

Online-Only Supplemental Material

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Supplemental Table S1. Cross-validation predictive performance

Social cohesion group	Logistic regression of CAC at baseline					Cumulative incidence function of CAC				
	Calibration-in-the-large intercept		Recalibration			Recalibration				
	C-statistic (95% CI)	O:E ratio (95% CI)	Intercept (95% CI)	Intercept (95% CI)	Slope (95% CI)	C-statistic (95% CI)	O:E ratio (95% CI)	Slope CAC (95% CI)	Slope competing MACE or death (95% CI)	
1	0.81 (0.79-0.83)	1.11 (1.03-1.19)	-0.10 (-0.21-0.02)	-0.09 (-0.22-0.03)	1.09 (0.98-1.22)	0.68 (0.63-0.73)	1.18 (0.97-1.43)	0.66 (0.23-1.08)	1.72 (0.65-2.80)	
2	0.79 (0.76-0.81)	1.07 (1.00-1.15)	0.05 (-0.07-0.17)	0.05 (-0.07-0.17)	0.99 (0.88-1.11)	0.65 (0.59-0.70)	0.87 (0.70-1.07)	0.64 (0.11-1.16)	0.48 (-0.16-1.12)	
3	0.76 (0.74-0.79)	1.01 (0.94-1.09)	-0.10 (-0.22-0.02)	-0.09 (-0.21-0.02)	0.85 (0.75-0.96)	0.69 (0.63-0.74)	1.05 (0.86-1.28)	0.79 (0.29-1.28)	0.75 (-0.85-2.35)	
4	0.79 (0.76-0.81)	0.96 (0.89-1.04)	0.15 (0.03-0.26)	0.15 (0.03-0.27)	1.01 (0.89-1.13)	0.68 (0.63-0.73)	0.98 (0.80-1.20)	1.00 (0.53-1.47)	0.49 (-0.25-1.22)	

Optimal observed:expected ratio=1; optimal intercept =0; optimal slope = 1. Abbreviations: CAC = coronary artery calcium, MACE = major adverse cardiovascular event; O:E = observed:expected.

Supplemental Table S2. Hazard ratios (95% CI) obtained from time-dependent Cox regression of atherosclerotic cardiovascular disease

Variable	Model 1	Model 2	Model 3	Model 4
CAC at baseline CT exam	2.03 (1.68-2.44)	-	-	-
Time-dependent CAC		2.26 (1.78-2.86)	-	-
CAC at baseline CT exam until repeat CT exam	-	-	2.49 (1.37-4.53)	-
after repeat CT exam	-	-	-	2.53 (1.39-4.61)
CAC at repeat CT exam	-	-	2.22 (1.72-2.86)	1.62 (1.19-2.22)
Type 2 diabetes	1.37 (1.13-1.67)	1.35 (1.11-1.65)	1.35 (1.11-1.65)	1.36 (1.11-1.65)
Male	1.37 (1.13-1.65)	1.40 (1.16-1.69)	1.40 (1.16-1.69)	1.34 (1.11-1.62)
Race/ethnicity				
Non-Hispanic Asian	0.65 (0.48-0.87)	0.64 (0.48-0.86)	0.64 (0.48-0.86)	0.64 (0.48-0.86)
Non-Hispanic black	0.90 (0.74-1.11)	0.89 (0.73-1.10)	0.89 (0.73-1.10)	0.89 (0.73-1.10)
Hispanic	1.01 (0.81-1.26)	0.99 (0.80-1.23)	0.99 (0.80-1.23)	0.99 (0.80-1.23)
Education				
High school	0.88 (0.69-1.12)	0.88 (0.69-1.12)	0.88 (0.69-1.12)	0.88 (0.69-1.12)
Some college/technical	0.96 (0.77-1.21)	0.96 (0.76-1.20)	0.96 (0.76-1.20)	0.96 (0.76-1.20)
College or graduate	0.82 (0.65-1.05)	0.82 (0.64-1.05)	0.82 (0.64-1.05)	0.82 (0.64-1.05)
Current smoker	1.73 (1.36-2.21)	1.73 (1.36-2.21)	1.73 (1.36-2.21)	1.71 (1.34-2.19)
Body mass index, 5 kg/m ²	0.99 (0.91-1.07)	0.98 (0.90-1.07)	0.98 (0.90-1.07)	0.98 (0.90-1.07)
Systolic blood pressure, 10 mmHg	1.11 (1.06-1.17)	1.12 (1.07-1.18)	1.12 (1.07-1.18)	1.11 (1.06-1.17)
Diastolic blood pressure, 10 mmHg	1.08 (0.96-1.20)	1.07 (0.96-1.19)	1.07 (0.96-1.19)	1.07 (0.96-1.20)
Antihypertensive treatment	1.50 (1.25-1.80)	1.48 (1.23-1.77)	1.48 (1.23-1.77)	1.48 (1.23-1.77)
HDL cholesterol, 10 mg/dL	0.90 (0.84-0.96)	0.89 (0.83-0.95)	0.89 (0.83-0.95)	0.90 (0.84-0.96)
LDL cholesterol, 10 mg/dL	1.02 (1.00-1.05)	1.02 (0.99-1.05)	1.02 (0.99-1.05)	1.02 (0.99-1.05)
Triglycerides, 10 mg/dL	1.01 (1.00-1.02)	1.01 (1.00-1.02)	1.01 (1.00-1.02)	1.01 (1.00-1.02)
Statins	0.91 (0.75-1.10)	0.91 (0.75-1.09)	0.91 (0.75-1.09)	0.90 (0.74-1.08)

