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Supplemental Table 1: Sensitivity Analysis for the Time to event Analyses of 24h Calibrated Urinary Potassium with CKD outcomes in Black Participants in the Chronic Renal Insufficiency Cohort
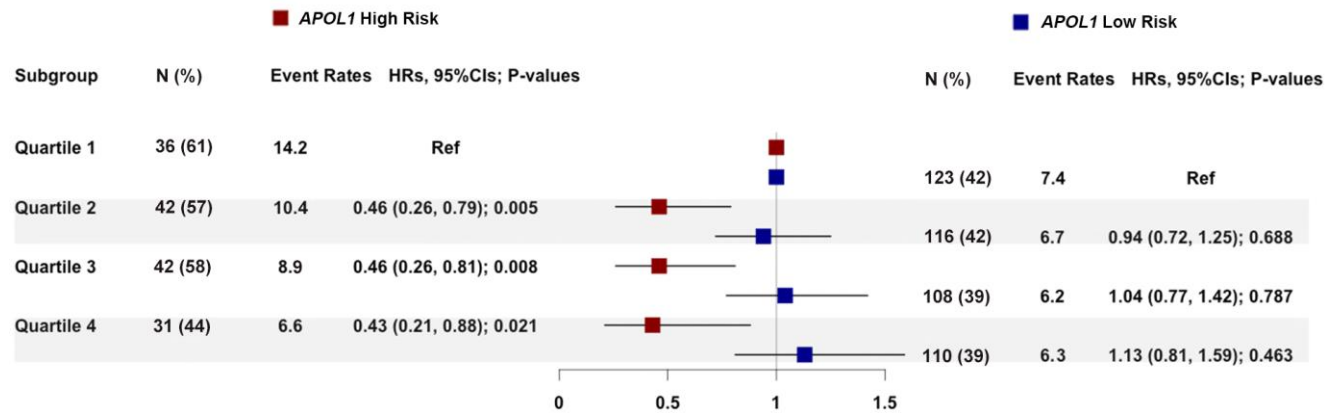
	Event rate N (%)	Incidence rates (per 100 person-years)	Unadjusted	Model 3	Sensitivity 1: Model 3 + Systolic BP	Sensitivity 2: Model 3 + UACR	Sensitivity 3: Model 3 + Dietary Calorie
Quartiles of 24hour Urinary Potassium (mmol/24hrs)				**CKD Progression**			
Urinary K <34.7	141 (41)	6.0.	ref	ref	ref	ref	ref
Urinary K 34.7-43.4	138 (40)	6.1	1.01 (0.80, 1.27)	0.95 (0.74, 1.21)	0.98 (0.77, 1.26)	0.84 (0.65, 1.08)	0.90 (0.67, 1.19)
Urinary K 43.5-54.4	155 (45)	7.2	1.19 (0.95, 1.50)	1.06 (0.83, 1.36)	0.98 (0.76, 1.27)	0.96 (0.74, 1.24)	0.95 (0.71, 1.28)
Urinary K >53.4	171 (50)	9.2	1.54 (1.23, 1.92)	1.26 (0.96, 1.64)	1.21 (0.92, 1.58)	0.90 (0.68, 1.19)	1.12 (0.82, 1.52)
Quartiles of 24hour Urinary Potassium (mmol/24hrs)				**CKD Progression or Death**			
Urinary K <34.7	199 (58)	7.1	ref	ref	ref	ref	ref
Urinary K 34.7-43.4	203 (59)	7.3	1.04 (0.85, 1.26)	0.91 (0.74, 1.12)	0.91 (0.74, 1.12)	0.84 (0.68, 1.04)	0.86 (0.68, 1.09)
Urinary K 43.5-54.4	222 (64)	8.6	1.22 (1.01, 1.48)	1.00 (0.81, 1.23)	0.93 (0.75, 1.15)	0.93 (0.75, 1.15)	0.91 (0.71, 1.16)
Urinary K >53.4	244 (71)	11.1	1.57 (1.30, 1.90)	1.17 (0.93, 1.46)	1.11 (0.89, 1.39)	0.96 (0.76, 1.21)	1.07 (0.83, 1.39)

