8.5, 11.0]	10.2 [8.8, 12.1]	0.01
C-reactive protein (mg/dL)	10.0 [2.7, 19.8]	10.6 [2.3, 20.8]	11.1 [3.2, 22.3]	8.9 [2.8, 17.6]	7.9 [1.1, 16.5]	0.4
Serum albumin (g/dL)	2.7 [2.3, 3.2]	2.8 [2.3, 3.3]	2.7 [2.3, 3.2]	2.8 [2.3, 3.1]	2.7 [2.2, 3.6]	0.5
Blood urea nitrogen (mg/dL)	49 [30, 73]	51 [31, 72]	48 [30, 68]	47 [30, 77]	58 [42, 90]	0.1
Serum creatinine (mg/dL)	2.5 [1.7, 3.7]	2.9 [2.0, 4.3]	2.6 [1.8, 3.7]	2.2 [1.4, 3.3]	2.2 [1.6, 3.5]	0.05
Serum potassium (mEq/L)	4.4 [3.8, 5.2]	4.6 [4.0, 5.6]	4.5 [3.7, 5.3]	4.4 [3.8, 5.1]	4.4 [3.9, 4.8]	0.5
pH on ABG	7.35 [7.27, 7.41]	7.34 [7.28, 7.42]	7.35 [7.27, 7.41]	7.35 [7.28, 7.41]	7.37 [7.27, 7.41]	0.9
Bicarbonate on ABG (mEq/L)	19.0 [15.7, 22.7]	18.5 [15.3, 22.2]	18.8 [15.7, 21.9]	19.6 [16.3, 23.0]	19.2 [14.4, 23.2]	0.7
Mechanical ventilation, n (%)	347 (70.2)	46 (68.7)	183 (68.8)	90 (73.2)	28 (73.7)	0.8
Vasopressor, n (%)	358 (72.5)	48 (71.6)	190 (71.4)	95 (77.2)	25 (65.8)	0.5

Note: Data are shown as median [interquartile range] or number (percentage). The number of missing values is as follows: Baseline serum creatinine, 35.2%; Serum albumin, 0.6%; all others have no missing values.

Abbreviations: APACHE, acute physiology and chronic health evaluation; AKI, acute kidney injury; ABG, arterial blood gas.

Table S8: Baseline CKRT characteristics based on categorizing delivered CKRT doses into four groups.

Characteristics	Overall (n = 494)	<10 mL/kg/h (n = 67)	10–14.9 mL/kg/h (n = 266)	15–19.9 mL/kg/h (n = 123)	≥20 mL/kg/h (n = 38)	P
CKRT modality (CVVHDF, n (%))	491 (99.4)	66 (98.5)	266 (100)	122 (99.2)	37 (97.4)	0.2
Catheter placement, n (%)						0.6
Right internal jugular vein	196 (39.7)	28 (41.8)	107 (40.2)	48 (39.0)	13 (34.2)	
Right femoral vein	196 (39.7)	25 (37.3)	107 (40.2)	52 (42.3)	12 (31.6)	
Left femoral vein	76 (15.4)	9 (13.4)	41 (15.4)	15 (12.2)	11 (28.9)	
Left internal jugular vein	14 (2.8)	2 (3.0)	5 (1.9)	6 (4.9)	1 (2.6)	
Right subclavian vein	1 (0.2)	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)	
Left subclavian vein	1 (0.2)	0 (0.0)	0 (0.0)	1 (0.8)	0 (0.0)	
ECMO circuit	10 (2.0)	3 (4.5)	5 (1.9)	1 (0.8)	1 (2.6)	
Anticoagulation, n (%)						0.5
Nafamostat Mesylate	444 (89.9)	59 (88.1)	236 (88.7)	115 (93.5)	34 (89.5)	
Heparin	20 (4.0)	6 (9.0)	11 (4.1)	1 (0.8)	2 (5.3)	
Heparin + Nafamostat Mesylate	17 (3.4)	1 (1.5)	11 (4.1)	3 (2.4)	2 (5.3)	
Argatroban Hydrate	1 (0.2)	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)	
None	12 (2.4)	1 (1.5)	7 (2.6)	4 (3.3)	0 (0.0)	
Prescribed dialysate + replacement fluid rate ≥800 ml/h, n (%)	256 (51.8)	25 (37.3)	124 (46.6)	76 (61.8)	31 (81.6)	<0.001
Net ultrafiltration intensity (mL/kg/h)[a]	0.15 [0.00, 0.80]	0.02 [0.00, 0.39]	0.26 [0.00, 0.83]	0.06 [0.00, 0.92]	0.10 [0.00, 1.14]	0.2
Net ultrafiltration rate (mL/day)	190.2 [0.0, 1131.0]	43.6 [0.0, 773.6]	337.7 [0.0, 1216.7]	79.1 [0.0, 1061.8]	108.2 [0.0, 1011.1]	0.3
Prescribed CKRT dose (mL/kg/h)	13.9 [11.8, 16.5]	9.5 [8.8, 10.4]	12.9 [11.8, 14.1]	17.1 [16.2, 18.3]	22.5 [21.3, 24.9]	<0.001
Delivered CKRT dose (mL/kg/h)	13.2 [11.3, 16.2]	9.1 [7.8, 9.6]	12.5 [11.5, 13.7]	16.8 [16.1, 18.0]	21.8 [21.0, 24.8]	<0.001
CKRT dose delivered (%)	99.0 [95.7, 100]	97.3 [86.9, 100]	98.5 [95.1, 100]	99.6 [97.5, 100]	100 [97.5, 100]	<0.001
Filtration fraction (%)[b]	10.2 [7.8, 12.0]	10.0 [7.2, 12.1]	10.4 [7.9, 11.9]	9.6 [7.7, 12.1]	10.3 [8.0, 12.4]	0.9

