

Item S2: Unadjusted and adjusted relative risk for individual biomarker quintiles, uncorrected and corrected for urine creatinine

Table a – Early Post-operative Biomarker Quintiles association with Any AKI and interaction with Pre-operative eGFR

Quintile Range	eGFR ≤ 60 ml/min/1.73 m ² (n= 424)		eGFR > 60 ml/min/1.73 m ² (n=795)		eGFR x Biomarker p-value
	unadjusted RR	adjusted RR	unadjusted RR	adjusted RR	
Urine IL-18					
<3.31	1.0 (referent)	1.0 (referent)	1.0 (referent)	1.0 (referent)	0.23
3.31 - 7.84	1.06 [0.69, 1.62]	0.99 [0.64, 1.52]	1.76 [1.14, 2.73]	1.71 [1.09, 2.69]	
7.84 - 16.99	1.10 [0.72, 1.67]	1.0 [0.66, 1.51]	1.75 [1.13, 2.71]	1.69 [1.07, 2.66]	
16.99 – 60.14	1.44 [0.97, 2.1]	1.19 [0.8, 1.76]	1.96 [1.28, 3.01]	1.77 [1.13, 2.76]	
>60.14	1.79 [1.25, 2.56]	1.38 [0.92, 2.06]	3.12 [2.11, 4.62]	2.68 [1.75, 4.1]	
Urine NGAL					
< 3.15	1.0 (referent)	1.0 (referent)	1.0 (referent)	1.0 (referent)	0.01
3.15 - 6.96	1.32 [0.85, 2.03]	1.32 [0.85, 2.03]	1.69 [1.1, 2.61]	1.44 [0.94, 2.21]	
6.96 - 16.11	1.73 [1.16, 2.57]	1.53 [1.01, 2.33]	1.68 [1.09, 2.59]	1.45 [0.95, 2.23]	
16.11 – 102.37	1.52 [1.01, 2.3]	1.28 [0.83, 1.98]	2.35 [1.57, 3.51]	1.86 [1.24, 2.78]	
>102.37	1.61 [1.07, 2.41]	1.33 [0.87, 2.05]	2.5 [1.68, 3.72]	1.75 [1.16, 2.63]	
Urine KIM-1					
<0.13	1.0 (referent)	1.0 (referent)	1.0 (referent)	1.0 (referent)	0.13
0.13 - 0.31	1.39 [0.9, 2.16]	1.30 [0.83, 2.01]	1.08 [0.72, 1.63]	0.98 [0.65, 1.46]	
0.31 - 0.6	1.33 [0.85, 2.08]	1.26 [0.8, 1.96]	1.38 [0.94, 2.03]	1.21 [0.83, 1.77]	
0.6 - 1.19	1.74 [1.15, 2.63]	1.45 [0.94, 2.24]	1.75 [1.23, 2.51]	1.60 [1.12, 2.28]	
>1.19	2.13 [1.44, 3.15]	1.80 [1.2, 2.7]	1.85 [1.3, 2.64]	1.68 [1.18, 2.41]	
Urine L-FABP					
< 2.82	1.0 (referent)	1.0 (referent)	1.0 (referent)	1.0 (referent)	0.04
2.82 - 10.68	1.13 [0.77, 1.67]	1.11 [0.76, 1.61]	1.59 [1.07, 2.37]	1.54 [1.04, 2.29]	
10.68 - 37.36	0.96 [0.63, 1.44]	0.85 [0.56, 1.29]	1.53 [1.02, 2.29]	1.43 [0.95, 2.16]	
37.36 – 175.82	1.4 [0.98, 2]	1.21 [0.84, 1.72]	1.52 [1.02, 2.28]	1.38 [0.92, 2.07]	
>175.82	1.33 [0.93, 1.92]	1.23 [0.84, 1.81]	2.37 [1.64, 3.41]	1.93 [1.3, 2.87]	
Urine Cystatin C					
<0.01	1.0 (referent)	1.0 (referent)	1.0 (referent)	1.0 (referent)	0.31
0.01 - 0.12	1.13 [0.78, 1.65]	1.03 [0.7, 1.5]	1.40 [0.97, 2.02]	1.38 [0.96, 1.99]	
0.12 - 0.2	1.32 [0.93, 1.89]	1.26 [0.88, 1.81]	1.43 [0.98, 2.09]	1.32 [0.91, 1.93]	
0.2 - 0.3	1.30 [0.9, 1.87]	1.11 [0.77, 1.61]	1.34 [0.91, 1.96]	1.33 [0.91, 1.94]	
>0.3	1.01 [0.67, 1.51]	0.90 [0.6, 1.35]	1.81 [1.27, 2.57]	1.56 [1.09, 2.22]	
Urine Albumin					
<5.6	1.0 (referent)	1.0 (referent)	1.0 (referent)	1.0 (referent)	0.04
5.6 - 10.4	1.36 [0.88, 2.09]	1.22 [0.8, 1.87]	0.84 [0.57, 1.23]	0.81 [0.55, 1.18]	
10.4 - 20.8	1.52 [1, 2.3]	1.36 [0.89, 2.06]	0.93 [0.64, 1.35]	0.87 [0.61, 1.23]	
20.8 - 48.8	1.46 [0.96, 2.22]	1.21 [0.79, 1.85]	1.11 [0.78, 1.57]	1.04 [0.74, 1.47]	

