Supplemental Tables

Supplement Table 1. Comparison of model type for relationship of CPP (per SD) and eGFR

Model	β (SE)	p-value
Linear	-1.73 (0.52)	0.001
Spline:CPP[a]	3.66 (2.81)	0.193
Spline:CPP^2	-0.75 (0.38)	0.051
Piecewise: CPP≤4 SD[b]	-0.26 (0.81)	0.748
Piecewise: CPP>4 SD	-4.54 (1.92)	0.018

[a]ANOVA and likelihood ratio tests for linear vs. spline models yielded p-value of 0.05.

[b]ANOVA and likelihood ratio tests for linear vs. piecewise models yielded a p-value of 0.02.

Abbreviations: CPP, carotid pulse pressure; eGFR, estimated glomerular filtration rate.

Supplement Table 2. Correlation matrix of measures of aortic stiffness and measures of peripheral blood pressure

	CPP (mm Hg)	CFPWV (m/s)	SBP (mm Hg)	DBP (mm Hg)	MAP (mm Hg)	PPP (mm Hg)
CPP (mm Hg)	1.00	0.29	0.83	-0.07	0.53	0.93
CFPWV (m/s)		1.00	0.40	0.21	0.36	0.32
SBP (mm Hg)			1.00	0.39	0.84	0.87
DBP (mm Hg)				1.00	0.79	-0.12
MAP (mm Hg)					1.00	0.48
PPP (mm Hg)						1.00

Abbreviations: CPP, carotid pulse pressure; CFPWV, carotid femoral pulse wave velocity; SBP, systolic blood pressure; DBP, diastolic blood pressure; MAP, mean arterial pressure; PPP, peripheral pulse pressure.

Supplement Table 3. Multivariable models of aortic stiffness and different GFR estimating equations

	CPP ≤ 85 mm Hg N=743		CPP > 85 mm Hg N=197		CFPWV[a]	
	Δ in eGFR per SD of CPP	95% CI	Δ in eGFR per SD of CPP	95% CI	Δ in eGFR per SD of CFPWV	95% CI
eGFRcr-cys						
Unadjusted	-0.26	-1.85, 1.33	-4.54	-8.30, -0.78	-1.87	-2.89, -0.85
Fully adjusted[b]	-0.03	-1.77, 1.72	-2.72	-6.23, 0.79	-0.29	-1.46, 0.87
eGFRcr						
Unadjusted	0.24	-1.30, 1.79	-5.14	-8.80, -1.47	-1.72	-2.72, -0.73
Fully adjusted[b]	0.55	-1.22, 2.31	-3.82	-7.37, -0.27	-0.50	-1.68, 0.68
eGFRcys						
Unadjusted	-0.65	-2.36, 1.06	-3.87	-7.91, 0.18	-2.04	-3.14, -0.94
Fully adjusted[b]	-0.53	-2.37, 1.30	-1.63	-5.31, 2.06	-0.09	-1.31, 1.14

[a]CFPWV modeled as the negative inverse

[b]Multivariable models adjusted for sex, heart rate, height, age, MAP, HDL cholesterol, HbA1c, CRP, ACR.

Abbreviations: eGFR, estimated glomerular filtration rate; CPP, carotid pulse pressure; CFPWV, carotid femoral pulse wave velocity; DM, diabetes mellitus; LDL, low density lipoprotein cholesterol; HDL, high density lipoprotein cholesterol; MAP, mean arterial pressure; HbA1c, hemoglobin A1c; CRP, c-reactive protein; ACR, natural logarithm of albumin-creatinine ratio.

