

Online Resource 5: Study characteristics by Sepsis and AKI Duration for patients surviving >48 hours in the ICU (N=707)

Category, N (%)	NO AKI (1) N=445 (62.9%)	TRANSIENT AKI (2) N=154 (21.8%)	PERSISTENT AKI (3) N=108 (15.3%)
Demographics/Clinical			
Age at ICU Admission (years)	3.7 (1.4, 11.9)	5.5 (1.7, 12.6)	6.8 (1.2, 14.3)
Male Gender	231 (51.9%)	86 (55.8%)	59 (54.6%)
Weight at ICU Admission (kg)	15.1 (9.7, 34.0)	19.8 (11.0, 46.2)	20.0 (9.9, 48.6)
Any Comorbid Conditions	372 (83.6%)	133 (86.4%)	92 (85.2%)
Admission Diagnosis			
Shock	234 (52.6%)	106 (68.8%)	73 (67.6%)
Medical Cardiac	13 (2.9%)	4 (2.6%)	4 (3.7%)
Respiratory Failure	217 (48.8%)	52 (33.8%)	55 (50.9%)
Post-Surgical/Minor Trauma	34 (7.6%)	14 (9.1%)	7 (6.5%)
CNS Dysfunction	99 (22.3%)	33 (21.4%)	16 (14.8%)
Pain/Sedation Management	7 (1.6%)	5 (3.3%)	0 (0%)
History of Transplant	15 (3.4%)	17 (11%)	16 (14.8%)
PRISM-III	4.0 (0.0, 10.0)	6.5 (2.0, 12.5)	10.0 (7.0, 14.0)
PIM-2	1.0 (1.0, 4.0)	1.0 (1.0, 3.0)	3.0 (1.0, 6.0)
PELOD	10.0 (1.0, 12.0)	11.0 (10.0, 12.0)	12.0 (11.0, 22.0)
Any Severity Score >75 th Percentile	64 (28.2%)	15 (27.3%)	21 (38.9%)
Outcomes			
Mechanical Ventilation Use	181 (43.6%)	60 (40.3%)	72 (66.7%)*
CRRT Use	2 (0.5%)	5 (3.3%)	21 (19.4%)*^
ECMO Use	6 (1.4%)	2 (1.3%)	4 (3.7%)
28-Day Mortality	16 (3.6%)	8 (5.2%)	15 (13.9%)*
28-Day MV-Free Days	24.0 (19.0, 26.0)	24.0 (21.0, 26.0)	19.0 (3.0, 23.0)*^
28-Day ICU-Free Days	24.0 (21.0, 25.0)	25.0 (20.0, 26.0)	17.0 (7.0, 21.0)*^
Complex ICU course	71 (16%)	26 (16.9%)	57 (52.8%)*^

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, Severity Score based on Sepsis sample (N=757)

¹Of 757 sepsis patients, N=33 were excluded due to no AKI within first 48 hours of observation, and N=17 were excluded due to death within the first 48 hours in the ICU. After adjustment for univariates, p value <0.017 considered at the Bonferroni threshold (0.05/3) for: *NO vs. PERSISTENT and ^TRANSIENT vs. PERSISTENT.