*Model 3 = Adjusted for clinic sites, age, sex, education, urinary creatinine excretion, waist circumference, body-mass index, cigarette smoking, alcohol drinking, physical activity, history of hypercholesterolemia, history of diabetes, history of cardiovascular disease, use of diuretics, use of renin-angiotensin system blocking agents, and use of other antihypertensive medications, baseline eGFR for urinary sodium excretion in potassium models and urinary potassium excretion in the urinary sodium models

Supplemental Figure 1: **Associations of Urinary Potassium Excretion (Average Urine Potassium) With Chronic Kidney Disease Progression Stratified by Apolipoprotein L1 Genotypes**
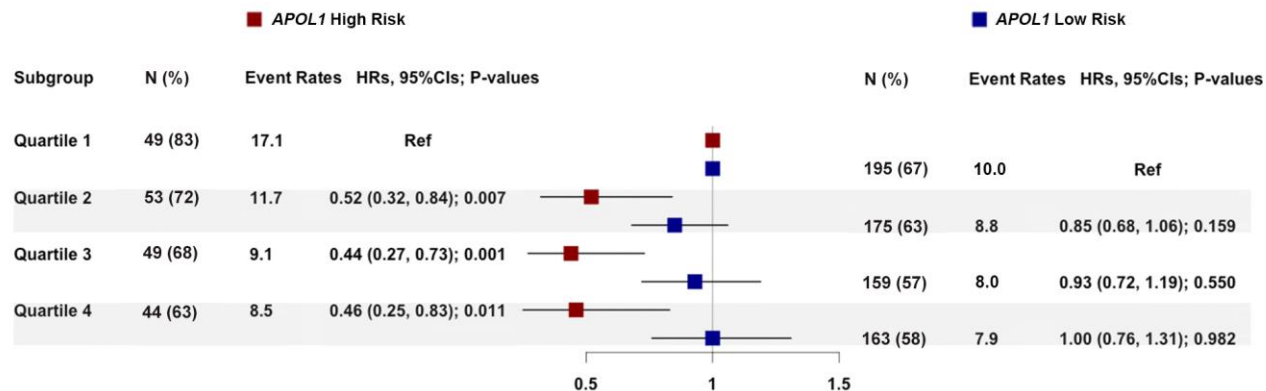
S1A.

24h urine averaged potassium and CKD progression by *APOL1* risk levels

■ *APOL1* High Risk   ■ *APOL1* Low Risk

Subgroup	N (%)	Event Rates	HRs, 95%CIs; P-values		N (%)	Event Rates	HRs, 95%CIs; P-values
Quartile 1	36 (61)	14.2	Ref				
					123 (42)	7.4	Ref
Quartile 2	42 (57)	10.4	0.46 (0.26, 0.79); 0.005				
					116 (42)	6.7	0.94 (0.72, 1.25); 0.688
Quartile 3	42 (58)	8.9	0.46 (0.26, 0.81); 0.008				
					108 (39)	6.2	1.04 (0.77, 1.42); 0.787
Quartile 4	31 (44)	6.6	0.43 (0.21, 0.88); 0.021				
					110 (39)	6.3	1.13 (0.81, 1.59); 0.463

Supplemental Figure 1A: Time to event analyses for average 24h urinary potassium excretion with CKD progression defined as 50% decline in eGFR or incident kidney failure stratified by Apolipoprotein L1 genotypes in CRIC. Model adjusted for clinic sites, age, sex, education, urinary creatinine excretion, waist circumference, body-mass index, cigarette smoking, alcohol drinking, physical activity, history of hypercholesterolemia, history of diabetes, history of cardiovascular disease, use of diuretics, use of renin-angiotensin system blocking agents, and use of other antihypertensive medications, baseline eGFR, and average 24h urinary sodium excretion. Unadjusted p for interaction urinary potassium x *APOL1* risk = 0.20 (not shown in figure), for fully adjusted model (Figure S1A), p for interaction 0.30.

S1B.