Abbreviations: Abbreviations: CAC = coronary artery calcium; HDL = high density lipoprotein; LDL = low density lipoprotein.

Supplemental Table S3. Hazard ratios (95% CI) obtained from time-dependent Cox regression of coronary heart disease

Variable	Model 1	Model 2	Model 3	Model 4
CAC at baseline CT exam	2.66 (2.06-3.43)	-	-	-
Time-dependent CAC		3.26 (2.27-4.69)	-	-
CAC at baseline CT exam until repeat CT exam	-	-	3.29 (1.43-7.60)	-
after repeat CT exam	-	-	-	3.37 (1.46-7.77)
CAC at repeat CT exam	-	-	3.26 (2.18-4.86)	2.12 (1.30-3.45)
Type 2 diabetes	1.50 (1.17-1.92)	1.47 (1.15-1.89)	1.47 (1.15-1.89)	1.48 (1.15-1.90)
Male	1.64 (1.29-2.09)	1.70 (1.33-2.16)	1.70 (1.33-2.16)	1.61 (1.26-2.05)
Race/ethnicity				
Non-Hispanic Asian	0.67 (0.48-0.97)	0.67 (0.47-0.96)	0.67 (0.47-0.96)	0.68 (0.47-0.97)
Non-Hispanic black	0.92 (0.71-1.19)	0.90 (0.70-1.17)	0.90 (0.70-1.17)	0.94 (0.72-1.22)
Hispanic	0.93 (0.70-1.23)	0.90 (0.68-1.19)	0.90 (0.68-1.19)	0.94 (0.71-1.24)
Education				
High school	0.83 (0.61-1.13)	0.83 (0.61-1.14)	0.83 (0.61-1.14)	0.83 (0.60-1.13)
Some college/technical	0.90 (0.67-1.20)	0.89 (0.67-1.19)	0.89 (0.67-1.19)	0.89 (0.67-1.19)
College or graduate	0.74 (0.54-1.00)	0.74 (0.54-1.00)	0.74 (0.54-1.00)	0.74 (0.54-1.00)
Current smoker	1.73 (1.26-2.36)	1.73 (1.27-2.36)	1.73 (1.27-2.36)	1.71 (1.25-2.33)
Body mass index, 5 kg/m ²	0.98 (0.88-1.10)	0.98 (0.88-1.09)	0.98 (0.88-1.09)	0.98 (0.88-1.09)
Systolic blood pressure, 10 mmHg	1.10 (1.03-1.17)	1.11 (1.04-1.18)	1.11 (1.04-1.18)	1.10 (1.03-1.17)
Diastolic blood pressure, 10 mmHg	1.01 (0.88-1.16)	1.00 (0.87-1.15)	1.00 (0.87-1.15)	1.01 (0.87-1.16)
Antihypertensive treatment	1.38 (1.09-1.74)	1.35 (1.07-1.71)	1.35 (1.07-1.71)	1.35 (1.07-1.70)
HDL cholesterol, 10 mg/dL	0.89 (0.82-0.97)	0.88 (0.81-0.96)	0.88 (0.81-0.96)	0.89 (0.82-0.97)
LDL cholesterol, 10 mg/dL	1.03 (1.00-1.07)	1.03 (1.00-1.07)	1.03 (1.00-1.07)	1.03 (1.00-1.07)
Triglycerides, 10 mg/dL	1.00 (0.99-1.01)	1.00 (0.99-1.01)	1.00 (0.99-1.01)	1.00 (0.99-1.01)
Statins	1.01 (0.80-1.27)	1.01 (0.80-1.27)	1.01 (0.80-1.27)	1.00 (0.79-1.26)

