

**Supplemental Material for
Kidney Biomarkers and Major Adverse Kidney Events in Critically Ill Patients
Flannery AH, Bosler K, Ortiz-Soriano V, Gianella F, Prado V, Lambert J, Toto RD,
Moe OW, Neyra JA**

eTable 1. Major Adverse Kidney Events at 90 Days

eTable 2. Major Adverse Kidney Events at Six Months

eTable 3. Major Adverse Kidney Events at One Year

eTable 1. Major Adverse Kidney Events at 90 Days

Kidney Biomarker	MAKE at 90 Days (n=47)	No MAKE at 90 Days (n=35)	p-value
Serum NGAL Time 1 (ng/ml)	483 (244-1307)	189 (119-304)	<0.001
Serum NGAL Time 2 (ng/ml)	441 (238-804) (n=21)	157 (133-437) (n=7)	0.062
Serum NGAL Time 3 (ng/ml)	237 (200-886) (n=12)	238 (106-516) (n=5)	0.574
Urinary NGAL/Ucr Time 1 (ng/ml)	850 (140-3649) (n=40)	34 (10-99)	<0.001
Urinary NGAL/Ucr Time 2 (ng/ml)	553 (75-1322) (n=18)	109 (35-2496) (n=7)	0.790
Urinary NGAL/Ucr Time 3 (ng/ml)	259 (40-891) (n=10)	30 (15-561) (n=5)	0.165
Serum Cystatin C Time 1 (ng/ml)	2018 (837-3002)	713 (574-1024)	<0.001
Serum Cystatin C Time 2 (ng/ml)	1369 (1100-2554) (n=21)	962 (667-1403) (n=7)	0.036
Serum Cystatin C Time 3 (ng/ml)	1668 (1201-2595) (n=12)	1445 (813-3124) (n=4)	0.599
Urinary Cystatin C/Ucr Time 1 (ng/ml)	339 (48-1529) (n=40)	68 (17-837)	0.047
Urinary Cystatin C/Ucr Time 2 (ng/ml)	370 (75-1462) (n=18)	147 (62-776) (n=7)	0.574
Urinary Cystatin C/Ucr Time 3 (ng/ml)	69 (46-820) (n=9)	116 (55-319) (n=5)	0.947
Urinary KIM-1/Ucr Time 1 (ng/ml)	5.2 (2.5-13.3) (n=40)	2.3 (1.4-6.1)	0.014
Urinary KIM-1/Ucr Time 2 (ng/ml)	4.6 (2.8-7.7) (n=18)	5.2 (1.2-6.8) (n=7)	0.701
Urinary KIM-1/Ucr Time 3 (ng/ml)	2.4 (1.8-4.9) (n=10)	3 (1.9-4.3) (n=5)	0.953

eTable 2. Major Adverse Kidney Events at Six Months

Kidney Biomarker	MAKE at 6 months (n=45)	No MAKE at 6 months (n=34)	p-value
Serum NGAL Time 1 (ng/ml)	474 (229-1203)	193 (129-312)	<0.001
Serum NGAL Time 2 (ng/ml)	452 (272-1018) (n=17)	158 (114-304) (n=8)	0.011
Serum NGAL Time 3 (ng/ml)	328 (226-1277) (n=9)	150 (108-238) (n=7)	0.023
Urinary NGAL/Ucr Time 1 (ng/ml)	510 (107-3277) (n=39)	33 (9-150) (n=33)	<0.001
Urinary NGAL/Ucr Time 2 (ng/ml)	494 (66-2009) (n=14)	343 (46-1126) (n=8)	0.664
Urinary NGAL/Ucr Time 3 (ng/ml)	416 (23-904) (n=7)	42 (19-70) (n=7)	0.209
Serum Cystatin C Time 1 (ng/ml)	2018 (830-3038)	710 (571-999)	<0.001
Serum Cystatin C Time 2 (ng/ml)	1506 (1042-2677) (n=17)	1035 (709-1340) (n=8)	0.043
Serum Cystatin C Time 3 (ng/ml)	2380 (1088-2708) (n=9)	1205 (955-1479) (n=6)	0.088
Urinary Cystatin C/Ucr Time 1 (ng/ml)	398 (48-1561) (n=39)	57 (13-650) (n=33)	0.036
Urinary Cystatin C/Ucr Time 2 (ng/ml)	503 (23-1462) (n=14)	174 (79-568) (n=8)	0.764
Urinary Cystatin C/Ucr Time 3 (ng/ml)	437 (49-1477) (n=6)	68 (49-116) (n=7)	0.181
Urinary KIM-1/Ucr Time 1 (ng/ml)	5.1 (2.5-13.3) (n=39)	2.1 (1.1-5.8) (n=33)	0.005
Urinary KIM-1/Ucr Time 2 (ng/ml)	5.8 (2.8-7.7) (n=14)	4.3 (1.6-6.4) (n=8)	0.525
Urinary KIM-1/Ucr Time 3 (ng/ml)	4.5 (2.0-6.4) (n=7)	2.3 (1.8-3.8) (n=7)	0.209

eTable 3. Major Adverse Kidney Events at One Year

Kidney Biomarker	MAKE at 1 year (n=48)	No MAKE at 1 year (n=27)	p-value
Serum NGAL Time 1 (ng/ml)	426 (188-927)	192 (133-279)	0.001
Serum NGAL Time 2 (ng/ml)	321 (168-575) (n=20)	153 (133-336) (n=3)	0.309
Serum NGAL Time 3 (ng/ml)	226 (177-1158) (n=10)	213 (136-306) (n=4)	0.635
Urinary NGAL/Ucr Time 1 (ng/ml)	510 (92-3079) (n=41)	33 (10-61) (n=27)	<0.001
Urinary NGAL/Ucr Time 2 (ng/ml)	459 (62-1832) (n=17)	109 (35-1173) (n=3)	0.689
Urinary NGAL/Ucr Time 3 (ng/ml)	259 (34-900) (n=8)	43 (14-167) (n=4)	0.154
Serum Cystatin C Time 1 (ng/ml)	1551 (801-2804)	713 (560-989)	<0.001
Serum Cystatin C Time 2 (ng/ml)	1358 (935-2598) (n=20)	974 (833-1318) (n=3)	0.309
Serum Cystatin C Time 3 (ng/ml)	2206 (1097-2685) (n=10)	940 (810-1766) (n=4)	0.106
Urinary Cystatin C/Ucr Time 1 (ng/ml)	280 (27-1299) (n=41)	53 (11-643)	0.113
Urinary Cystatin C/Ucr Time 2 (ng/ml)	247 (23-782) (n=17)	147 (63-1794) (n=3)	0.842
Urinary Cystatin C/Ucr Time 3 (ng/ml)	317 (69-1084) (n=7)	52 (49-56) (n=4)	0.073
Urinary KIM-1/Ucr Time 1 (ng/ml)	4.3 (1.6-13.2) (n=41)	2.1 (1.4-5.5)	0.089
Urinary KIM-1/Ucr Time 2 (ng/ml)	4.5 (2.1-7.3) (n=17)	4.1 (3.7-5.2) (n=3)	0.958
Urinary KIM-1/Ucr Time 3 (ng/ml)	2.2 (1.7-6.0) (n=8)	2.9 (1.0-4.5) (n=4)	0.933