

PRETERM BIRTH AND FUTURE MATERNAL BLOOD PRESSURE, INFLAMMATION AND INTIMAL MEDIAL THICKNESS: THE
CARDIA STUDY

Running title: Preterm birth, blood pressure, and IMT

Janet M Catov, PhD MS; Cora E Lewis, M.D; Minjae Lee, PhD; Melissa F Wellons, MD, Erica P Gunderson, PhD.

Corresponding Author:

Janet M. Catov, PhD MS

Assistant Professor

Department of Obstetrics, Gynecology & Reproductive Sciences

University of Pittsburgh School of Medicine

300 Halket Street

Pittsburgh, PA 15213

412.641.6217 (phone)

412.641.1133 (fax)

catovjm@upmc.edu

Cora E Lewis, MD, MSPH

University of Alabama at Birmingham Preventive Medicine

Minjae Lee, PhD

University of Texas Health Science Center at Houston

Melissa F Wellons, MD

University of Alabama School of Medicine

Erica P Gunderson, PhD

Kaiser Permanente Division of Research

S 1. Maternal characteristics at baseline according to preterm birth status (n=916)

Maternal Characteristic	Term (n=690)	Preterm (n=226)	P value
Age, years (SD)	24.32(3.71)	24.10(3.71)	0.45
Black race (n, %)	283(41.01)	141(62.39)	<0.0001
Education (n, %)			0.0003
<High school education	33(4.78)	17(7.52)	
High school education	159(23.04)	80(35.40)	
Some college	250(36.23)	71(31.42)	
>4 yr college or more	248(35.94)	58(25.66)	
Parous at baseline (n, %)	189(27.39)	81(35.84)	0.02
Gestational diabetes (n, %)	84 (12.1)	30 (13.2)	0.57
Alcohol use, any (n, %)	397(57.70)	109(48.44)	0.02
Hypertension (n, %)			
During pregnancy (ever)	159(23.11)	75(33.19)	<0.01
Before index pregnancy	16(2.32)	8(3.56)	0.31
After index pregnancy	121(17.54)	63(28.00)	<0.001
Age at delivery, year (SD)	30.51(4.65)	29.89(5.09)	0.11
Time from baseline to index delivery, year (SD)	6.22(4.10)	5.81(4.23)	0.09
Physical activity (exercise units, SD)			0.08
1st quartile	160(23.19)	69(30.53)	
2nd quartile	173(25.07)	58(25.66)	
3rd quartile	173(25.07)	54(23.89)	
4th quartile	184(26.67)	45(19.91)	

S2. Blood pressure and BMI at baseline and year 20, stratified by race

Characteristic	<u>Term (n=407)</u>		<u>White (n=492)</u>		P value*	<u>Term (n=283)</u>		<u>Black (n=424)</u>		P value*		
	Baseline	Year 20	Preterm (n=85)	Year 20		Baseline	Year 20	Preterm (n=141)	Year 20			
Systolic BP (mmHg)	104 (9)	107 (9)	107 (9)	109 (13)	Group	<0.01	107 (9)	116 (15)	107 (9)	119 (17)	Group	0.94
					Group*time	0.03					Group*time	0.05
Diastolic BP (mmHg)	65 (9)	66 (10)	66 (8)	68 (12)	Group	0.53	69 (10)	74 (11)	66 (9)	76 (11)	Group	0.50
					Group*time	0.54					Group*time	0.16
BMI (k/m2)	22.1 (3.1)	26.4 (6.3)	23.4 (4.3)	27.8 (6.5)	Group	0.01	25.1 (5.6)	32.3 (7.8)	24.2 (4.7)	31.3 (7.2)	Group	0.06
					Group*time	0.85					Group*time	0.40

* Group and group* time p values derived from GEE models