Abbreviations: Abbreviations: CAC = coronary artery calcium; HDL = high density lipoprotein; LDL = low density lipoprotein.

Supplemental Table S4. Hazard ratios (95% CI) obtained from time-dependent Cox regression of stroke

Variable	Model 1	Model 2	Model 3	Model 4
CAC at baseline CT exam	1.38 (1.05-1.81)	-	-	-
Time-dependent CAC		1.47 (1.06-2.05)	-	-
CAC at baseline CT exam until repeat CT exam	-	-	1.88 (0.81-4.40)	-
after repeat CT exam	-	-	-	1.90 (0.81-4.43)
CAC at repeat CT exam	-	-	1.41 (0.98-2.01)	1.25 (0.80-1.95)
Type 2 diabetes	1.22 (0.90-1.65)	1.21 (0.89-1.63)	1.22 (0.90-1.65)	1.21 (0.89-1.64)
Male	1.03 (0.77-1.38)	1.04 (0.78-1.39)	1.04 (0.78-1.39)	1.02 (0.76-1.37)
Race/ethnicity				
Non-Hispanic Asian	0.64 (0.40-1.01)	0.64 (0.40-1.01)	0.64 (0.40-1.01)	0.64 (0.40-1.02)
Non-Hispanic black	0.88 (0.64-1.21)	0.88 (0.64-1.21)	0.88 (0.64-1.21)	0.89 (0.65-1.22)
Hispanic	1.16 (0.83-1.63)	1.15 (0.82-1.62)	1.15 (0.82-1.62)	1.16 (0.83-1.63)
Education				
High school	0.92 (0.63-1.34)	0.92 (0.63-1.34)	0.92 (0.63-1.34)	0.92 (0.63-1.34)
Some college/technical	1.05 (0.74-1.50)	1.05 (0.74-1.50)	1.05 (0.74-1.50)	1.05 (0.74-1.50)
College or graduate	0.97 (0.66-1.42)	0.97 (0.66-1.42)	0.97 (0.66-1.42)	0.97 (0.66-1.42)
Current smoker	1.62 (1.10-2.40)	1.62 (1.10-2.39)	1.62 (1.10-2.39)	1.61 (1.09-2.38)
Body mass index, 5 kg/m ²	1.01 (0.89-1.14)	1.00 (0.88-1.14)	1.01 (0.89-1.14)	1.01 (0.89-1.14)
Systolic blood pressure, 10 mmHg	1.13 (1.04-1.22)	1.13 (1.04-1.22)	1.13 (1.04-1.22)	1.13 (1.04-1.22)
Diastolic blood pressure, 10 mmHg	1.20 (1.01-1.43)	1.20 (1.01-1.43)	1.20 (1.01-1.43)	1.20 (1.01-1.43)
Antihypertensive treatment	1.62 (1.22-2.15)	1.60 (1.21-2.13)	1.61 (1.21-2.13)	1.60 (1.21-2.13)
HDL cholesterol, 10 mg/dL	0.92 (0.84-1.02)	0.92 (0.83-1.01)	0.92 (0.83-1.01)	0.92 (0.84-1.01)
LDL cholesterol, 10 mg/dL	1.01 (0.97-1.05)	1.01 (0.97-1.05)	1.01 (0.96-1.05)	1.01 (0.96-1.05)
Triglycerides, 10 mg/dL	1.01 (1.00-1.02)	1.01 (1.00-1.02)	1.01 (1.00-1.02)	1.01 (1.00-1.02)
Statins	0.81 (0.60-1.09)	0.80 (0.60-1.08)	0.80 (0.60-1.08)	0.80 (0.59-1.08)

Abbreviations: Abbreviations: CAC = coronary artery calcium; HDL = high density lipoprotein; LDL = low density lipoprotein.

