

SUPPLEMENTAL MATERIAL

Supplemental Table 1: Sensitivity analyses of multivariable-adjusted hazard ratios of CVD events for any CAC and CAC \geq 100 by dyslipidemia category

	Adding adjustment for initiation of dyslipidemia medication during follow-up to Model 3*	Including those on a dyslipidemia medication at baseline†	Excluding those initiating a dyslipidemia medication during follow-up‡
0 LA	N=1,975	N=2,436	N=1,765
Any CAC	2.11 (1.17-3.79) P=0.01	2.23 (1.35-3.70) P=0.002	1.67 (0.87-3.21) P=0.13
CAC\geq100	2.85 (1.50-5.44) P=0.001	3.23 (1.87-5.57) P<0.001	1.95 (0.93-4.11) P=0.08
1 LA	N=2,021	N=2,423	N=1,520
Any CAC	3.86 (2.32-6.41) P<0.001	3.99 (2.53-6.29) P<0.001	4.49 (2.35-8.59) P<0.001
CAC\geq100	5.63 (3.22-9.87) P<0.001	5.66 (3.45-9.28) P<0.001	6.24 (3.01-12.91) P<0.001
2 LA	N=1,208	N=1,468	N=862
Any CAC	1.91 (1.07-3.38) P=0.03	2.29 (1.34-3.90) P=0.002	2.34 (1.06-5.18) P=0.04

CAC\geq100	2.60 (1.39-4.85) P=0.003	3.09 (1.73-5.50) P<0.001	3.24 (1.32-7.93) P=0.01
3 LA	N=330	N=370	N=185
Any CAC	2.36 (0.94-5.96) P=0.07	2.19 (0.90-5.29) P=0.08	2.70 (0.52-13.89) P=0.24
CAC\geq100	3.34 (1.20-9.27) P=0.02	3.17 (1.18-8.57) P=0.02	3.35 (0.54-20.63) P=0.19

*Primary analysis study population included; model adjusted for age, gender, ethnicity, education, MESA site, hypertension, initiation of dyslipidemia medication during follow-up, diabetes mellitus, smoking, body mass index, and family history.

†Entire MESA population with lipid and event data included; model adjusted for age, gender, ethnicity, education, MESA site, hypertension, baseline use or follow-up initiation of dyslipidemia medication, diabetes mellitus, smoking, body mass index, and family history.

‡In addition to those on baseline dyslipidemia medications, those starting such medications during follow-up were excluded; model adjusted for age, gender, ethnicity, education, MESA site, hypertension, diabetes mellitus, smoking, body mass index, and family history.

LA = lipid abnormality; CVD = atherosclerotic cardiovascular disease; CAC = coronary artery calcium.

Supplemental Table 2: Multivariable-adjusted hazard ratios of CVD events by increasing dyslipidemia burden across CAC categories

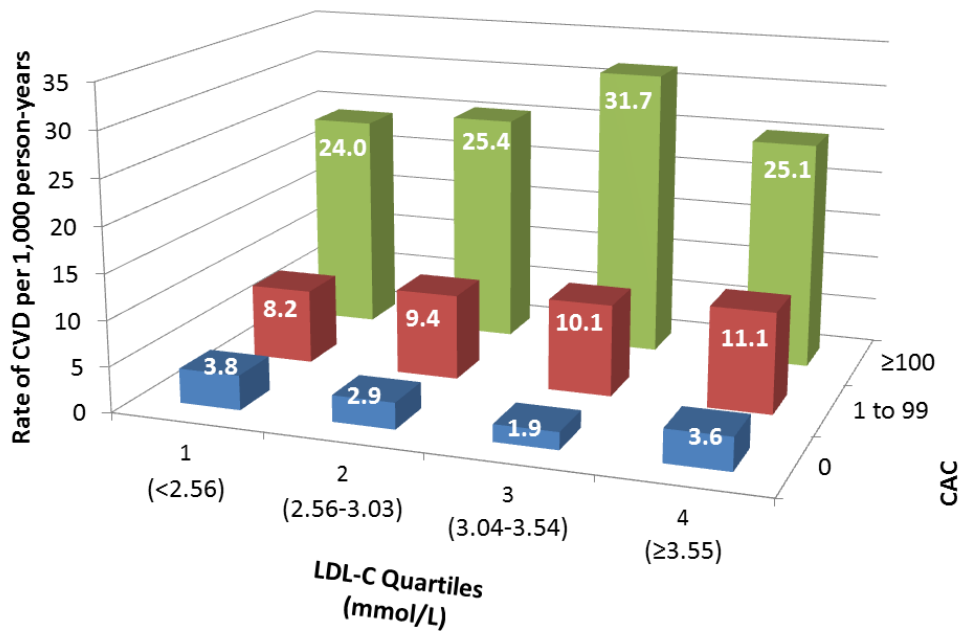
	CAC=0	CAC 1 to 99	CAC\geq100
0 LA	Reference Group N=1,152	Reference Group N=438	Reference Group N=385
1 LA	1.14 (0.60-2.16) P=0.69 N=1,099	1.77 (1.00-3.14) P=0.05 N=511	1.50 (1.03-2.18) P=0.04 N=411
2 LA	1.94 (0.97-3.86) P=0.06 N=562	1.76 (0.94-3.31) P=0.08 N=358	1.69 (1.12-2.56) P=0.01 N=288
3 LA	2.75 (1.11-6.81) P=0.03 N=164	2.76 (1.17-6.50) P=0.02 N=95	2.16 (1.13-4.10) P=0.02 N=71

Adjusted for age, gender, ethnicity, education, MESA site, hypertension, diabetes mellitus, smoking, body mass index, and family history.

