Supplementary Materials

Supplemental Table S1. Performance of the scoring systems on day 1 of CRRT initiation in predicting 3-day mortality in the entire cohort and in patients older than 80 years

	Total cohort			Cohort with octogenarian (Age ≥80 years)		
	Survivor	Non-survivor		Survivor	Non-survivor	
Score	(*n* = 2,119)	(*n* = 1,251)	AUC (95% CI)	(*n* = 321)	(*n* = 237)	AUC (95% CI)
SOFA	14.3 ± 3.4	14.9 ± 3.3	54.7 (52.7 - 56.7)	13.1 ± 3.2	13.9 ± 3.2	56.3 (51.5 - 61.1)
qSOFA	1.9 ± 0.8	2.1 ± 0.8	56.1 (54.2 - 57.9)	2.0 ± 0.8	2.0 ± 0.8	52.4 (47.9 - 56.8)
APACHE III	99.3 ± 28.9	112.1 ± 28.0	62.5 (60.5 - 64.4)	102.4 ± 27.1	113.6 ± 27.1	62.1 (57.4 - 66.7)
MOSAIC	19.7 ± 10.6	24.3 ± 11.2	61.5 (59.5 - 63.4)	16.9 ± 10.3	21.2 ± 10.5	62.1 (57.4 - 66.7)

CRRT, continuous renal replacement therapy; AUC, area under the curve; CI, confidence interval; SOFA, Sequential Organ Failure Assessment; qSOFA, quick Sequential Organ Failure Assessment; APACHE, Acute Physiology and Chronic Health Evaluation; MOSAIC, Mortality Scoring system for AKI with CRRT

a: the missing components of the score system were imputed by a score of 0.

Supplemental Table S2. The optimal cutoffs and the corresponding sensitivity and specificity in the analysis with an AUC ≥70%.

Day of mortality	Score	Day after CRRT	Cohort	AUC, % (95% CI)	Cutoff	Sensitivity, % (95% CI)	Specificity, % (95% CI)
7-day	APACHE III	3rd day	Total	76.1 (73.6 - 78.5)	107	63.8 (59.1 - 68.3)	75.0 (72.8 - 77.1)
7-day	qSOFA	3rd day	≥80 years	74.3 (68.8 - 79.7)	2	90.0 (81.9 - 95.3)	43.3 (36.5 - 50.2)
7-day	APACHE III	3rd day	≥80 years	78.9 (73.1 - 84.8)	108	67.8 (57.1 - 77.3)	78.6 (72.5 - 83.9)
ICU	SOFA	7th day	Total	74.1 (71.7 - 76.5)	14	67.3 (63.5 - 71.0)	67.6 (64.5 - 70.6)
ICU	APACHE III	7th day	Total	74.7 (72.3 - 77.1)	82	65.5 (61.6 - 69.3)	71.0 (67.9 - 73.9)
ICU	MOSAIC	7th day	Total	71.3 (68.8 - 73.9)	10	77.6 (74.1 - 80.9)	54.0 (50.7 - 57.2)
ICU	SOFA	7th day	≥80 years	75.4 (68.9 - 81.8)	13	70.2 (59.3 - 79.7)	70.4 (61.6 - 78.2)
ICU	APACHE III	7th day	≥80 years	72.6 (65.8 - 79.3)	85	65.5 (54.3 - 75.5)	71.2 (62.4 - 79.0)

ICU	MOSAIC	7th day	≥80 years	74.2 (67.5 - 80.9)	13	60.7 (49.4 - 71.2)	78.4 (70.2 - 85.3)
In-hospital	SOFA	7th day	Total	71.8 (69.3 - 74.3)	12	78.9 (75.8 - 81.8)	51.6 (48.1 - 55.1)
In-hospital	APACHE III	7th day	Total	73.5 (71.0 - 76.0)	75	69.9 (66.4 - 73.2)	64.9 (61.5 - 68.2)
In-hospital	SOFA	7th day	≥80 years	73.2 (66.5 - 79.8)	13	63.3 (53.5 - 72.3)	73.0 (63.2 - 81.4)
In-hospital	APACHE III	7th day	≥80 years	70.7 (63.7 - 77.7)	82	65.1 (55.4 - 74.0)	67.0 (56.9 - 76.1)
In-hospital	MOSAIC	7th day	≥80 years	74.7 (67.9 - 81.4)	9	77.1 (68.0 - 84.6)	62.0 (51.8 - 71.5)

AUC, area under the curve; CRRT, continuous renal replacement therapy; CI, confidence interval; ICU, intensive care unit; SOFA, Sequential Organ Failure Assessment; qSOFA, quick Sequential Organ Failure Assessment; APACHE, Acute Physiology and Chronic Health Evaluation; MOSAIC, Mortality Scoring system for AKI with CRRT.