

Online Resource 4: P-values for AKI Temporality 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)	0.256	0.311	0.770			
Male Gender	0.480	0.653	0.898			
Weight at ICU Admission (kg)	0.063	0.115	0.995			
Any Comorbid Conditions	0.274	0.720	0.609			
Admission Diagnosis						
Shock	<0.001	0.007	0.539			
Medical Cardiac	1.000	0.754	0.742			
Respiratory Failure	0.010	0.643	0.020			
Post-Surgical/Minor Trauma	0.547	0.701	0.447			
CNS Dysfunction	0.934	0.097	0.156			
Pain/Sedation Management	0.220	0.365	0.084			
History of Transplant	<0.001	<0.001	0.414			
PRISM-III	0.021	<0.001	0.102			
PIM-2	0.993	0.029	0.127			
PELOD	0.293	0.002	0.050			
Any Severity Score >75 th Percentile	0.502	0.131	0.495			
Outcomes						
Mechanical Ventilation Use	0.811	<0.001	<0.001	0.807	0.009	0.020
CRRT Use	0.002	<0.001	<0.001	0.016	<0.001	0.003
ECMO Use	1.000	0.108	0.216	0.649	0.068	0.337
28-Day Mortality	0.001	0.001	0.656	0.007	0.037	0.595
28-Day MV-Free Days	0.383	<0.001	0.003	0.295	<0.001	0.017
28-Day ICU-Free Days	0.669	<0.001	<0.001	0.953	<0.001	<0.001
Complex ICU course	0.089	<0.001	<0.001	0.577	<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)