Quintile Range	eGFR ≤ 60 ml/min/1.73 m ² (n= 424)		eGFR > 60 ml/min/1.73 m ² (n=795)		eGFR x Biomarker p-value
	unadjusted RR	adjusted RR	unadjusted RR	adjusted RR	
>48.8	1.96 [1.33, 2.88]	1.64 [1.1, 2.45]	1.71 [1.26, 2.32]	1.52 [1.11, 2.06]	

Table b - Urinary Creatinine Corrected Early Post-operative Biomarker Quintiles association with Any AKI and interaction with Pre-operative eGFR

Quintile	eGFR ≤ 60 ml/min/1.73 m ²		eGFR > 60 ml/min/1.73 m ²		eGFR x Biomarker p-value
	unadjusted RR	adjusted RR	unadjusted RR	adjusted RR	
Urine IL-18					
<0.21	1.0 (referent)	1.0 (referent)	1.0 (referent)	1.0 (referent)	0.23
0.21-0.35	1.78 [1.14, 2.8]	1.8 [1.12, 2.88]	1.01 [0.68, 1.51]	0.93 [0.63, 1.38]	
0.35-0.65	1.25 [0.76, 2.05]	1.26 [0.75, 2.13]	1.54 [1.09, 2.19]	1.31 [0.92, 1.86]	
0.65-2.05	1.76 [1.13, 2.72]	1.75 [1.09, 2.82]	1.5 [1.04, 2.16]	1.18 [0.82, 1.72]	
>2.05	1.64 [1.03, 2.61]	1.61 [0.97, 2.67]	1.79 [1.28, 2.5]	1.29 [0.9, 1.86]	
Urine NGAL					
<0.15	1.0 (referent)	1.0 (referent)	1.0 (referent)	1.0 (referent)	0.03
0.15-0.29	1.08 [0.68, 1.71]	1.14 [0.72, 1.81]	1.24 [0.78, 1.97]	1.17 [0.73, 1.89]	
0.29-0.66	1.43 [0.93, 2.2]	1.42 [0.93, 2.17]	2.01 [1.33, 3.03]	1.97 [1.29, 2.99]	
0.66-4.49	1.41 [0.93, 2.14]	1.36 [0.9, 2.05]	2.4 [1.61, 3.58]	2.23 [1.47, 3.38]	
>4.49	1.93 [1.31, 2.86]	1.72 [1.12, 2.66]	2.85 [1.94, 4.19]	2.4 [1.58, 3.66]	
Urine KIM-1					
<0.01	1.0 (referent)	1.0 (referent)	1.0 (referent)	1.0 (referent)	0.28
0.01-0.015	0.85 [0.54, 1.34]	1.03 [0.65, 1.62]	1.6 [1.1, 2.33]	1.48 [1.02, 2.14]	
0.015-0.023	0.97 [0.62, 1.51]	0.97 [0.63, 1.51]	1.6 [1.1, 2.32]	1.5 [1.04, 2.17]	
0.023-0.036	1.29 [0.88, 1.89]	1.29 [0.88, 1.9]	1.45 [0.98, 2.14]	1.28 [0.87, 1.89]	
>0.036	1.54 [1.08, 2.2]	1.54 [1.07, 2.21]	2.07 [1.45, 2.98]	1.8 [1.24, 2.61]	
Urine L-FABP					
<0.10	1.0 (referent)	1.0 (referent)	1.0 (referent)	1.0 (referent)	0.06
0.10-0.51	0.86 [0.57, 1.31]	0.79 [0.53, 1.17]	1.48 [1.03, 2.13]	1.29 [0.9, 1.84]	
0.51-1.95	1.02 [0.7, 1.48]	0.9 [0.62, 1.3]	1.12 [0.74, 1.67]	0.98 [0.66, 1.47]	
1.95-9.52	1.07 [0.74, 1.54]	0.98 [0.67, 1.42]	1.44 [0.99, 2.08]	1.23 [0.85, 1.78]	
>9.52	1.06 [0.72, 1.55]	0.94 [0.62, 1.41]	2.07 [1.48, 2.88]	1.66 [1.15, 2.39]	
Urine Cystatin C					
<0.001	1.0 (referent)	1.0 (referent)	1.0 (referent)	1.0 (referent)	0.54
0.001-0.004	1.34 [0.97, 1.86]	1.19 [0.85, 1.66]	1.36 [0.94, 1.98]	1.27 [0.87, 1.85]	
0.004-0.007	1.04 [0.71, 1.53]	1 [0.69, 1.47]	1.4 [0.98, 2.01]	1.25 [0.87, 1.8]	
0.007-0.01	0.97 [0.67, 1.41]	0.9 [0.62, 1.3]	1.39 [0.96, 2.01]	1.27 [0.87, 1.83]	
>0.01	0.99 [0.68, 1.44]	0.99 [0.68, 1.43]	1.35 [0.93, 1.95]	1.18 [0.82, 1.71]	
Urine Albumin					
<0.02	1.0 (referent)	1.0 (referent)	1.0 (referent)	1.0 (referent)	0.82
0.02-0.05	1.32 [0.85, 2.04]	1.05 [0.68, 1.62]	1.05 [0.74, 1.5]	0.98 [0.69, 1.39]	
0.05-0.10	1.05 [0.67, 1.64]	0.93 [0.6, 1.44]	0.99 [0.68, 1.44]	0.97 [0.67, 1.4]	
0.10-0.19	1.22 [0.8, 1.88]	1.13 [0.75, 1.71]	1.42 [1.02, 1.97]	1.28 [0.93, 1.77]	
>0.19	1.56 [1.04, 2.34]	1.36 [0.9, 2.05]	1.56 [1.13, 2.14]	1.36 [0.98, 1.89]	