SUPPLEMENTAL MATERIAL

Table S1. P for Interaction by Race.

P for interaction*	Association of Log-Aldosterone SD with Incident Diabetes (Continuous) †			
Variables	All Races		Non-Hispanic whites, African Americans & Hispanic Americans versus Chinese Americans	
	Unadjusted	Adjusted	Unadjusted	Adjusted
p-values	p=0.2362	p=0.2447	p=0.0489	p=0.0885

* P for interaction calculated using multiplicative interaction terms with application of the likelihood ratio test (p-value <0.10 considered statistically significant)

† Models adjusted for age, sex, education, study site, race, alcohol, physical activity, estimated glomerular filtration rate, systolic blood pressure

Table S2. Characteristics of Participants in MESA by Race/Ethnicity.

Baseline Characteristics*	All n= 1570	non-Hispanic white n= 682	Chinese American n= 205	African American n= 311	Hispanic American n= 372	p-value
Age, years	64.4 (9.7)	65.2 (9.6)	64.5 (10.0)	64.2 (9.9)	62.8 (9.6)	p=0.0017
Female, sex (%)	802 (51)	333 (49)	101 (49)	175 (57)	193 (52)	p=0.164
Education ≥ Bachelor's Degree(%)	610 (39)	355 (52)	86 (42)	119 (38)	50 (13)	p=0.001
Current Alcohol use (%)	867 (55)	483 (71)	69 (33)	153 (49)	162 (44)	p=0.001
Exercise Physical Activity (met-min/week)	1430 (1844)	1561 (1775)	1282 (1630)	1593 (2408)	1137 (1461)	p=0.0008
Ace-inhibitor or ARB (%)	299 (19)	138 (20)	32 (16)	72 (23)	57 (15)	p=0.030
Body-mass index (kilograms/meter^2)	27.7 (4.9)	27.4 (4.7)	23.9 (3.2)	29.2 (5.3)	29.1 (4.6)	p<0.0001
Waist circumference (cm)	97.1 (13.5)	97.9 (13.4)	86.5 (9.3)	98.8 (14.4)	100.1 (12.4)	p<0.0001
Systolic blood pressure (mmHg)	123 (20)	120 (19)	120 (19)	129 (21)	124 (21)	p<0.0001
Diastolic blood pressure (mmHg)	70 (10)	69 (9)	70 (9)	73 (11)	71 (10)	p<0.0001
Glucose (mg/dL)	5.05 (0.56), 91 (10)	5.00 (0.50), 90 (9)	5.16 (0.56), 93 (10)	5.05 (0.61), 91 (11)	5.11 (0.56), 92 (10)	p<0.0001
Creatinine (µmol/L, mg/dL)	83.10 (19.45), 0.94 (0.22)	84.86 (17.68), 0.96 (0.20)	76.91 (17.68), 0.87 (0.20)	89.28 (23.87), 1.01 (0.27)	77.79 (17.68), 0.88 (0.20)	p<0.0001
eGFR CKD-Epi (mL/s/m^2, mL/min/1.73m^2)	1.32 (0.27), 79 (16)	1.25 (0.25), 75 (15)	1.37 (0.27), 82 (16)	1.37 (0.32), 82 (19)	1.37 (0.25), 82 (15)	p<0.0001
	median, interquartile range					
Aldosterone (pmol/L, pg/mL) (n=1,548) †	363.12 (260.48, 507.36), 130.9 (93.9, 182.9)	378.10 (272.13, 522.62), 136.3 (98.1, 188.4)	358.40 (276.29, 471.30), 129.2 (99.6, 169.9	313.18 (222.20, 460.76), 112.9 (80.1, 166.1)	383.64 (279.34, 546.76), 138.3 (100.7, 197.1)	p=0.0001
Plasma Renin activity (PRA)‡ (ng/ml/hour)	0.5 (0.3, 1.1)	0.6 (0.3, 1.2)	0.5 (0.3, 0.9)	0.3 (0.2, 0.7)	0.6 (0.3, 1.2)	p=0.0001
Homeostatic model assessment - insulin resistance§	0.81 (0.57, 1.16)	0.77 (0.54, 1.09)	0.70 (0.50, 0.99)	0.84 (0.57, 1.23)	0.92 (0.68, 1.41)	p=0.0001
Homeostatic model assessment2 – β-cell function (%) §	81.5 (66.5, 102.9)	80.3 (64.9, 102.8)	72.3 (58.5, 86.7)	84.3 (69.0, 103.0)	88.1 (70.4, 112)	p=0.0001
Interleukin-6 (pg/mL) ‖	1.8 (1.2, 2.7)	1.7 (1.2, 2.5)	1.3 (0.9, 2.1)	1.9 (1.2, 3.0)	2.0 (1.3, 3.2)	p=0.0001
High sensitivity C-reactive protein (mg/L) ¶	1.4 (0.7, 3.2)	1.3 (0.7, 2.7)	0.8 (0.5, 1.4)	1.8 (0.9, 4.5)	1.9 (0.9, 3.9)	p=0.0001
Tumor necrosis factor–α (pg/mL) #	4.5 (3.4, 6.2)	4.7 (3.4, 6.3)	4.1 (3.2, 5.6)	4.4 (3.4, 6.2)	4.7 (3.7, 6.4)	p=0.0026

