SUPPLEMENTAL MATERIAL

Table S1. The association between GFRcr/GFRcr squared and calcification in different arteries.

	Difference (95% confidence interval)*			
	CAC	AAC	ECAC	ICAC
Model I (n=2241)				
GFRcr	0.34 (0.03, 0.65)	0.47 (0.15, 0.78)	0.78 (0.46, 1.11)	0.44 (0.12, 0.76)
GFRcr^2	-0.37 (-0.69, -0.06)	-0.51 (-0.83, -0.20)	-0.80 (-1.12, -0.48)	-0.47 (-0.79, -0.14)
Model II (n=2220)				
GFRcr	0.63 (-0.12, 1.38)	0.82 (0.12, 1.53)	1.55 (0.84, 2.25)	0.74 (0.09, 1.39)
GFRcr^2	-0.70 (-1.45, 0.05)	-0.91 (-1.62, -0.21)	-1.56 (-2.27, -0.86)	-0.79 (-1.44, -0.14)

Model 1: Adjusted for age, sex and cohort effect.

Model 2: Adjusted for model 1+ body mass index, hypertension, smoking, diabetes mellitus, total cholesterol, and HDL cholesterol.

*Reported beta and confidence intervals are standardized log increase in calcification per one SD lower GFR estimates.

GFRcr^2 refers to addition of a squared GFR variable in the model.

SD: standard deviation; CAC: Coronary artery calcification; AAC: Aortic arch calcification; ECAC: Extracranial carotid artery calcification; ICAC: Intracranial carotid artery calcification

Figure S1. **Non-linear association of kidney measures and arterial calcification in different vascular beds.**
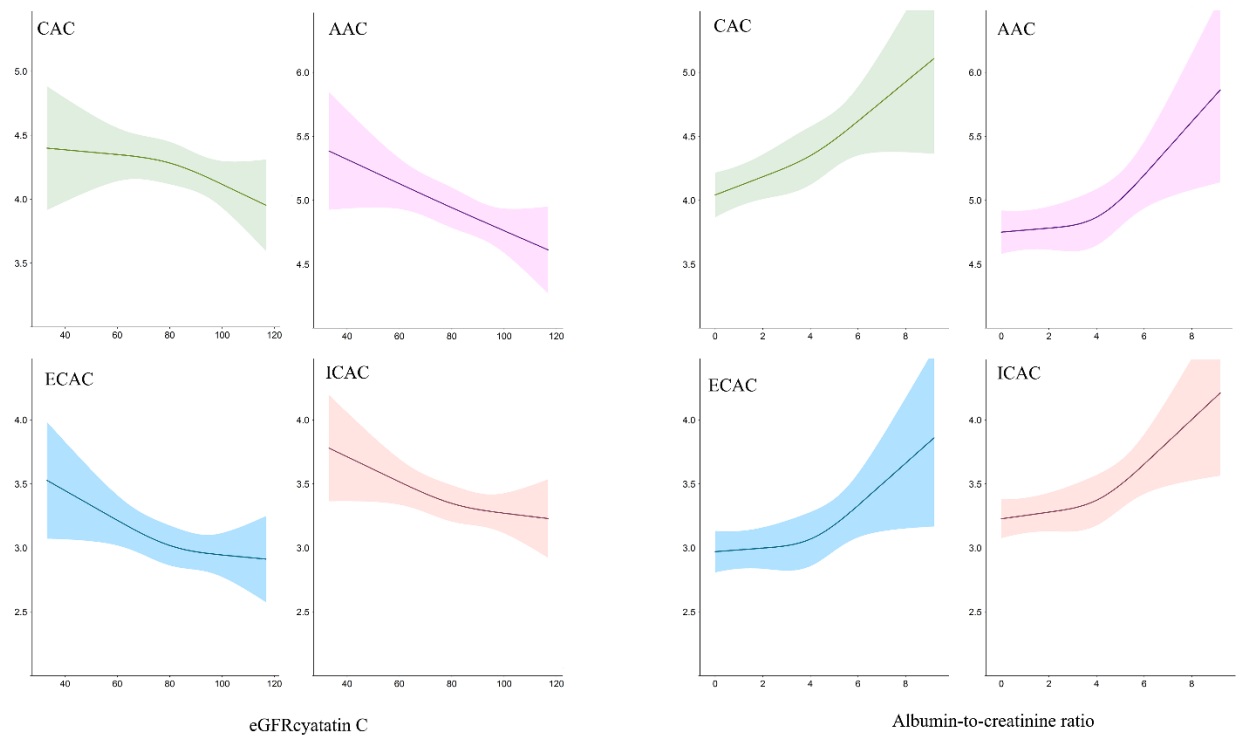
X-axes represent values of eGFR or logarithm of albumin-to-creatinine ratio and Y-axes represent logarithm of arterial calcification values. CAC: Coronary artery calcification; AAC: Aortic arch calcification; ECAC: Extracranial carotid artery calcification; ICAC: Intracranial carotid artery calcification.