24h urine averaged potassium and CKD progression or Death by *APOL1* risk levels

■ *APOL1* High Risk   ■ *APOL1* Low Risk

Subgroup	N (%)	Event Rates	HRs, 95%CIs; P-values		N (%)	Event Rates	HRs, 95%CIs; P-values
Quartile 1	49 (83)	17.1	Ref				
					195 (67)	10.0	Ref
Quartile 2	53 (72)	11.7	0.52 (0.32, 0.84); 0.007				
					175 (63)	8.8	0.85 (0.68, 1.06); 0.159
Quartile 3	49 (68)	9.1	0.44 (0.27, 0.73); 0.001				
					159 (57)	8.0	0.93 (0.72, 1.19); 0.550
Quartile 4	44 (63)	8.5	0.46 (0.25, 0.83); 0.011				
					163 (58)	7.9	1.00 (0.76, 1.31); 0.982

Supplemental Figure 1B: Time to event analyses for average 24h urinary potassium excretion with CKD progression or death stratified by Apolipoprotein L1 genotypes in CRIC. Model adjusted for clinic sites, age, sex, education, urinary creatinine excretion, waist circumference, body-mass index, cigarette smoking, alcohol drinking, physical activity, history of hypercholesterolemia, history of diabetes, history of cardiovascular disease, use of diuretics, use of renin-angiotensin system blocking agents, and use of other antihypertensive medications, baseline eGFR, and average 24h urinary sodium excretion. P for interaction urinary potassium excretion x *APOL1* risk allele in unadjusted model = 0.21 (not shown in figure), for fully adjusted model (Figure S1B), p for interaction =0.08.

Supplemental Table 2: Baseline Characteristics of Black Participants in the Chronic Renal Insufficiency Cohort across Calibrated 24-hour Urinary Sodium Quartiles

	24-hour urinary sodium			
	Quartile 1	Quartile 2	Quartile 3	Quartile 4
N	**345**	**345**	**345**	**345**
Range of urinary Sodium (mmol/24hrs)	<117.8	117.8-149.6	149.7-187.8	>187.8
Age, years	57.9 (10.8)	58.2 (11.1)	58.6 (9.9)	58.5 (10.4)
Male#	110 (32)	151 (44)	194 (56)	234 (68)
Annual Household Income≤$50,000/year#	208 (60)	222 (64)	219 (64)	230 (67)
Education level (<high school graduate) #	70 (20)	91 (27)	88 (26)	102 (30)
Current smoking#	62 (18)	59 (17)	66 (19)	74 (21)
Total Metabolism Score from Physical Activity	2.9 (1.2)	3.0 (1.1)	3.0 (1.2)	3.0 (1.2)
Weekly alcohol intake#	38 (11)	41 (12)	57 (17)	53 (15)
African Ancestry %	77.4 (10)	77.9 (9)	77.8 (9)	76.8 (10)
Hypertension#	315 (91)	318 (92)	323 (94)	325 (94)
Diabetes#	141 (41)	164 (48)	186 (54)	210 (61)
Hx of cardiovascular disease#	115 (33.3)	126 (36.5)	130 (37.7)	150 (43.5)
Antihypertensive medication use#	311 (97)	316 (98)	316 (98)	320 (98)
Systolic blood pressure, mmHg	130 (22.3)	130 (21.3)	133 (22.7)	136 (23.0)
Diastolic blood pressure, mmHg	73 (13.9)	73 (13.7)	75 (12.7)	75 (14.4)
Body mass index, kg/m^2	32.6 (7.8)	34.4 (7.6)	33.1 (7.5)	33.1 (8.4)
Waist circumference, cm	105.5 (18.5)	109.8 (16.8)	107.3 (16.3)	109.0 (19.0)
APOL1 status# **0-1 risk variants**	264 (77)	280 (81)	278 (81)	282 (82)
2 risk variants	81 (23)	65 (19)	67 (19)	63 (18)
Aldosterone*	104 (72, 162)	99 (69, 153)	103 (74, 152)	103 (73,148)
Urinary protein, mg/24 hours*	130 (68, 539)	228 (71, 880)	228 (77, 1019)	611 (120, 1752)
Urinary Creatinine, mg/24 hours	1475 (654)	1453 (644)	1411 (592)	1232 (539)
Total Caloric intake, kcal/24h	1803 (808)	1811 (815)	1914 (920)	1993 (995)
Plasma potassium, mmol/L	4.17 (0.53)	4.29 (0.50)	4.22 (0.53)	4.33 (0.55)
eGFR, ml/min/1.73m^2	44 (15.0)	45 (14.5)	45 (15.7)	43 (14.2)

