

SUPPLEMENTAL TABLES & FIGURES

Age-related blood pressure sensitivity to aldosterone in blacks and whites

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Table S1. Baseline characteristics of the study subjects - Comparisons between males and females within each race group

	Black			White		
variables	Male	Female	P value	Male	Female	P value
Data from the child study: Mean (Standard Deviation)						
N	113	135		193	164	
Age, years	14.09 (2.162)	14.19 (1.983)	0.7092	14.98 (2.545)	14.9 (2.306)	0.7586
Systolic BP, mmHg	111 (11.637)	107.3 (10.892)	0.011	110.2 (12.858)	106.45 (9.167)	0.0015
Diastolic BP, mmHg	67.31 (10.867)	67.02 (9.140)	0.8212	65.12 (11.724)	66.07 (9.224)	0.3961
BMI, kg/ m ²	23.91 (6.950)	24.72 (6.618)	0.3513	22.3 (4.682)	21.94 (4.442)	0.4565
Data from the adult study: Mean (Standard Deviation)						
N	36	38		62	63	
Age, years	28.93 (4.092)	29.64 (3.822)	0.4439	32.26 (4.395)	30.85 (3.594)	0.0517
Systolic BP, mmHg	118.42 (10.598)	110.49 (9.021)	0.0009	119.9 (7.898)	109.16 (8.960)	<0.0001

Diastolic BP, mmHg	72.94	71.61	0.5647	75.58	69.47	<0.0001
	(10.060)	(9.838)		(8.621)	(8.355)	
BMI, kg/ m ²	29.52	32.47	0.1084	27.57	26.99	0.6599
	(7.322)	(8.289)		(4.803)	(9.235)	

Table S2. Blood and urine measurements; Comparisons between males and females within each race group

	Black			White		
Variables	Male	Female	P value	Male	Female	P value
The child study: Mean (Standard deviation)						
Blood samples; N	62	59		159	143	
PRA* (ng/mL/h)	3.14	3.05	0.8332	3.25	3.36	0.6614
	(2.384)	(2.427)		(1.986)	(2.520)	
PAC* (ng/dL)	9.28	8.9	0.7418	12.66	14.65	0.0565
	(6.133)	(6.593)		(7.828)	(9.955)	
Plasma K (mmol/L)	4.28	4.27	0.9856	4.24	4.15	0.044
	(0.679)	(1.013)		(0.392)	(0.349)	
Plasma Na	138.66	137.58	0.0825	138.79	138.76	0.9343
(mmol/L)	(3.845)	(2.926)		(3.806)	(2.660)	
Urine samples; N	912	991		2402	2068	
Urine creatinine	161.99	160.94	0.757	140.74	134.08	0.0004
(mg/dL)	(76.68)	(71.275)		(63.946)	(60.537)	

Urine Aldosterone*	3.97	4.37	0.0489	5.98	5.85	0.442
(mg/mg Cr)	(4.237)	(4.449)		(5.271)	(5.302)	
Urine K*	28.3	26.28	0.0139	33.36	30.46	<0.0001
(mmol/g Cr)	(19.813)	(15.529)		(23.565)	(20.446)	
Urine Na*	121.19	118.44	0.3485	123.98	121.75	0.2697
(mmol/g Cr)	(65.834)	(62.015)		(68.303)	(66.236)	

The adult study: Mean (Standard deviation)

Blood samples; N	116	126		129	229	
PRA* (ng/mL/h)	0.94	1.14	0.1296	1.55	1.58	0.8247
	(0.929)	(1.106)		(1.108)	(1.325)	
PAC* (ng/dL)	4.51	5.64	0.0219	7.41	10.68	0.0002
	(3.052)	(4.490)		(4.624)	(11.438)	
Plasma K (mmol/L)	3.88	3.76	0.0004	3.85	3.78	0.0339
	(0.269)	(0.242)		(0.278)	(0.277)	
Plasma Na	139.09	137.63	<0.0001	138.97	138.38	0.009
(mmol/L)	(2.244)	(2.153)		(2.103)	(1.855)	

Urine samples; N	117	135		135	232	
Urine creatinine	239.9	178.88	<0.0001	189.62	135.37	<0.0001
(mg/dL)	(89.503)	(87.718)		(76.168)	(65.944)	
Urine Aldosterone*	2.29	5.02	<0.0001	3.42	6.41	<0.0001
(mg/mg Cr)	(1.434)	(4.242)		(2.424)	(6.835)	
Urine K*	16.8	20.23	0.0021	20.19	21.74	0.3985
(mmol/g Cr)	(8.835)	(8.571)		(19.004)	(12.380)	
Urine Na*	66.17	90.75	<0.0001	67.49	85.07	0.0002
(mmol/g Cr)	(34.452)	(44.658)		(43.372)	(41.046)	

Figure S1. Age-related changes in systolic and diastolic blood pressure (BP) in blacks and whites.

Panels A and B: Systolic and diastolic BP increased with age in both blacks and whites; but at any given age, levels of systolic and diastolic BP were not significantly different between the two race groups.

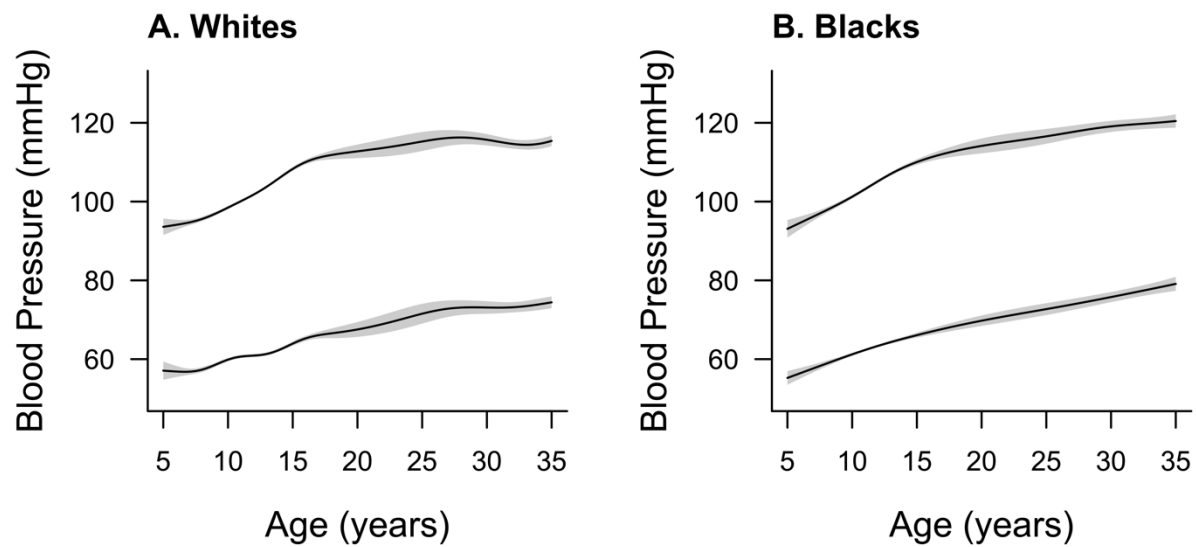


Figure S2. Urinary aldosterone and creatinine levels at different ages in blacks and whites. The solid curves are the estimated mean levels. The shaded regions represent 95% pointwise confidence intervals. Panels A and B: Urinary aldosterone excretion rates. Panels C and D. Levels of urine creatinine.