Adiponectin (ng/mL)	17973 (12347,26678)	22093 (14480,30685)	14426 (10002,21983)	15233 (10484,22669)	17544 (12722,24529)	p=0.0001
Leptin (pg/mL) **	13006 (5455, 27881)	10940 (5075, 23020)	7086 (2865, 14170)	22005 (9020, 42914)	16087 (6379, 28604)	p=0.0001
Number of Incident Diabetes Cases	116	41	19	28	28	
Incidence of Diabetes (per 1000 person-years)	7.8 (6.5, 9.3)	6.3 (4.6, 8.5)	9.7 (6.2, 15.2)	9.8 (6.8, 14.2)	8.0 (5.5, 11.5)	

Table S3. The Association of log Aldosterone and log Plasma Renin Activity with Fasting Plasma Glucose by Race/Ethnicity.

Log-Aldosterone (Continuous)	Fasting Plasma Glucose - Linear Regression β Coefficients*			
	Unadjusted	Model 1	Model 2	Model 3
All (n=1548)	2.15 (1.22, 3.08)	2.75 (1.83, 3.68)	2.54 (1.64, 3.44)	2.58 (1.69, 3.48)
non-Hispanic white (n=674)	2.10 (0.78, 3.43)	2.71 (1.37, 4.05)	2.16 (0.86, 3.46)	2.27 (0.96, 3.57)
Chinese American (n=204)	3.53 (0.69, 6.38)	4.27 (1.46, 7.07)	3.84 (1.09, 6.59)	3.81 (1.06, 6.57)
African American (n=301)	2.37 (0.13, 4.61)	3.33 (1.07, 5.59)	3.26 (1.04, 5.48)	3.20 (0.98, 5.42)
Hispanic American (n=369)	1.59 (-0.35, 3.52)	1.56 (-0.35, 3.48)	1.77 (-0.10, 3.64)	1.86 (-0.02, 3.73)
Log-Plasma Renin Activity (Continuous)	Fasting Plasma Glucose - Linear Regression β Coefficients*			
All (n=1,474)	0.90 (0.48, 1.31)	1.16 (0.75, 1.58)	1.06 (0.66, 1.47)	1.04 (0.61, 1.47)
non-Hispanic white (n=643)	1.11 (0.55, 1.67)	1.39 (0.83, 1.95)	1.22 (0.68, 1.77)	1.31 (0.71, 1.91)
Chinese American (n=200)	0.80 (-0.43, 2.02)	1.14 (-0.09, 2.37)	0.82 (-0.40, 2.04)	0.72 (-0.61, 2.05)
African American (n=281)	1.10 (0.03, 2.17)	1.03 (-0.05, 2.10)	0.92 (-0.14, 1.98)	0.84 (-0.28, 1.95)
Hispanic American (n=350)	0.53 (-0.41, 1.47)	0.75 (-0.20, 1.68)	0.81 (-0.11, 1.73)	0.77 (-0.18, 1.71)

Models:
Model 1: age, education, sex, study site, race, alcohol, physical activity, estimated glomerular filtration rate and systolic blood pressure
Model 2: Model 1 + waist circumference (cm)
Model 3: Model 2 + angiotensin converting enzyme inhibitors and angiotensin receptor blockers

* Linear Regression - a 100% increase in aldosterone or plasma renin activity is associated with an X mg/dL increase in glucose and a 100% increase in aldosterone or plasma renin activity results in a 100 times X percent increase in HOMA-IR or HOMA-β, where X equals the β-coefficient.

Figure S1. Multiethnic Study of Atherosclerosis (MESA) Calcified Renal Artery Atherosclerosis Ancillary Study Consort Flow Diagram.