Values represented as mean and standard deviation except where indicated **#** which represents n(%), * median(IQR), APOL1=Apolipoprotein L1, eGFR=estimated glomerular filtration rate.

Supplemental Table 3: Sensitivity Analysis for the Time to event Analyses for Calibrated 24h Urinary Sodium with CKD outcomes in Black Participants in the Chronic Renal Insufficiency Cohort

	Event rates N (%)	Incidence rate (per 100 person-years)	Unadjusted	Model 3	Sensitivity1: Model 3 + Systolic BP	Sensitivity2: Model 3 + UACR	Sensitivity3: Model 3 + Dietary Calorie
Quartiles of 24hour Urinary Sodium (mmol/24hrs)				**CKD Progression**			
Urinary Na <114.7	131 (38)	5.8	ref =1	ref =1	ref =1	ref =1	ref =1
Urinary Na 114.8-152.9	150 (43)	6.4	1.11 (0.88, 1.40)	1.02 (0.80, 1.29)	1.06 (0.83, 1.35)	0.91 (0.71, 1.16)	1.01 (0.77, 1.32)
Urinary Na 153.1-193.5	137 (40)	6.0	1.03 (0.81, 1.31)	0.90 (0.70, 1.16)	0.86 (0.67, 1.11)	0.69 (0.53, 0.89)	0.89 (0.67, 1.20)
Urinary Na >193.5	187 (54)	10.6	1.83 (1.46, 2.28)	1.20 (0.94, 1.55)	1.21 (0.94, 1.55)	0.89 (0.69, 1.15)	1.15 (0.86, 1.55)
				CKD Progression or Death			
Urinary Na <114.7	197 (57)	7.2	ref =1	ref =1	ref =1	ref =1	ref =1
Urinary Na 114.8-152.9	203 (59)	7.3	1.00 (0.82, 1.22)	0.92 (0.75, 1.13)	0.94 (0.77, 1.15)	0.82 (0.67, 1.01)	0.92 (0.73, 1.16)
Urinary Na 153.1-193.5	207 (60)	7.6	1.05 (0.86, 1.28)	0.88 (0.72, 1.08)	0.86 (0.70, 1.06)	0.74 (0.60, 0.92)	0.84 (0.66, 1.07)
Urinary Na >193.5	261 (76)	12.7	1.76 (1.46, 2.12)	1.20 (0.97, 1.48)	1.19 (0.97, 1.47)	0.96 (0.78, 1.19)	1.19 (0.93, 1.52)

*Model 3 = Adjusted for clinic sites, age, sex, education, urinary creatinine excretion, waist circumference, body-mass index, cigarette smoking, alcohol drinking, physical activity, history of hypercholesterolemia, history of diabetes, history of cardiovascular disease, use of diuretics, use of renin-angiotensin system blocking agents, and use of other antihypertensive medications, baseline eGFR, for urinary sodium excretion in potassium models and urinary potassium excretion in the urinary sodium models. Outcomes, 1) CKD progression defined as 50% decline in estimated glomerular filtration rate (eGFR) or kidney failure 2) CKD progression or death.

