Supplementary Files for:
Discovery of a Resistant Cohort to Acute Kidney Injury: Insights from Patients with Septic Shock

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Supplementary Table S1. Strengthening the Reporting of Observational Studies Epidemiology (STROBE) Checklist

	Item No	Recommendation	Completed
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract	✓
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found	✓
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	✓
Objectives	3	State specific objectives, including any prespecified hypotheses	✓
Methods			
Study design	4	Present key elements of study design early in the paper	✓
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	✓
Participants	6	(*a*) Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up	✓
		(*b*) For matched studies, give matching criteria and number of exposed and unexposed	N/A
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	✓
Data sources/ measurement	8	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	✓
Bias	9	Describe any efforts to address potential sources of bias	N/A
Study size	10	Explain how the study size was arrived at	N/A
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	N/A
Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding	✓
		(*b*) Describe any methods used to examine subgroups and interactions	✓
		(*c*) Explain how missing data were addressed	N/A
		(*d*) If applicable, explain how loss to follow-up was addressed	N/A
		(*e*) Describe any sensitivity analyses	✓
Results			

Participants	13	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	✓
		(b) Give reasons for non-participation at each stage	N/A
		(c) Consider use of a flow diagram	
Descriptive data	14	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	✓
		(b) Indicate number of participants with missing data for each variable of interest	✓
		(c) Summarise follow-up time (eg, average and total amount)	✓
Outcome data	15	Report numbers of outcome events or summary measures over time	✓
Main results	16	(*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	✓
		(*b*) Report category boundaries when continuous variables were categorized	N/A
		(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	N/A
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	✓
Discussion			
Key results	18	Summarise key results with reference to study objectives	✓
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	✓
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	✓
Generalisability	21	Discuss the generalisability (external validity) of the study results	✓
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	N/A

Supplementary Table S2. Baseline characteristics and severity of illness where patients with reduced risk for AKI who met KDIGO AKI criteria (n=27) are included in the AKI cohort

Characteristic[a]	Reduced Risk for AKI (n=312)	AKI Resistant (n=40)	AKI (n=221)	*P*-Value for AKI Resistant Compared to AKI[b]	*P*-Value for AKI Resistant Compared to Reduced Risk for AKI[b]	*P*-Value for Reduced Risk for AKI Compared to AKI[b]
Age (years)	60 (50-73)	62.5 (45.5-71.5)	61 (49-73)	0.92	0.93	0.72
Sex (male)	161 (51.6)	22 (55.0)	155 (70.1)	0.06	0.69	**<0.01**
Arterial Hypertension	181 (58.0)	24 (62.5)	129 (58.4)	0.85	0.81	0.88
Previous Myocardial Infarction	35 (11.2)	3 (7.5)	17 (7.8)	0.97	0.48	0.17
Peripheral Vascular Disease	22 (7.1)	3 (7.5)	19 (8.6)	0.82	0.92	0.53
Diabetes	109 (34.9)	14 (35.0)	73 (33.0)	0.76	0.98	0.60
Chronic Respiratory Disease	70 (22.4)	11 (27.5)	44 (20.0)	0.28	0.47	0.60
Active Cancer	61 (19.6)	9 (22.5)	44 (20.0)	0.71	0.66	0.95
Cirrhosis	16 (5.1)	2 (5.0)	20 (9.0)	0.40	0.97	0.06
HIV Infection	8 (2.6)	1 (2.5)	5 (2.3)	0.93	0.98	0.81
Charlson Comorbidity Index Score	2 (1-4)	1 (1-3.5)	2 (1-3)	0.57	0.62	0.91
Need for Mechanical Ventilation	96 (28.6)	19 (47.5)	105 (53.6)	0.96	**0.04**	**<0.01**
Non-Renal SOFA Score at Enrollment[c]	5 (2-7)	6 (4.5-8)	6 (5-9)	0.71	**<0.01**	**<0.01**

Abbreviations: AKI, Acute Kidney Injury; KDIGO, Kidney Disease Improving Global Outcomes; HIV, Human Immunodeficiency Virus; SOFA, Sequential Organ Failure Assessment

[a]Categorical variables are presented as the number of patients (percentage) and continuous variables as median (interquartile range).

[b]P values are from the χ^2 test for categorical variables and the Kruskal-Wallis H test for continuous and ordinal variables

[c]Serum creatinine and urine output were not included in the score determination.

