

**Supplemental Table 1**

	Monday Initiation n=71	Non-Monday Initiation n=463	p
<b>Demographics</b>			
Age	56 ± 17	59 ± 16	0.11
Male Gender	50 (70)	290 (63)	0.21
Black	13 (18)	80 (17)	0.83
<b>Hospital Location</b>			
Surgical service	46 (65)	262 (57)	0.19
Intensive Care Unit	65 (92)	413 (89)	0.55
<b>Comorbidities (present at admission)</b>			
HIV	0 (0)	8 (2)	n/a
Congestive Heart Failure	30 (42)	210 (45)	0.62
Cardiovascular Disease	10 (14)	49 (11)	0.38
Diabetes	20 (28)	117 (25)	0.60
Liver disease	26 (37)	195 (42)	0.38
Malignancy	6 (8)	44 (10)	0.78
Metastatic Solid Tumor	2 (3)	18 (4)	0.66
Myocardial Infarction	16 (23)	79 (17)	0.26
Peptic ulcer disease	4 (6)	21 (5)	0.68
Peripheral vascular disease	18 (25)	84 (18)	0.15
Pulmonary disease	6 (8)	57 (12)	0.35
Hemiplegia	3 (4)	11 (2)	0.37
Rheumatologic disease	4 (6)	9 (2)	0.07
<b>Laboratory Values</b>			
Baseline creatinine	0.94 ± 0.27	0.94 ± 0.25	0.95
Bicarbonate	18 ± 5	17 ± 5	0.30
BUN	78 ± 36	71 ± 40	0.15
Change in creatinine from day prior	0.84 ± 0.80	0.96 ± 0.82	0.24
Creatinine	4.26 ± 1.61	4.16 ± 1.84	0.67
Potassium	5.1 ± 1.0	5.3 ± 1.1	0.32
<b>AKI Data</b>			
Hospital stay prior to today (IQR)	8 (4 - 14)	8 (4 - 17)	0.41
Onset of AKI to Doubling of Creatinine (IQR)	2 (1 - 2)	2 (1 - 2)	0.95
Time from AKI stage 2 to RRT (IQR)	2 (1 - 5)	3 (2 - 5)	0.22
<b>Acuity of Illness</b>			
SOFA score	10.8 ± 2.8	10.9 ± 3.4	0.83
Ventilated	52 (73)	310 (67)	0.29
Pressor Requirement			
None	20 (28)	149 (32)	0.50
1	12 (17)	74 (16)	0.84
≥2	39 (55)	240 (52)	0.63
Propensity to be dialyzed	0.24 ± 0.18	0.26 ± 0.23	0.32

Supplemental Table 1: Patient characteristics, stratified by day of initiation of dialysis. Data is mean ± SD or n(%) unless otherwise indicated.

**Supplemental Table 2**

	Sunday	Monday	Tue-Sat	Total	P(sun vs. mon)	P(sun vs. tue-sat)
<b>Demographics</b>	n=680	n=593	n=3,697	n=4,970		
Age	61 ± 16	61 ± 17	61 ± 16	61 ± 16	0.79	0.36
Male Gender	356 (52)	312 (53)	1981 (54)	2649 (53)	0.61	0.58
Black	197 (29)	161 (27)	983 (27)	1341 (27)	0.68	0.97
<b>Hospital Location</b>						
Surgical service	311 (46)	259 (44)	1763 (48)	2333 (47)	0.75	0.86
Intensive Care Unit	322 (47)	284 (48)	1775 (48)	2381 (48)	0.59	0.90
<b>Comorbidities (present at admission)</b>						
HIV	24 (4)	13 (2)	79 (2)	116 (2)	0.48	0.07
Congestive Heart Failure	237 (35)	225 (38)	1318 (36)	1780 (36)	0.49	0.49
Cardiovascular Disease	69 (10)	55 (9)	354 (10)	478 (10)	0.49	0.30
Diabetes	183 (27)	161 (27)	964 (26)	1308 (26)	0.85	0.91
Liver disease	134 (20)	117 (20)	692 (19)	943 (19)	0.74	0.65
Malignancy	65 (10)	56 (9)	464 (13)	585 (12)	0.34	0.66
Metastatic Solid Tumor	55 (8)	62 (10)	359 (10)	476 (10)	0.98	0.39
Myocardial Infarction	79 (12)	86 (15)	513 (14)	678 (14)	0.50	0.80
Peptic ulcer disease	21 (3)	11 (2)	100 (3)	132 (3)	0.50	0.45
Peripheral vascular disease	99 (15)	81 (14)	513 (14)	693 (14)	0.96	0.49
Pulmonary disease	107 (16)	85 (14)	539 (15)	731 (15)	0.46	0.18
Hemiplegia	15 (2)	11 (2)	99 (3)	125 (3)	0.75	0.73
Rheumatologic disease	24 (4)	17 (3)	120 (3)	161 (3)	0.66	0.06
<b>Laboratory Values</b>						
Baseline creatinine	0.83 ± 0.25	0.81 ± 0.25	0.83 ± 0.26	0.83 ± 0.25	0.19	0.10
Bicarbonate	22 ± 6	22 ± 6	22 ± 6	22 ± 6	0.85	0.18
BUN	39 ± 22	41 ± 23	38 ± 22	38 ± 22	0.05	0.84
Change in creatinine from day prior	0.94 ± 0.74	0.82 ± 0.70	0.90 ± 0.63	0.90 ± 0.65	0.003	0.24
Creatinine	2.16 ± 0.89	2.10 ± 0.84	2.13 ± 0.80	2.13 ± 0.82	0.96	0.20
Potassium	4.6 ± 0.8	4.6 ± 0.8	4.7 ± 0.9	4.6 ± 0.9	0.74	<0.001
<b>AKI Data</b>						
Hospital stay prior to today, days (IQR)*	8 (4 - 15)	8 (5 - 15)	8 (5 - 15)	8 (5 - 15)	0.01	0.45
Onset of AKI to Doubling of Creatinine, days (IQR)*	2 (1 - 2)	2 (1 - 2)	2 (1 - 2)	2 (1 - 2)	0.05	0.68
<b>Acuity of Illness</b>						
SOFA score	5.3 ± 3.6	5.5 ± 3.6	5.4 ± 3.7	5.4 ± 3.6	0.39	0.92
Ventilated	186 (27)	177 (30)	1059 (29)	1422 (29)	0.42	0.83
Pressor Requirement						
None	494 (73)	422 (71)	2672 (72)	3588 (72)	0.74	0.87
1	92 (14)	84 (14)	451 (12)	627 (13)	0.98	0.48
≥2	94 (14)	87 (15)	574 (16)	755 (15)	0.65	0.37
Propensity to be dialyzed	0.03 ± 0.09	0.02 ± 0.07	0.03 ± 0.09	0.03 ± 0.08	0.90	0.39

Supplemental Table 2: Patient characteristics of patients on the first day AKIN stage 2 criteria is met, stratified by day of the week. Data is mean± SD or n(%) unless otherwise indicated. n=Patients  
\*Patients who achieve AKIN stage 2 or greater on a Sunday have slightly shorter hospital stays than patients with AKI stage 2 or greater present on Monday.