Note: Data are shown as median [interquartile range] or number (percentage). There are no missing values for any variables.

[a]Net UF intensity was calculated as the net UF rate in mL/h divided by patients' body weight (kg).

[b]Filtration fraction for post-dilution CVVHDF and CVVHD was calculated by dividing the total ultrafiltration rate by the plasma flow rate at the time of CKRT initiation, expressed as a percentage. The plasma flow rate was calculated as the blood flow rate multiplied by (1 − hematocrit).

Abbreviations: CKRT, continuous kidney replacement therapy; CVVHDF, continuous venovenous hemodiafiltration; ECMO, extracorporeal membrane oxygenation; CVVHD, continuous venovenous hemodialysis.

Table S9: Parameter estimates for each independent variable of multivariable Cox regression analysis comparing among four categories of delivered CKRT dose.

Independent variable	Hazard ratio	Lower 95% CI	Upper 95% CI	P
Delivered CKRT dose category				
<10 mL/kg/h	1.70	0.87	3.31	0.1
10–14.9 mL/kg/h	1.53	1.03	2.27	0.04
15–19.9 mL/kg/h (reference)	1.00	NA	NA	NA
≥20 mL/kg/h	1.34	0.75	2.40	0.3
Age (per 10 years older)	1.13	1.01	1.27	0.04
Female (vs Male)	1.02	0.73	1.42	0.9
MAP (per 10 mmHg higher)	0.96	0.89	1.04	0.3
BMI (per 5 kg/m^2 higher)	0.95	0.77	1.17	0.6
Urine output (per 100 mL/day greater)	0.94	0.91	0.97	<0.001
APACHE II (per 5 higher)	1.22	1.08	1.37	<0.001
Sepsis, Yes (vs No)	0.94	0.69	1.28	0.7
Mechanical ventilation, Yes (vs No)	2.06	1.34	3.17	0.001
Hemoglobin (per 5 g/dL higher)	0.91	0.66	1.25	0.5
Serum albumin (per 1 g/dL higher)	0.71	0.55	0.93	0.01
BUN (per 10 mg/dL higher)	1.09	1.04	1.15	<0.001
Serum creatinine (per 1 mg/dL higher)	0.73	0.64	0.84	<0.001
CRP (per 5 mg/dL higher)	0.91	0.84	0.98	0.01

Note: The dependent variable in the multivariable Cox regression analysis was all-cause death within 90 days after CKRT initiation. Fourteen independent variables were included in the analysis: delivered CKRT dose categorized into four groups (<10, 10–14.9, 15–19.9 [reference], and ≥20 mL/kg/h), sex, MAP at the time of CKRT initiation, BMI, urine output on the day of CKRT initiation, APACHE II score, presence of sepsis, mechanical ventilation use at the time of CKRT initiation, as well as the levels of hemoglobin, serum albumin, BUN, serum creatinine, and CRP.
Abbreviations: CI, confidence interval; MAP, mean arterial pressure; BMI, body mass index; APACHE, acute physiology and chronic health evaluation; BUN, blood urea nitrogen; CRP, C-reactive protein.

Supplementary Reference

1. Khanna A, English SW, Wang XS, et al. Angiotensin II for the Treatment of Vasodilatory Shock. *N Engl J Med*. Aug 3 2017;377(5):419-430. doi:10.1056/NEJMoa1704154