

Table S1. Comparison between the participants from Chicago field center and those included in this study.

	Included in			
_	No (n=591)	Yes (n=154)	p-value	
Demographics at Y30				
Age, y	55 ± 4	54 ± 4	0.080	
Female, %	60	45	< 0.001	
Blacks, %	46	46	0.954	
Risk Factors at Y30				
SBP, mmHG	120 ± 17	120 ± 15	0.107	
DBP, mmHG	73 ± 11	74 ± 11	0.887	
Body Mass Index, kg/m2	30 ± 7	30 ± 6	0.003	
Total cholesterol, mg/dL	189 ± 37	192 ± 38	0.976	
History of diabetes, %	16	16	0.871	
History of HTN, %	40	33	0.131	
Current Smoker, %	15	14	0.990	
History of cardiac problem, No. (%)	13	12	0.705	
Renal history, No. (%)	9	8	0.595	

Data are expressed as mean±SD or %. Characteristics were compared using t-test for continuous variables and chi-squared test for categorical variables. Chicago cohort had a total of 1108 participants at baseline. A total of 745 participants attended the Y30 follow-up examination (n=64 death before Y30 examination).

Table S2. Characteristics of participants in thirds of NTproBNP.

	NTproBNP (pg/ml) thirds			
	Low (5.0-21.97) n=51	Middle (22.02-45.35) n=52	High (45.72-273.50) n=51	<i>p</i> -value ^a
Demographics at Year 25				
Age, y, mean (SD)	49.5 (3.9)	48.8 (3.9)	49.9 (3.8)	0.316
Females, No. (%)	10 (19.6)	19 (36.5)	40 (78.4)	< 0.001
Blacks, No. (%)	24 (47.1)	24 (46.2)	22 (43.1)	0.917
Risk Factors at Year 25				
SBP, mmHG, mean (SD)	116.5 (9.6)	118.8 (11.0)	117.2 (20.0)	0.704
DBP, mmHG, mean (SD)	73.4 (9.2)	74.0 (10.4)	73.8 (15.4)	0.975
Body Mass Index, kg/m ² , mean (SD)	30.2 (5.7)	27.9 (5.0)	29.5 (6.8)	0.143
Total cholesterol, mg/dL, mean (SD)	190.6 (34.2)	193.2 (42.6)	193.4 (35.3)	0.917
History of diabetes, No. (%)	7 (13.7)	5 (9.6)	8 (15.7)	0.645
History of hypertension, No. (%)	15 (29.4)	15 (29.0)	13 (26.0)	0.892
Current Smoker, No. (%)	9 (17.6)	8 (16.0)	9 (17.6)	0.151
History of cardiac problem, No. (%)	8 (15.7)	5 (9.6)	6 (11.8)	0.637
Renal history, No. (%)	5 (9.8)	5 (9.6)	0	0.071

 $^{^{}a}$ p-values were calculated using one-way ANOVA or chi-squared test were appropriate. Abbreviations: SBP: systolic blood pressure and DBP: diastolic blood pressure

Table S3. Characteristics of participants in thirds of proANP.

	NT-proANP (nmol/L) thirds			
	Low 0.18-1.09 n=52	Middle 1.10-1.63 n=51	High 1.64-3.07 n=51	p-value ^a
Demographics at Year 25				
Age, y, mean (SD)	48.4 (4.1)	49.6 (3.5)	50.3 (3.8)	0.038
Female, No. (%)	17 (32.7)	26 (51.0)	26 (51.0)	0.097
Blacks, No. (%)	26 (50.0)	22 (43.1)	22 (43.1)	0.721
Risk Factors at Year 25				
SBP, mmHG, mean (SD)	118.4 (11.0)	116.6 (11.0)	117.6 (19.2)	0.810
DBP, mmHG, mean (SD)	75.5 (10.6)	73.0 (9.8)	72.7 (14.7)	0.426
Body Mass Index, kg/m ² , mean (SD)	29.5 (6.2)	29.0 (5.3)	29.0 (6.3)	0.892
Total cholesterol, mg/dL, mean (SD)	191.1 (41.8)	197.1 (35.0)	189.1 (35.1)	0.532
History of hypertension, No. (%)	17 (32.7)	12 (23.5)	14 (27.5)	0.582
History of diabetes, No. (%)	11 (21.2)	4 (7.8)	5 (9.8)	0.094
Current Smoker, No. (%)	13 (25.5)	6 (12.0)	7 (13.7)	0.206
History of cardiac problem, No. (%)	10 (19.2)	9 (17.6)	0	0.005
Renal history, No. (%)	3 (5.8)	3 (5.9)	4 (7.8)	0.892

 $^{^{\}rm a}$ p-values were calculated using one-way ANOVA or chi-squared test were appropriate. Abbreviations: SBP: systolic blood pressure and DBP: diastolic blood pressure

CARDIA Enrollment N= 5115 Minneapolis, MN Oakland, CA Birmingham, AL Chicago, IL N=1178 N=1402 N=1426 N=1109 Follow-up 2015 1987 1990 1992 1995 2000 2005 2010 Year 2 Year 5 Year 7 Year 10 Year 15 Year 20 Year 25 Year 30 N=1004 N=930 N=865 N=840 N=816 N=793 N=793 N=745 Plasma NP TCD **Ancillary study** N=157 N=202 Final sample with data on both plasma NP and TCD-dCA N=154

Figure S1. Flowchart of included participants in this study.

The CARDIA cohort enrolled 5115 adults aged 18-30 years beginning 1986 from four U.S. cities of Birmingham, Chicago, Minneapolis and Oakland. These participants were followed for 30 years through 8 inperson follow-up visits after 2, 5, 7, 10, 15, 20, 25 and 30 years. The current study includes a subset of participants from the Chicago center at year 25 and year 30 examinations. NP: natriuretic peptides; TCD: transcranial Doppler; dCA: dynamic cerebral autoregulation.