

SUPPLEMENTARY DATA

Supplementary Table 1. Differences in Cardiovascular Risk Factors and Treatments by Gender and Diabetes Status*

	GeneSTAR				MESA				NHANES III Follow-Up Study			
	Women		Men		Women		Men		Women		Men	
	Diabetes	No Diabetes	Diabetes	No Diabetes	Diabetes	No Diabetes						
n	74	715	59	600	141	1496	150	1285	257	2952	402	3386
Age (years)	48.7 (6.4)	46.6 (7.1)	48.5 (6.6)	45.9 (7.3)	54.2 (4.5)	52.5 (4.5)	53.9 (4.2)	52.4 (4.5)	43.8 (10.8)	36.5 (10.9)	47.4 (9.0)	36.2 (10.7)
Race/ethnicity (%)												
European American	27%	50.1%	42.4%	68.2%	13.5%	39.2%	22%	39.7%	61.4%	73.9%	76.2%	75.1%
African American	73%	49.4%	57.6%	31.5%	9.2%	11.7%	10.7%	11.9%	18.3%	12.5%	13.5%	10.3%
Hispanic American	--	--	--	--	45.4%	26.9%	37.3%	24.9%	9.3%	5.5%	7.9%	6.4%
Chinese American	--	--	--	--	31.9%	22.1%	30%	23.5%	--	--	--	--
Other	0%	0.5%	0%	0.33%	--	--	--	--	10.9%	8.0%	2.4%	8.2%
Education level (%)												
Less than HS	21.6%	16.8%	15.3%	20.3%	20.6%	12.2%	19.3%	11.2%	33.6%	17.9%	29.4%	19.5%
High school	45.9%	44.5%	42.4%	36.2%	24.8%	16.6%	16%	13.1%	38.2%	38.2%	32.5%	31.9%
More than HS	32.4%	38.7%	42.4%	43.5%	54.6%	71.1%	64.7%	75.7%	28.2%	43.9%	38.2%	48.5%
BMI (kg/m ²)	34.9 (6.8)	29.5 (6.8)	33.4 (6.0)	28.1 (4.6)	33.2 (6.7)	28.9 (6.6)	30.3 (5.2)	28 (4.3)	31.4 (7.7)	25.8 (6.1)	30.4 (5.8)	26.4 (4.9)
Current Smoking (%)	35.1%	30.2%	18.6%	31.3%	14.2%	16.6%	26%	19.6%	28.1%	28.1%	26.6%	34.7%
Family History of CAD	100%	100%	100%	100%	25.4%	20%	17.9%	17.3%	11.6%	8.6%	13.1%	6.4%
Systolic BP (mmHg)	141 (16.2)	132 (16.4)	140 (16.3)	135 (14.2)	128 (20.4)	117 (19.4)	125 (17.5)	120 (16.3)	123 (18.1)	113 (13.7)	129 (14.1)	121 (12.3)
Diastolic BP (mmHg)	86 (10)	83 (10)	88 (10)	87 (9.5)	71 (10)	69 (10)	76 (8.8)	76 (9.3)	75 (9.6)	71 (9.4)	80 (9.6)	77 (9.9)
BP medication use (%)	50%	24.3%	40.7%	18.5%	57.9%	23.4%	47.3%	19.8%	29.2%	9.1%	30.8%	7.6%
Cholesterol (mg/dl)												
Total	222.0 (39)	222 (48)	225 (49)	221 (48)	196 (41)	198 (37)	185 (41)	193 (35)	224.8 (50)	195.4 (40)	203.3 (50)	199 (40)
LDL**	138 (35)	140 (44)	139 (39)	145 (43)	118 (36)	117 (32)	111 (38)	121 (31)	135.1 (35)	118.9 (35)	122 (34)	129 (36)
HDL	50 (17)	58 (16)	46 (18)	47 (15)	49 (13)	56 (15)	41 (10)	44 (11)	49 (14)	55 (15)	41 (14)	46 (13)
Triglycerides	165 (109)	118 (69)	227 (252)	159 (127)	155 (108)	123 (86)	177 (118)	139 (88)	262 (318)	111 (74)	246 (381)	135 (96)
Cholesterol medication use (%)	9.4%	6.7%	15.3%	6%	23.4%	8.3%	20.7%	10%	4.7%	1.9%	9.8%	1.9%
Fasting glucose (mg/dl)	177 (69)	89 (12)	175 (69)	93 (11)	160 (62.5)	86 (10)	159 (62.1)	90 (9.7)	162 (74.9)	90 (8.9)	171 (67.2)	95 (8.7)

*Unless otherwise indicated, mean ± SD are shown.

