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Supplementary Table 1. Multivariable association between AKI and change in level of urine PCR, full model and analyses that exclude receipt of ACE-I/ARB or systolic blood pressure level

Predictors in mixed effects model	Full Model		Model excluding receipt of ACE-I/ARB		Model excluding systolic blood pressure level	
	Relative risk (95% CI)	P	Relative risk (95% CI)	P	Relative risk (95% CI)	P
AKI between study visits (vs. no AKI)*	**1.090 (1.021 to 1.163)**	**0.01**	**1.093 (1.024 to 1.166)**	**0.01**	**1.071 (1.003 to 1.144)**	**0.04**
eGFR (per 1 ml/min/1.73m^2 increase)*	0.997 (0.996 to 0.998)	<0.001	0.997 (0.996 to 0.998)	<0.001	0.999 (0.998 to 1.000)	0.01
Systolic blood pressure (per 1 mmHg increase)*	1.010 (1.009 to 1.010)	<0.001	1.010 (1.009 to 1.011)	<0.001	■	■
Receipt of ACE-I/ARB*	0.842 (0.798 to 0.888)	<0.001	■	■	0.831 (0.786 to 0.878)	<0.001
Antihypertensive medication use*	1.042 (1.008 to 1.077)	0.02	1.030 (0.996 to 1.064)	0.08	1.026 (0.992 to 1.062)	0.13
Diabetes mellitus (vs. no diabetes) *	1.470 (1.379 to 1.568)	<0.001	1.450 (1.359 to 1.546)	<0.001	1.486 (1.390 to 1.588)	<0.001
Age (per 1 year increase)*	1.014 (1.012 to 1.017)	<0.001	1.014 (1.012 to 1.017)	<0.001	1.020 (1.017 to 1.023)	<0.001
Black race (vs. non-black)	1.311 (1.160 to 1.483)	<0.001	1.284 (1.136 to 1.451)	<0.001	1.432 (1.259 to 1.628)	<0.001
Female (vs. male)	1.009 (0.919 to 1.108)	0.85	1.034 (0.942 to 1.135)	0.48	0.977 (0.885 to 1.077)	0.64
ASSESS-AKI participant (vs. CRIC participant)	1.050 (0.937 to 1.177)	0.40	1.093 (0.976 to 1.224)	0.12	1.039 (0.922 to 1.172)	0.53

*Time-updated predictors

Supplementary Table 2. Multivariable association between AKI and change in level of urine PCR using an AKI vs. matched non-AKI episode modeling approach (i.e. comparing only single pair of pre- and post- study visits urine PCR), full model and analyses that exclude receipt of ACE-I/ARB or systolic blood pressure level

Predictors in mixed effects model	Full Model		Model excluding receipt of ACE-I/ARB		Model excluding systolic blood pressure level	
	Relative risk (95% CI)	P	Relative risk (95% CI)	P	Relative risk (95% CI)	P
AKI between study visits (vs. no AKI)*	**1.107 (1.017 to 1.205)**	**0.02**	**1.108 (1.018 to 1.206)**	**0.02**	**1.079 (0.989 to 1.178)**	0.09
eGFR (per 1 ml/min/1.73m^2 increase)*	0.988 (0.986 to 0.991)	<0.001	0.989 (0.986 to 0.991)	<0.001	0.990 (0.987 to 0.993)	<0.001
Systolic blood pressure (per 1 mmHg increase)*	1.011 (1.009 to 1.014)	<0.001	1.011 (1.009 to 1.014)	<0.001	■	■
Receipt of ACE-I/ARB*	0.906 (0.777 to 1.058)	0.21	■	■	0.903 (0.770 to 1.059)	0.21
Antihypertensive medication use*	1.122 (1.009 to 1.248)	0.03	1.114 (1.002 to 1.238)	0.05	1.113 (0.997 to 1.242)	0.06
Diabetes mellitus (vs. no diabetes) *	1.790 (1.530 to 2.096)	<0.001	1.762 (1.508 to 2.059)	<0.001	1.880 (1.598 to 2.210)	<0.001
Age (per 1 year increase)*	0.986 (0.979 to 0.993)	<0.001	0.986 (0.979 to 0.993)	<0.001	0.990 (0.983 to 0.998)	0.01
Black race (vs. non-black)	0.933 (0.749 to 1.162)	0.54	0.923 (0.741 to 1.149)	0.47	1.053 (0.841 to 1.318)	0.65
Female (vs. male)	0.920 (0.776 to 1.090)	0.33	0.935 (0.790 to 1.106)	0.43	0.891 (0.748 to 1.061)	0.19
ASSESS-AKI participant (vs. CRIC participant)	1.259 (1.016 to 1.562)	0.04	1.289 (1.042 to 1.594)	0.02	1.261 (1.010 to 1.574)	0.04

*Time-updated predictors

Supplementary Table 3. Distributions of absolute levels of urine protein/creatinine ratio (in units of g/g) at two consecutive study visits with and without intervening AKI.

	Median (IQR) urine proteinuria/creatinine level from earlier study visit	Intervening AKI	Median (IQR) urine proteinuria/creatinine level from subsequent study visit
Matched AKI participants (N=324)	0.18 (0.10-0.49) (g/g)	Yes	0.20 (0.10-0.53) (g/g)
Matched non-AKI participants (N=324)	0.12 (0.07-0.24) (g/g)	No	0.11 (0.07-0.24) (g/g)