Supplemental Table 4: Interaction Analyses for 24h Calibrated Urinary Sodium and Urinary Potassium and *APOL1* risk status with the Hazards of CKD Progression and CKD Progression or Death
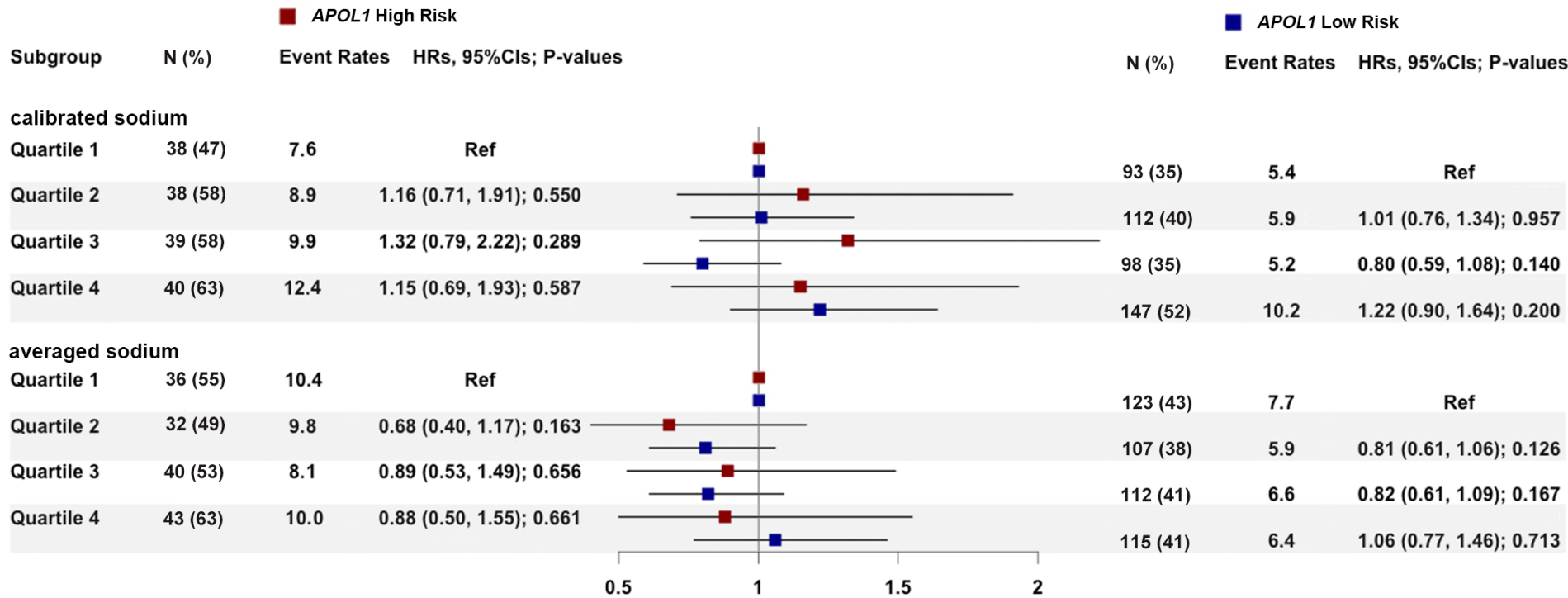
Interaction analyses	Model 3 + systolic blood pressure	Model 3 +24h urine albumin creatinine ratio	Model 3 +calorie intake	Model 3 +serum albumin
P for interaction for CKD progression				
Urinary sodium excretion x *APOL*1 risk allele	0.046	0.083	0.773	0.246
Urinary potassium excretion x *APOL1* risk allele	0.001	0.010	0.035	0.006
P for interaction for CKD progression or death				
Urinary sodium excretion x *APOL1* risk allele	0.268	0.122	0.844	0.445
Urine potassium excretion x *APOL1* risk allele	0.019	0.056	0.139	0.028

*Model 3 = Adjusted for clinic sites, age, sex, education, urinary creatinine excretion, waist circumference, body-mass index, cigarette smoking, alcohol drinking, physical activity, history of hypercholesterolemia, history of diabetes, history of cardiovascular disease, use of diuretics, use of renin-angiotensin system blocking agents, and use of other antihypertensive medications, baseline eGFR for urinary sodium excretion in potassium models and urinary potassium excretion in the urinary sodium models. Outcomes, 1) CKD progression defined as 50% decline in estimated glomerular filtration rate (eGFR) or kidney failure 2) CKD progression or death.