** Low density lipoprotein (LDL) cholesterol was calculated if triglyceride levels were <400 mg/dL.

SUPPLEMENTARY DATA

Supplementary Table 2. Cox regression models demonstrating relative risk (hazard ratios and 95% confidence intervals) for incident CAD events associated with gender by diabetes status, in adults <60 years at baseline

	Number of Events	Incidence Rate/1000py	Model 1*	Model 2**	p-value for interaction	
GeneSTAR						
<u>No Diabetes</u>						
Men	91	11.22	2.78 (1.92, 4.00)	2.33 (1.54, 3.57)	Model 1: 0.006 Model 2: 0.038	
Women	37	4.27	Reference	Reference		
<u>Diabetes</u>						
Men	9	12.86	0.56 (0.20, 1.54)	0.68 (0.13, 3.57)		
Women	14	17.65	Reference	Reference		
MESA						
<u>No Diabetes</u>						
Men	52	5.64	3.57 (2.08, 6.25)	3.23 (1.82, 5.88)	Model 1: 0.12 Model 2: 0.14	
Women	18	1.66	Reference	Reference		
<u>Diabetes</u>						
Men	10	9.71	1.19 (0.44, 3.13)	1.22 (0.38, 4.00)		
Women	7	7.34	Reference	Reference		
NHANES[†]						
<u>No Diabetes</u>						
Men	34	0.88	2.22 (0.91, 5.56)	1.20 (0.42, 3.45)	Model 1: 0.15 Model 2: 0.22	
Women	11	0.40	Reference	Reference		
<u>Diabetes</u>						
Men	14	1.83	0.93 (0.26, 3.45)	0.76 (0.25, 2.27)		
Women	14	2.37	Reference	Reference		

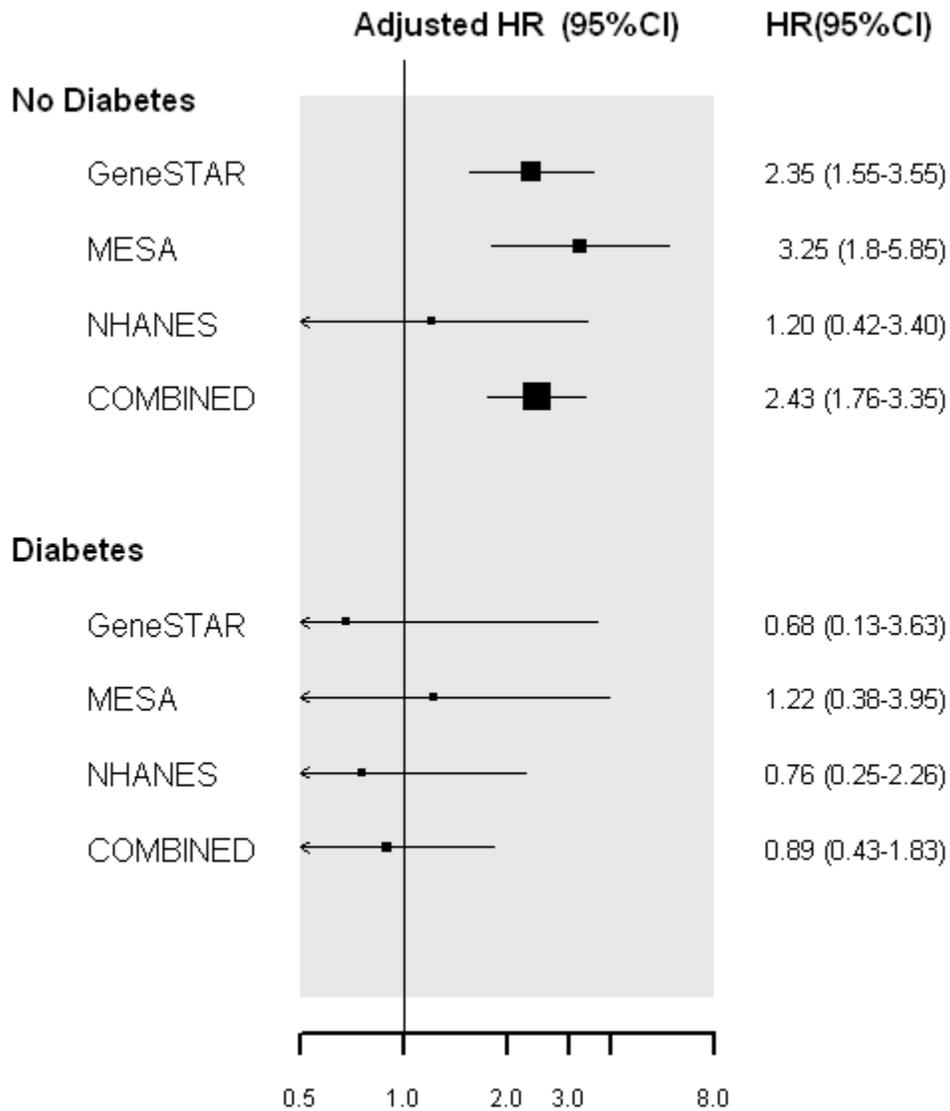
*Model 1: age, race, education

**Model 2: Model 1 + BMI + smoking + systolic BP + HDL cholesterol + non-HDL cholesterol + blood pressure medication use + cholesterol medication use

[†] Only fatal CAD events ascertained.

SUPPLEMENTARY DATA

Supplementary Figure 1. Meta-analysis of 3 cohort studies demonstrating hazard ratios of incident CAD, adjusted for traditional cardiovascular risk factors, in men versus women by diabetes status.



In meta-analyses, after accounting for age, race, education, body-mass index, smoking, hypertension, HDL and non-HDL cholesterol, anti-hypertensive and cholesterol-lowering medication, the fully adjusted hazard ratio for incident CAD in men versus women was significant in diabetes (HR=2.43, 1.76-3.35) and non-significant in those without diabetes (HR=0.89, 0.43-1.83). The interaction by diabetes status was significant (p=0.013).