Supplement Table 4. Sensitivity analyses for multivariable models of aortic stiffness and eGFR (ml/min/1.73 m^2)

	CPP ≤ 85 mm Hg N=743		**CPP > 85 mm Hg N=197**		**CFPWV[a]**	
	Δ in eGFR per SD of CPP	95% CI	Δ in eGFR per SD of CPP	95% CI	Δ in eGFR per SD of CFPWV	95% CI
Original model[b]	-0.03	-1.77, 1.72	-2.72	-6.23, 0.79	-0.29	-1.46, 0.87
+Smoking status	-0.09	-1.84, 1.65	-2.66	-6.16, 0.85	-0.27	-1.44, 0.89
+DM status	-0.10	-1.84, 1.64	-2.47	-5.98, 1.03	-0.28	-1.44, 0.88
+Statin use	-0.25	-2.11, 1.62	-2.54	-6.22, 1.14	-0.32	-1.57, 0.93
+On treatment for hypertension	0.35	-1.36, 2.06	-2.86	-6.29, 0.58	-0.05	-1.19, 1.09
LDL instead of HDL	0.44	-1.33, 2.21	-3.55	-7.11, 0.02	-0.67	-1.85, 0.51
Cholesterol instead of HDL	0.45	-1.33, 2.20	-3.48	-7.05, 0.09	-0.66	-1.84, 0.52

[a]CFPWV modeled as the negative inverse

[b]Original multivariable model includes sex, heart rate, height, age, MAP, HDL cholesterol, HbA1c, CRP, ACR.

Abbreviations: eGFR, estimated glomerular filtration rate; CPP, carotid pulse pressure; CFPWV, carotid femoral pulse wave velocity; DM, diabetes mellitus; LDL, low density lipoprotein cholesterol; HDL, high density lipoprotein cholesterol; MAP, mean arterial pressure; HbA1c, hemoglobin A1c; CRP, c-reactive protein; ACR, natural logarithm of albumin-creatinine ratio.

Supplement Table 5. Sensitivity analyses for multivariable models of aortic stiffness and ACR[a] (mg/g)

	CPP		CFPWV[a]	
	Δ in ACR per SD of CPP	95% CI	Δ in ACR per SD of CFPWV	95% CI
Original model[b]	0.14	0.03, 0.24	0.01	-0.09, 0.11
+Smoking status	0.14	0.02, 0.25	0.002	-0.11, 0.11
+DM status	0.14	0.03, 0.26	-0.001	-0.11, 0.11
+Statin use[c]	0.11	-0.01, 0.24	-0.01	-0.13, 0.10
+On treatment for hypertension	0.14	0.03, 0.26	-0.0004	-0.11, 0.11
LDL instead of HDL	0.13	0.02, 0.25	-0.01	-0.12, 0.10
Cholesterol instead of HDL	0.14	0.02, 0.26	-0.01	-0.12, 0.10

[a]ACR modeled as natural logarithm, CFPWV modeled as the negative inverse.

[b]Original multivariable model includes sex, heart rate, height, age, MAP, HDL, HbA1c, CRP, eGFR.

[c]R^2 for model including statin use was less than original model (0.107 vs. 0.112, respectively).

Abbreviations: ACR, natural logarithm of albumin-creatinine ratio. CPP, carotid pulse pressure; CFPWV, carotid femoral pulse wave velocity; DM, diabetes mellitus; LDL, low density lipoprotein cholesterol; HDL, high density lipoprotein cholesterol; MAP, mean arterial pressure; HbA1c, hemoglobin A1c; CRP, c-reactive protein; eGFR, estimated glomerular filtration rate.

Supplement Table 6. Multivariable linear regression of peripheral pulse pressure and measures of kidney disease

	PPP		
	Δ per SD of PPP	95% CI	R^2
eGFR			
Unadjusted	-1.50	-2.52, -0.48	0.009
Fully adjusted[a]	-0.46	-1.65, 0.73	0.174
ACR			
Unadjusted	0.18	0.25, 0.94	0.020
Fully adjusted[a]	0.15	0.04, 0.25	0.121

[a]Multivariable models adjusted for sex, heart rate, height, age, MAP, HDL cholesterol, HbA1c, CRP, ACR/eGFR.

Abbreviations: PPP, peripheral pulse pressure; eGFR, estimated glomerular filtration rate; ACR, natural logarithm of albumin-creatinine ratio; MAP, mean arterial pressure; HDL, high density lipoprotein cholesterol; HbA1c, hemoglobin A1c; CRP, c-reactive protein.