Supplemental Figure 2: Associations of 24-hour Urinary Sodium Excretion with Chronic Kidney Disease Stratified by Apolipoprotein L1 Genotypes
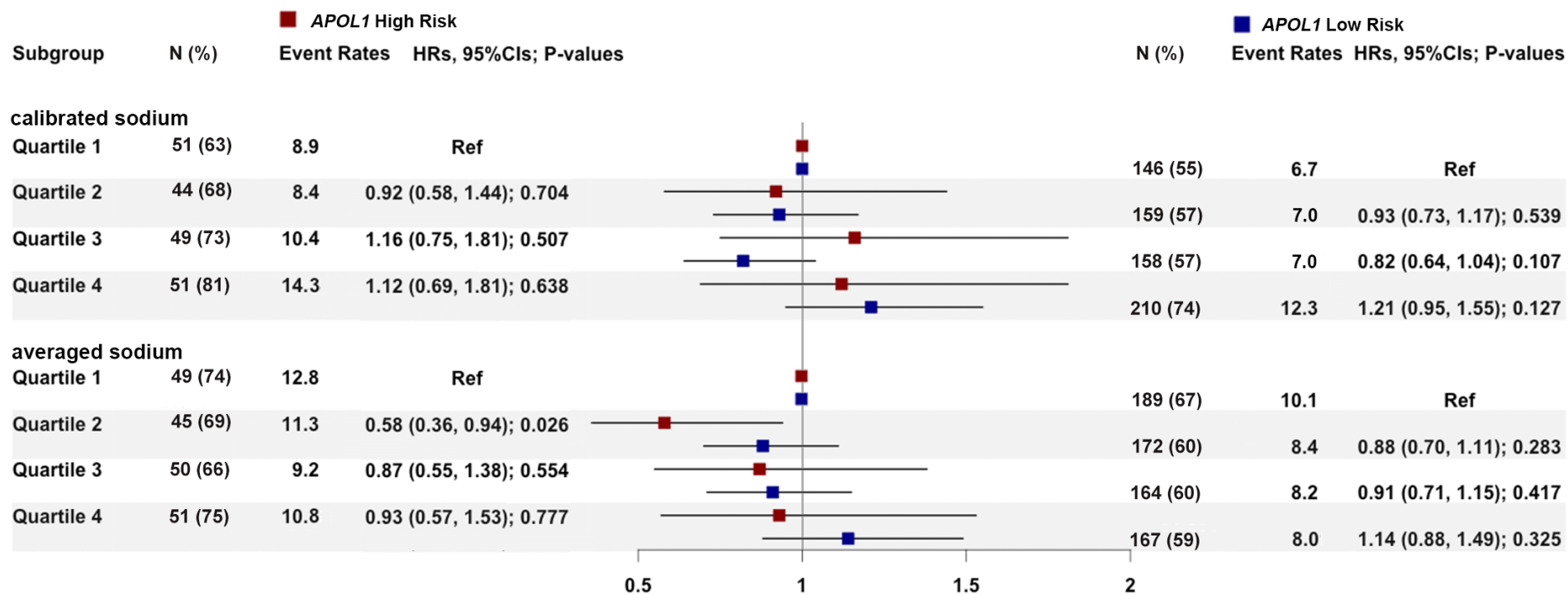

Fig S2A

24h urine sodium and CKD progression by *APOL1* risk levels

APOL1 High Risk

APOL1 Low Risk

Subgroup	N (%)	Event Rates	HRs, 95%CIs; P-values		N (%)	Event Rates	HRs, 95%CIs; P-values
calibrated sodium							
Quartile 1	38 (47)	7.6	Ref		93 (35)	5.4	Ref
Quartile 2	38 (58)	8.9	1.16 (0.71, 1.91); 0.550		112 (40)	5.9	1.01 (0.76, 1.34); 0.957
Quartile 3	39 (58)	9.9	1.32 (0.79, 2.22); 0.289		98 (35)	5.2	0.80 (0.59, 1.08); 0.140
Quartile 4	40 (63)	12.4	1.15 (0.69, 1.93); 0.587		147 (52)	10.2	1.22 (0.90, 1.64); 0.200
averaged sodium							
Quartile 1	36 (55)	10.4	Ref		123 (43)	7.7	Ref
Quartile 2	32 (49)	9.8	0.68 (0.40, 1.17); 0.163		107 (38)	5.9	0.81 (0.61, 1.06); 0.126
Quartile 3	40 (53)	8.1	0.89 (0.53, 1.49); 0.656		112 (41)	6.6	0.82 (0.61, 1.09); 0.167
Quartile 4	43 (63)	10.0	0.88 (0.50, 1.55); 0.661		115 (41)	6.4	1.06 (0.77, 1.46); 0.713