Supplementary Table S3. Comparison of clinical endpoints where patients with reduced risk for AKI who met KDIGO AKI criteria (n=27) are included in the AKI cohort

Endpoints[a]	Reduced Risk for AKI (n=339)	AKI Resistant (n=40)	AKI (n=194)	*P*-Value for AKI Resistant Compared to AKI[b]	*P*-Value for AKI Resistant Compared to Reduced Risk for AKI[b]	*P*-Value for Reduced Risk for AKI Compared to AKI[b]
Mortality at 30 days	53 (15.6)	4 (10.0)	65 (33.5)	**0.01**	0.24	**<0.01**
ICU Length of Stay	3 (2-5)	2 (1.5-4.5)	4 (2-6)	**<0.01**	0.28	**<0.01**

Abbreviations: AKI, Acute Kidney Injury; CI, KDIGO, Kidney Disease Improving Global Outcomes; Confidence Interval; ICU Intensive Care Unit

[a]Categorical variables are presented as the number of patients (percentage) and continuous variables as median (interquartile range)

[b]P values are from the χ^2 test for categorical variables and the Kruskal-Wallis H test for continuous and ordinal variables

Supplementary Table S4. Baseline characteristics and severity of illness using a Kidney Injury Molecule-1 cutoff of ≤1 ng/ml instead of ≤2 ng/ml to define AKI resistant patients

Characteristic[a]	Reduced Risk for AKI (n=339)	AKI Resistant (n=26)	AKI (n=208)	*P*-Value for AKI Resistant Compared to AKI[b]	*P*-Value for AKI Resistant Compared to Reduced Risk for AKI[b]	*P*-Value for Reduced Risk for AKI Compared to AKI[b]
Age (years)	60 (50-73)	60.5 (47-67)	61.5 (49.5-72)	0.54	0.54	0.89
Sex (male)	188 (55.5)	14 (53.8)	136 (65.4)	0.25	0.87	**0.03**
Arterial Hypertension	193 (56.9)	16 (61.5)	125 (60.1)	0.89	0.65	0.47
Previous Myocardial Infarction	39 (11.5)	0 (0)	16 (7.8)	0.14	0.07	0.13
Peripheral Vascular Disease	24 (7.1)	3 (11.5)	17 (8.2)	0.56	0.40	0.55
Diabetes	116 34.2)	9 (34.6)	71 (34.1)	0.96	0.97	0.83
Chronic Respiratory Disease	73 (21.5)	6 (23.1)	46 (22.1)	0.91	0.85	0.81
Active Cancer	63 (18.6)	6 (23.1)	45 (21.6)	0.87	0.57	0.31
Cirrhosis	18 (5.3)	1 (3.8)	19 (9.1)	0.36	0.75	0.05
HIV Infection	9 (2.7)	0 (0)	5 (2.4)	0.52	0.72	0.83
Charlson Comorbidity Index Score	2 (1-4)	1 (1-3)	2 (1-3.5)	0.33	0.54	0.44
Need for Mechanical Ventilation	97 (28.6)	11 (42.3)	112 (54.3)	0.27	0.14	**<0.01**
Non-Renal SOFA Score at Enrollment[c]	5 (2-7)	6 (4-8)	6 (5-9)	0.43	**0.02**	**<0.01**

Abbreviations: AKI, Acute Kidney Injury; HIV, Human Immunodeficiency Virus; SOFA, Sequential Organ Failure Assessment

[a]Categorical variables are presented as the number of patients (percentage) and continuous variables as median (interquartile range).

[b]P values are from the χ^2 test for categorical variables and the Kruskal-Wallis H test for continuous and ordinal variables

[c]Serum creatinine and urine output were not included in the score determination.

Supplementary Table S5. Comparison of clinical endpoints using a Kidney Injury Molecule-1 cutoff of ≤1 ng/ml instead of ≤2 ng/ml to define AKI Resistant Patients

Endpoints[a]	Reduced Risk for AKI (n=339)	AKI Resistant (n=26)	AKI (n=208)	*P*-Value for AKI Resistant Compared to AKI[b]	*P*-Value for AKI Resistant Compared to Reduced Risk for AKI[b]	*P*-Value for Reduced Risk for AKI Compared to AKI[b]
Mortality at 30 days	56 (16.5)	3 (11.5)	63 (30.3)	**0.04**	0.51	**<0.01**
ICU Length of Stay	3 (2-5)	2.5 (2-5)	4 (2-6)	**0.03**	0.61	**<0.01**

Abbreviations: AKI, Acute Kidney Injury; CI, Confidence Interval; ICU Intensive Care Unit

[a]Categorical variables are presented as the number of patients (percentage) and continuous variables as median (interquartile range)

[b]P values are from the χ^2 test for categorical variables and the Kruskal-Wallis H test for continuous and ordinal variables