

1 **Title: Elevated serum iron level is a predictor of prognosis in ICU patients with**
2 **acute kidney injury**

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1 **Table S1. Baseline characteristics of the original study cohort.** Values are
2 presented as number (%) and mean (SD). SOFA Score, Sequential Organ Failure
3 Assessment score; RRT, Renal replacement therapy; SD, standard deviation.

Characteristics	Values
Total	483
Sex, n(%)	
Female	237 (49.1)
Male	246 (50.9)
Age, n(%) (years)	
16-59	196 (40.6)
≥60	287 (59.4)
Comorbidity, n(%)	
Congestive heart failure, n(%)	198 (41.0)
Hypertension, n(%)	255 (52.8)
SOFA score, n(%)	
<2	39 (8.1)
≥2	444 (91.9)
Stage of AKI, n(%)	
Stage 1	114 (23.6)
Stage 2	115 (23.8)
Stage 3	254 (52.6)
RRT, n(%)	123 (25.5)
Iron group, n(%)	
Low iron group	311 (64.4)
High iron group	172 (35.6)
Laboratory measurements	
Creatine, mean (SD)(mg/dl)	2.20 (1.61)
Transferrin, mean (SD)(mg/dl)	160.95 (59.44)
Ferritin, mean (SD)(ng/ml)	439.02 (417.24)
28-day survival status, n(%)	
Non-death	334 (69.2)
Death	149 (30.8)
28-day survival times, mean(SD)	22.34 (9.52)
90-day survival status, n(%)	
non-death	292 (60.5)
death	191 (39.5)
90-day survival times, mean (SD)	61.76 (37.19)

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5 **Table S2. Baseline characteristics of the patients in two groups after**
6 **interpolation.** Values are presented as number (%) and mean (SD). SOFA Score,

1 Sequential Organ Failure Assessment score; RRT, Renal replacement therapy; SD,
2 standard deviation.

Characteristics	Serum iron < 60	Serum iron ≥ 60	P Value
Total	311	172	
Sex, n(%)			0.024
Female	165 (53.1)	72 (41.9)	
Male	146 (46.9)	100 (58.1)	
Age, n(%) (years)			<0.001
16 - 59	100 (32.2)	96 (55.8)	
≥ 60	211 (67.8)	76 (44.2)	
Comorbidity, n(%)			
Congestive heart failure	159 (51.1)	39 (22.7)	<0.001
Hypertension	173 (55.6)	82 (47.7)	0.114
SOFA score, n(%)			0.237
< 2	29 (9.3)	10 (5.8)	
≥ 2	282 (90.7)	162 (94.2)	
Stage of AKI, n(%)			0.174
Stage 1	81 (26.0)	33 (19.2)	
Stage 2	75 (24.1)	40 (23.3)	
Stage 3	155 (49.8)	99 (57.6)	
RRT, n(%)	67 (21.5)	56 (32.6)	0.011
Laboratory measurements			
Creatine, mean (SD)	2.19 (1.51)	2.35 (1.72)	0.303
Transferrin, mean (SD)	162.76 (58.66)	157.54 (57.97)	0.348
Ferritin, mean (SD)	434.78 (379.43)	607.44 (393.24)	<0.001
28-day survival status, n(%)			<0.001
Non-death	233 (74.9)	101 (58.7)	
Death	78 (25.1)	71 (41.3)	
28-day survival times, mean (SD)	23.49 (8.56)	20.26 (10.77)	<0.001
90-day survival status, n(%)			0.009
Non-death	202 (65.0)	90 (52.3)	
Death	109 (35.0)	82 (47.7)	
90-day survival times, mean (SD)	66.22 (35.04)	53.70 (39.63)	<0.001

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4 **Table S3. Cox proportional hazards models exploring the relationship between serum**
5 **iron levels and 28-day mortality.**

Group	Multivariate model	
	HR (95%CI)	P value
Original study cohort		
Low iron group	Reference	—

High iron group	1.837(1.166-2.895)	0.009
Interpolated study cohort		
Low iron group	Reference	—
High iron group	1.832(1.305-2.573)	<0.001

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3 **Table S4 Cox proportional hazards models exploring the relationship between serum**

4 **iron levels and 90-day mortality**

Group	Multivariate model	
	HR(95%CI)	P value
Original study cohort		
Low iron group	Reference	—
High iron group	1.620 (1.073-2.447)	0.022
Interpolated study cohort		
Low iron group	Reference	—
High iron group	1.741(1.285-2.358)	<0.001

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