Supplementary Table 5. Associations between PREVENT-ASCVD risk scores categories and the presence of CBI imaging phenotypes

Outcomes	Risk scores	Groups	n	Event n (%)	Model 1		Model 2	
					OR (95% CI)	*P*	Adjusted OR (95% CI)	*P*
Presence of cavitatory lesions	PREVENT-base*	Low	1,481	29 (1.96)	Ref		Ref	
		Borderline	639	28 (4.38)	2.29 (1.35–3.89)	0.002	2.05 (1.20–3.49)	0.009
		Intermediate	834	79 (9.47)	5.24 (3.39–8.09)	<0.001	4.35 (2.78–6.80)	<0.001
		High	11	0 (0.00)	NA	NA	NA	NA
	PREVENT-UACR†	Low	1,482	31 (2.09)	Ref		Ref	
		Borderline	612	29 (4.74)	2.33 (1.39–3.90)	0.001	2.04 (1.21–3.44)	0.008
		Intermediate	829	69 (8.32)	4.25 (2.76–6.55)	<0.001	3.51 (2.25–5.48)	<0.001
		High	42	7 (16.67)	9.36 (3.86–22.71)	<0.001	7.41 (3.00–18.32)	<0.001
	PREVENT-HbA1c‡	Low	1,488	29 (1.95)	Ref		Ref	
		Borderline	654	30 (4.59)	2.42 (1.44–4.06)	<0.001	2.16 (1.28–3.65)	0.004
		Intermediate	799	74 (9.26)	5.14 (3.31–7.96)	<0.001	4.25 (2.70–6.67)	<0.001
		High	24	3 (12.50)	7.19 (2.03–25.45)	0.002	5.84 (1.63–20.90)	0.007
Presence of acute cerebral infarction	PREVENT-base*	Low	1,481	2 (0.14)	Ref		Ref	
		Borderline	639	2 (0.31)	2.32 (0.33–16.52)	0.400	2.20 (0.31–15.77)	0.433
		Intermediate	834	11 (1.32)	9.88 (2.19–44.70)	0.003	7.92 (1.70–36.89)	0.008
		High	11	0 (0.00)	NA	NA	NA	NA
	PREVENT-UACR†	Low	1,482	2 (0.13)	Ref		Ref	
		Borderline	612	2 (0.33)	2.43 (0.34–17.26)	0.376	2.32 (0.32–16.71)	0.404
		Intermediate	829	8 (0.97)	7.21 (1.53–34.03)	0.013	5.55 (1.14–27.11)	0.034
		High	42	3 (7.14)	56.92 (9.25–350.33)	<0.001	55.78 (8.59–362.11)	<0.001
	PREVENT-HbA1c‡	Low	1,488	2 (0.13)	Ref		Ref	
		Borderline	654	3 (0.46)	3.42 (0.57–20.54)	0.178	3.26 (0.54–19.74)	0.199
		Intermediate	799	10 (1.25)	9.42 (2.06–43.08)	0.004	7.15 (1.52–33.70)	0.013
		High	24	0 (0.00)	NA	NA	NA	NA
Presence of chronic infarction	PREVENT-base*	Low	1,481	55 (3.71)	Ref		Ref	
		Borderline	639	37 (5.79)	1.59 (1.04–2.44)	0.033	1.50 (0.97–2.31)	0.068
		Intermediate	834	71 (8.51)	2.41 (1.68–3.47)	<0.001	2.22 (1.52–3.24)	<0.001
		High	11	1 (9.09)	2.59 (0.33–20.61)	0.367	2.44 (0.30–19.64)	0.402
	PREVENT-UACR†	Low	1,482	54 (3.64)	Ref		Ref	
		Borderline	612	36 (5.88)	1.65 (1.07–2.55)	0.023	1.54 (1.00–2.40)	0.053
		Intermediate	829	68 (8.20)	2.36 (1.64–3.41)	<0.001	2.18 (1.49–3.19)	<0.001
		High	42	6 (14.29)	4.41 (1.78–10.91)	0.001	4.13 (1.65–10.34)	0.003
	PREVENT-HbA1c‡	Low	1,488	55 (3.70)	Ref		Ref	
		Borderline	654	39 (5.96)	1.65 (1.08–2.52)	0.019	1.55 (1.01–2.38)	0.044
		Intermediate	799	68 (8.51)	2.42 (1.68–3.50)	<0.001	2.23 (1.53–3.27)	<0.001
		High	24	2 (8.33)	2.37 (0.54–10.33)	0.251	2.15 (0.49–9.46)	0.310

All three models of PREVENT-ASCVD (base, UACR and HbA1c) were categorized as low (<5.0%), borderline (5.0%–7.4%), intermediate (7.5%–19.9%) or high (≥20.0%) risk. Model 1 is the unadjusted model; Model 2 is adjusted for education, drinking, level of homocysteine, and history of chronic lung disease and cancer.

PREVENT, the Predicting Risk of Cardiovascular Disease EVENTs; ASCVD, atherosclerotic cardiovascular disease; CBI, covert brain infarction; OR, odds ratio; CI, confidence interval; UACR, urine albumin-creatinine ratio; HbA1c, hemoglobin A1c; Ref, reference; NA, not applicable; CVD, cardiovascular disease.

*PREVENT-base: The base model based on the PREVENT equations, uses required clinical information to estimate CVD risk; †PREVENT-UACR: On top of the base model, include UACR as an additional predictor; ‡PREVENT-HbA1c: On top of the base model, include HbA1c as an additional predictor.