Supplemental Table S5. Hazard ratios (95% CI) obtained from time-dependent Cox regression of hospitalization for heart failure

Variable	Model 1	Model 2	Model 3	Model 4
CAC at baseline CT exam	1.45 (1.12-1.88)	-	-	-
Time-dependent CAC		1.42 (1.03-1.95)	-	-
CAC at baseline CT exam until repeat CT exam	-	-	1.09 (0.59-1.99)	-
after repeat CT exam	-	-	-	1.10 (0.60-2.02)
CAC at repeat CT exam	-	-	1.55 (1.07-2.24)	1.23 (0.78-1.94)
Type 2 diabetes	1.74 (1.34-2.24)	1.73 (1.34-2.23)	1.73 (1.33-2.23)	1.73 (1.34-2.23)
Male	1.72 (1.31-2.24)	1.75 (1.34-2.29)	1.76 (1.35-2.29)	1.71 (1.31-2.23)
Race/ethnicity				
Non-Hispanic Asian	0.60 (0.38-0.93)	0.59 (0.38-0.92)	0.59 (0.38-0.92)	0.60 (0.38-0.93)
Non-Hispanic black	0.86 (0.65-1.14)	0.85 (0.64-1.13)	0.85 (0.64-1.13)	0.87 (0.66-1.15)
Hispanic	0.77 (0.56-1.06)	0.76 (0.55-1.04)	0.76 (0.55-1.04)	0.77 (0.56-1.06)
Education				
High school	0.90 (0.64-1.28)	0.90 (0.64-1.28)	0.90 (0.64-1.28)	0.90 (0.64-1.27)
Some college/technical	0.95 (0.68-1.31)	0.94 (0.68-1.31)	0.94 (0.68-1.31)	0.95 (0.68-1.31)
College or graduate	0.89 (0.63-1.25)	0.88 (0.63-1.24)	0.88 (0.63-1.24)	0.88 (0.63-1.25)
Current smoker	1.50 (1.03-2.17)	1.50 (1.04-2.18)	1.51 (1.04-2.18)	1.50 (1.03-2.17)
Body mass index, 5 kg/m ²	1.21 (1.08-1.35)	1.21 (1.08-1.35)	1.21 (1.08-1.35)	1.21 (1.08-1.35)
Systolic blood pressure, 10 mmHg	1.15 (1.08-1.24)	1.16 (1.08-1.24)	1.16 (1.08-1.24)	1.15 (1.08-1.24)
Diastolic blood pressure, 10 mmHg	0.93 (0.79-1.08)	0.92 (0.79-1.08)	0.92 (0.79-1.07)	0.93 (0.79-1.08)
Antihypertensive treatment	1.92 (1.44-2.56)	1.92 (1.44-2.56)	1.92 (1.44-2.56)	1.91 (1.43-2.55)
HDL cholesterol, 10 mg/dL	0.97 (0.88-1.05)	0.96 (0.88-1.05)	0.96 (0.88-1.05)	0.97 (0.88-1.06)
LDL cholesterol, 10 mg/dL	0.97 (0.93-1.01)	0.97 (0.93-1.01)	0.97 (0.93-1.01)	0.97 (0.93-1.01)
Triglycerides, 10 mg/dL	1.00 (0.98-1.02)	1.00 (0.98-1.02)	1.00 (0.98-1.02)	1.00 (0.98-1.02)
Statins	0.85 (0.65-1.11)	0.86 (0.65-1.12)	0.86 (0.65-1.12)	0.85 (0.65-1.11)

