

Online Resource 3: P-values for AKI Severity in Sepsis patients

Category, N (%) ¹	Unadjusted			Adjusted ²		
	1 vs. 2 P-Value	1 vs. 3 P-Value	2 vs. 3 P-Value	1 vs. 2 P-Value	1 vs. 3 P-Value	2 vs. 3 P-Value
Demographics/Clinical						
Age at ICU Admission (years)	0.184	0.232	0.947			
Male Gender	0.648	0.375	0.278			
Weight at ICU Admission (kg)	0.097	0.032	0.785			
Any Comorbid Conditions	0.366	0.538	0.769			
Admission Diagnosis						
Shock	0.080	<0.001	0.028			
Medical Cardiac	0.774	0.432	0.521			
Respiratory Failure	0.187	0.522	0.535			
Post-Surgical/Minor Trauma	0.316	0.437	0.146			
CNS Dysfunction	0.669	0.246	0.572			
Pain/Sedation Management	0.489	1.000	0.705			
History of Transplant	<0.001	<0.001	0.855			
PRISM-III	0.686	<0.001	<0.001			
PIM-2	0.829	0.007	0.023			
PELOD	0.227	0.003	0.095			
Any Severity Score >75 th Percentile	0.328	0.006	0.005			
Outcomes						
Mechanical Ventilation Use	0.992	<0.001	0.005	0.928	0.007	0.033
CRRT Use	0.553	<0.001	<0.001	0.308	<0.001	0.006
ECMO Use	1.000	0.182	0.229	0.963	0.076	0.957
28-Day Mortality	0.876	<0.001	<0.001	0.897	0.001	0.034
28-Day MV-Free Days	0.209	<0.001	0.008	0.304	<0.001	0.088
28-Day ICU-Free Days	0.018	<0.001	<0.001	0.106	<0.001	0.007
Complex ICU course	0.195	<0.001	<0.001	0.990	<0.001	<0.001

ICU = Intensive Care Unit, AKI = Acute Kidney Injury, PRISM-III = Pediatric Risk of Mortality 3, PIM-2 = Pediatric Index of Mortality 2, PELOD= Pediatric Logistic Organ Dysfunction, CNS = Central Nervous System, MV = Mechanical Ventilation, CRRT = Continuous Renal Replacement Therapy, ECMO = Extracorporeal Membrane Oxygenation

¹P-values considered at the Bonferroni threshold (0.05 / 3 = 0.017)

²Outcome p-values adjusted for SOI score (i.e., Any SOI > 75th)