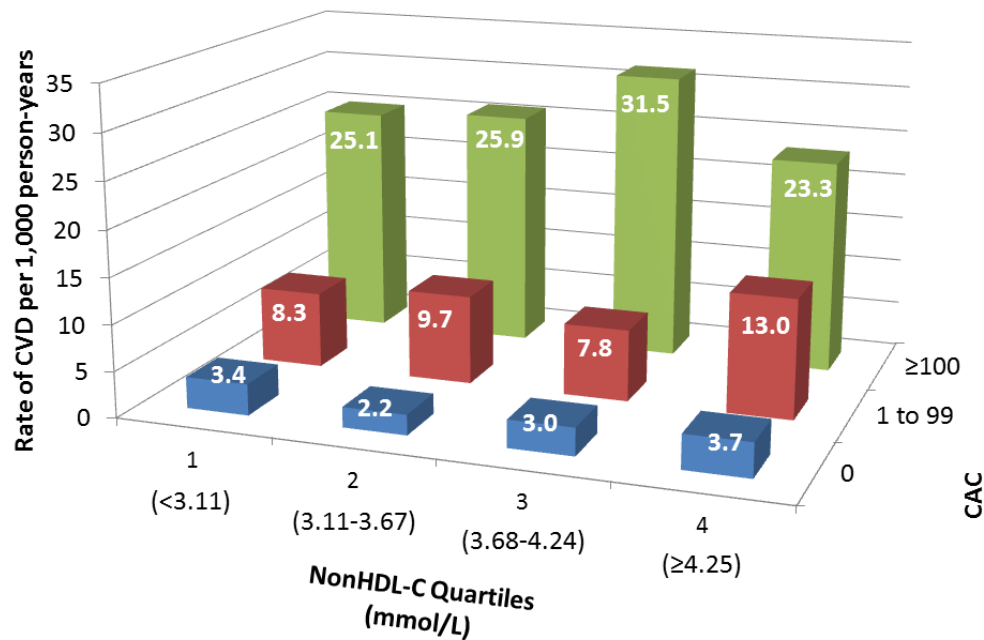
LA = lipid abnormality; CVD = atherosclerotic cardiovascular disease; CAC = coronary artery calcium.

Supplemental Figure 1: CVD events per 1,000 person-years by strata of CAC and dataset quartiles of (A) LDL-C, (B) non-HDL-C, or (C) LDL-P. CVD = atherosclerotic cardiovascular disease; CAC = coronary artery calcium score; LDL-C = low-density lipoprotein cholesterol; non-HDL-C = non-high-density lipoprotein cholesterol; LDL-P = LDL particle concentration.

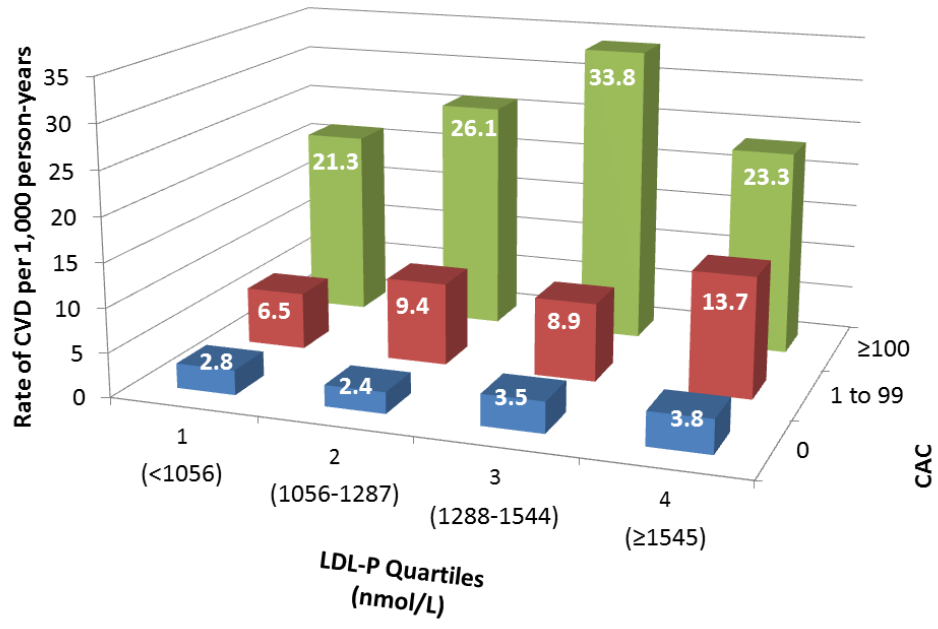
(A)



(B)



(C)



Supplemental Figure 2: Cumulative incidence of CVD events by LA among participants with CAC=0. LA = lipid abnormality; abbreviations otherwise per Supplemental Figure 1.