0.5   1   1.5   2

Supplemental Figure 2A: Time to event analyses of 24hour urinary sodium excretion (calibrated and average) with CKD progression defined as 50% decline in eGFR or incident kidney failure stratified by Apolipoprotein L1 genotypes in the Chronic Renal Insufficiency Cohort. Model adjusted for clinic sites, age, sex, education, urinary creatinine excretion, waist circumference, body-mass index, cigarette smoking, alcohol drinking, physical activity, history of hypercholesterolemia, history of diabetes, history of cardiovascular disease, use of diuretics, use of renin-angiotensin system blocking agents, and use of other antihypertensive medications, baseline eGFR for and urinary potassium excretion. For CKD progression, p for interaction for calibrated urinary sodium excretion x *APOL1* risk allele in unadjusted models = 0.37 and fully adjusted model, p for interaction = 0.13. For CKD progression or death, p for interaction for average urinary sodium excretion x *APOL1* risk allele in unadjusted models = .74 and fully adjusted model, p for interaction = 0.88.

Fig S2B

24h urine sodium and CKD progression or death by *APOL1* risk levels

■ *APOL1* High Risk   ■ *APOL1* Low Risk

Subgroup	N (%)	Event Rates	HRs, 95%CIs; P-values	N (%)	Event Rates	HRs, 95%CIs; P-values
calibrated sodium						
Quartile 1	51 (63)	8.9	Ref			
				146 (55)	6.7	Ref
Quartile 2	44 (68)	8.4	0.92 (0.58, 1.44); 0.704			
				159 (57)	7.0	0.93 (0.73, 1.17); 0.539
Quartile 3	49 (73)	10.4	1.16 (0.75, 1.81); 0.507			
				158 (57)	7.0	0.82 (0.64, 1.04); 0.107
Quartile 4	51 (81)	14.3	1.12 (0.69, 1.81); 0.638			
				210 (74)	12.3	1.21 (0.95, 1.55); 0.127
averaged sodium						
Quartile 1	49 (74)	12.8	Ref			
				189 (67)	10.1	Ref
Quartile 2	45 (69)	11.3	0.58 (0.36, 0.94); 0.026			
				172 (60)	8.4	0.88 (0.70, 1.11); 0.283
Quartile 3	50 (66)	9.2	0.87 (0.55, 1.38); 0.554			
				164 (60)	8.2	0.91 (0.71, 1.15); 0.417
Quartile 4	51 (75)	10.8	0.93 (0.57, 1.53); 0.777			
				167 (59)	8.0	1.14 (0.88, 1.49); 0.325

0.5   1   1.5   2

Supplemental Figure 2B: Time to event analyses of 24-hour urinary sodium excretion (calibrated and average) with CKD progression or death stratified by Apolipoprotein L1 genotypes in the Chronic Renal Insufficiency Cohort. Model adjusted for clinic sites, age, sex, education, urinary creatinine excretion, waist circumference, body-mass index, cigarette smoking, alcohol drinking, physical activity, history of hypercholesterolemia, history of diabetes, history of cardiovascular disease, use of diuretics, use of renin-angiotensin system blocking agents, and use of other antihypertensive medications, baseline eGFR for and urinary potassium excretion. For CKD progression or death, p for interaction for calibrated urinary sodium excretion x *APOL1* risk allele in unadjusted models =0.69 and fully adjusted model, p for interaction =0.76. For average urinary sodium excretion x *APOL1* risk allele in unadjusted models p for interaction =0.85, and fully adjusted model, p for interaction= 0.73.