Figure S2. Non-linear association of eGFRcr and arterial calcification in different vascular beds.
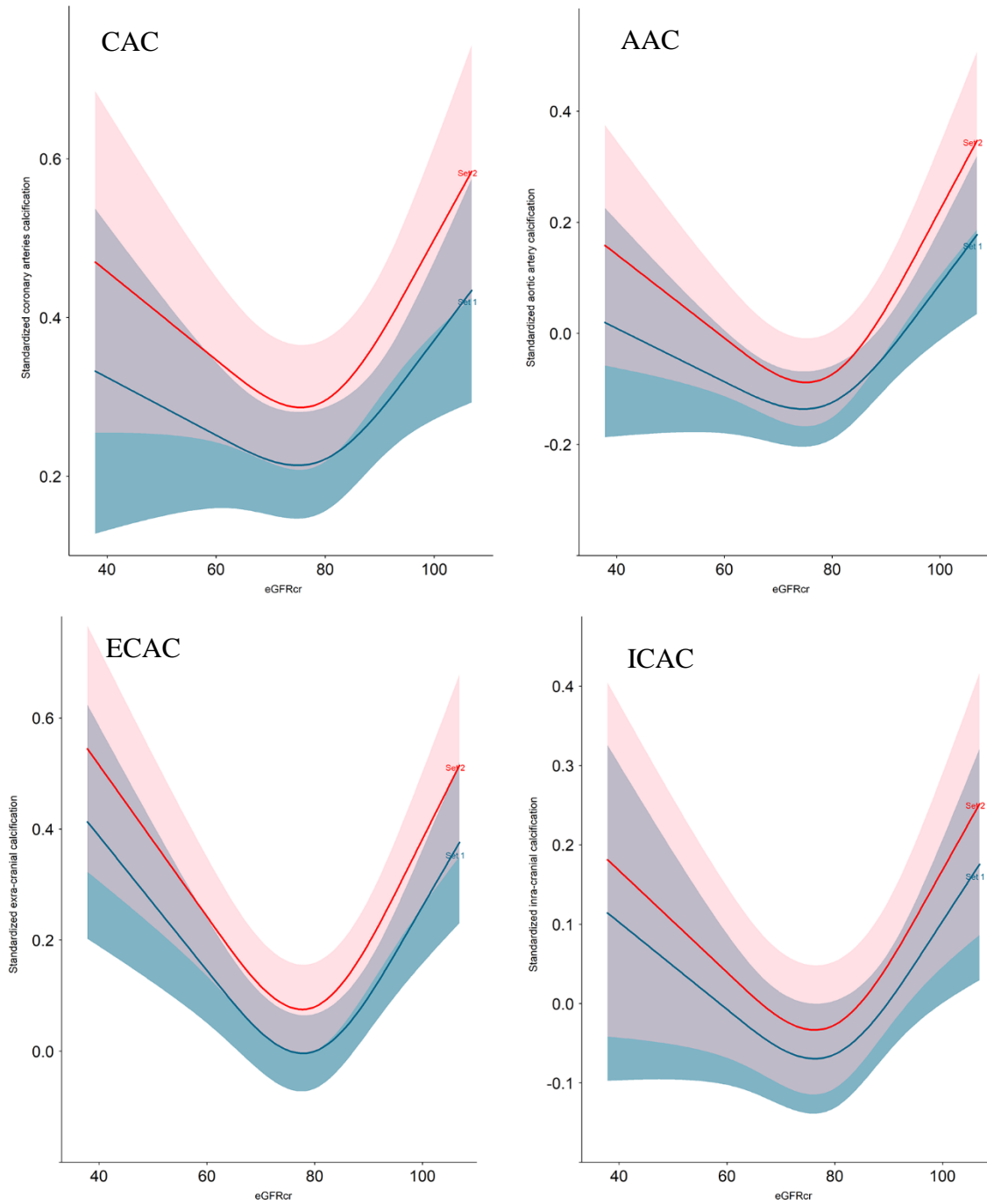
X-axes represent values of eGFRcr and Y-axes represent logarithm of arterial calcification values. Blue represent model including eGFRcr as a nonlinear term.
Red represent model including eGFRcr as a nonlinear term as well as age (as spline) and interactions of age (as a spline) and sex.