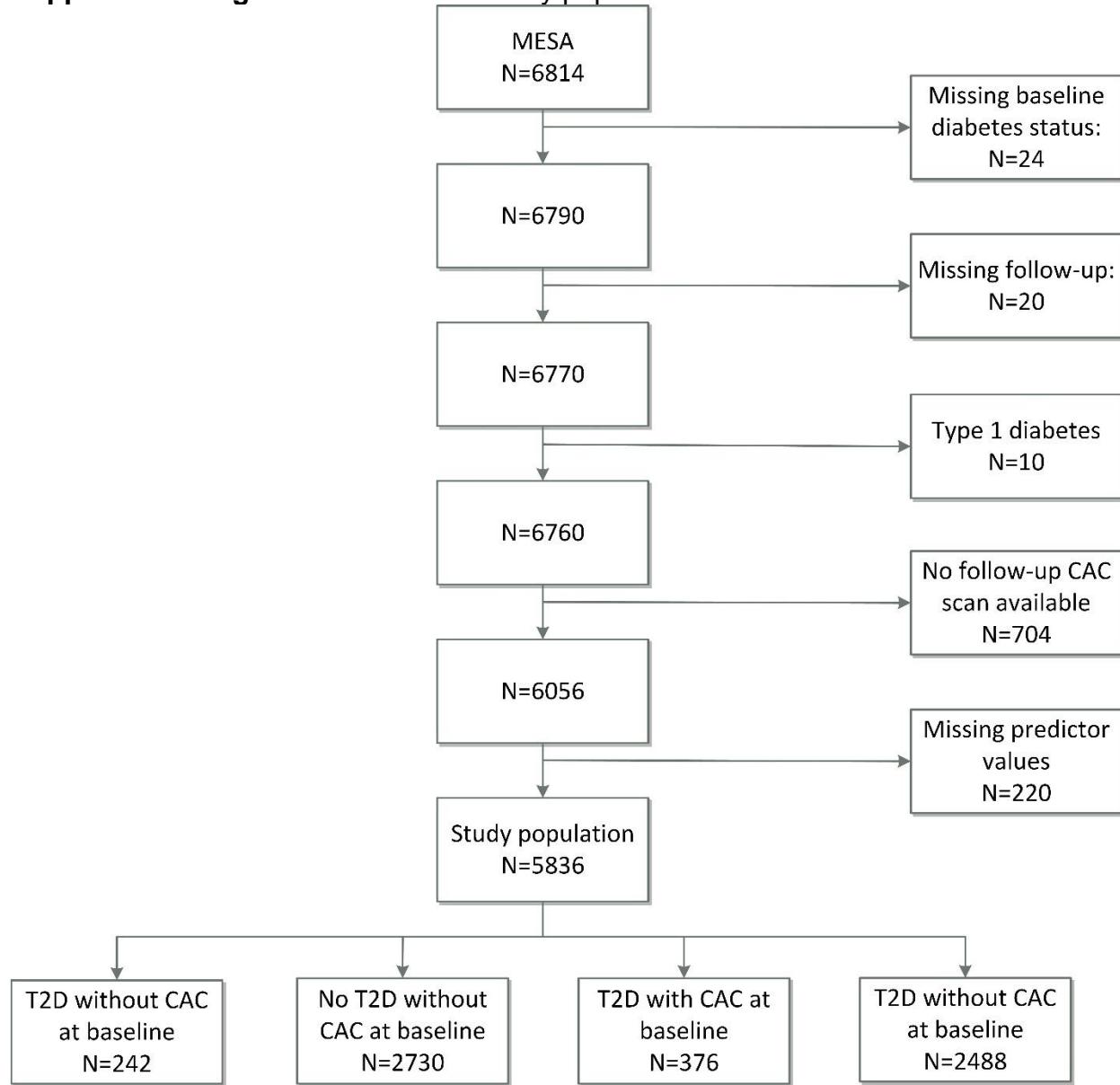
Abbreviations: Abbreviations: CAC = coronary artery calcium; HDL = high density lipoprotein; LDL = low density lipoprotein.

Supplemental Table S6. P-values for interaction between Type 2 diabetes and CAC variables

Variable	ASCVD	CHD	Stroke	Any heart failure	Heart failure with reduced ejection fraction	Heart failure with preserved ejection fraction
Model 1	0.71	0.90	0.80	0.73	0.91	0.49
Model 2	0.74	1.00	0.56	0.76	0.96	0.62
Model 3	0.16	0.70	0.21	0.59	0.46	0.66
Model 4	0.15	0.52	0.22	0.54	0.50	0.70

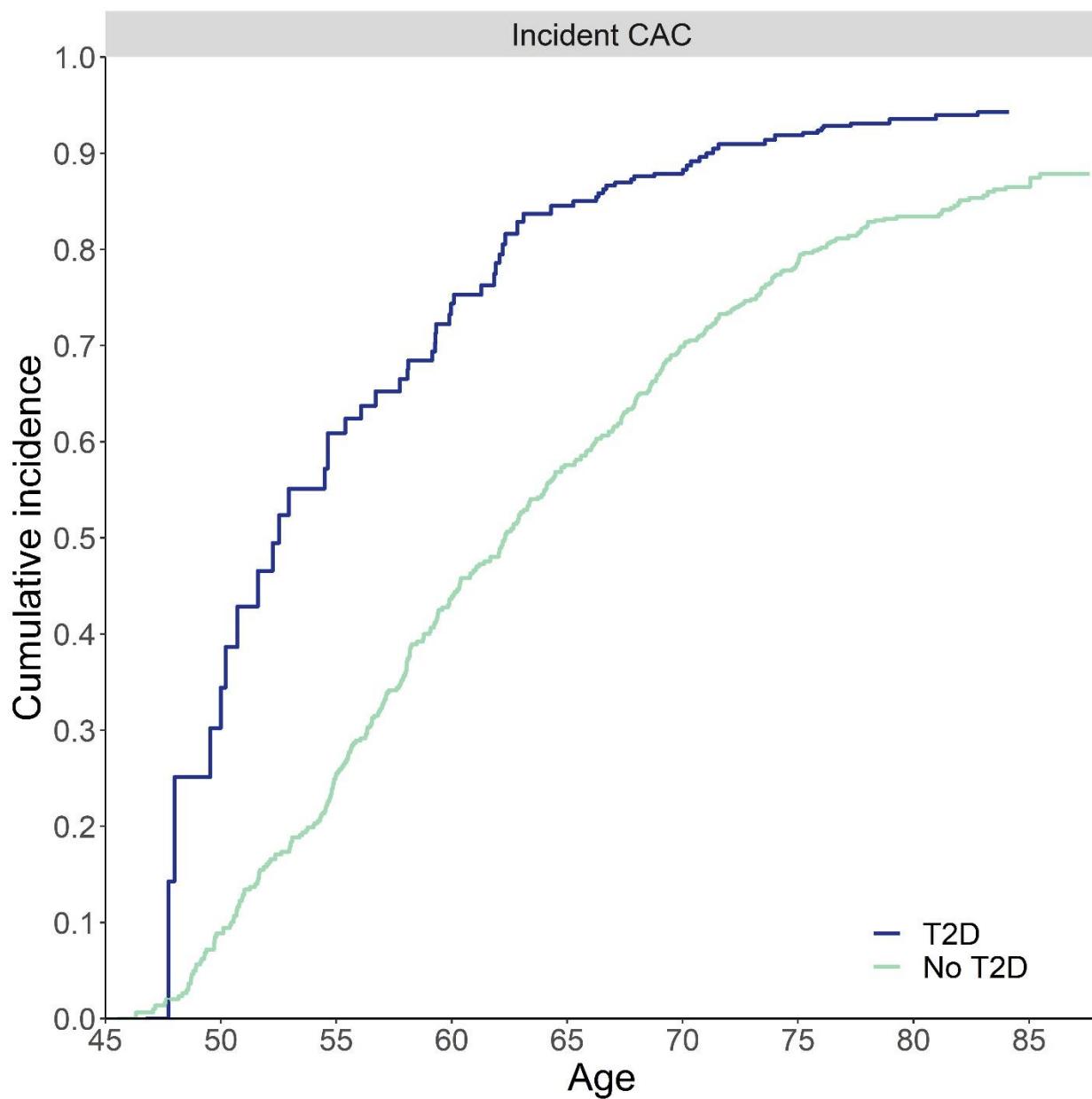
Abbreviations: ASCVD=atherosclerotic cardiovascular disease; CHD=coronary heart disease.

Supplemental Figure S1. Flowchart study population



Abbreviations: CAC = coronary artery calcium, T2D = type 2 diabetes.

Supplemental Figure S2. Cumulative incidence of CAC by baseline type 2 diabetes status



Abbreviations: CAC = coronary artery calcium, T2D = type 2 diabetes.