

e-Table 1. Descriptive* characteristics by coronary artery calcification category: The MESA Study 2010-2013

CAC burden	None	Low Burden	High Burden		
Agatston score	0	>0 to <400	≥400	p-trend [†]	
	N (%)	528 (36)	719 (49)	218 (15)	
Demographics & Behaviors					
Age (yrs)		64.1 ± 7.6	69.1 ± 8.9	74.4 ± 8.6	<0.001
Male gender, n (%)		160 (30.3)	366 (50.9)	144 (66.1)	<0.001
Race/ethnicity, n (%)					<0.001
Caucasian		165 (31.3)	262 (36.4)	100 (45.9)	
Chinese		74 (14.0)	77 (10.7)	32 (14.7)	
African American		169 (32.0)	190 (26.4)	42 (19.3)	
Hispanic		120 (22.7)	190 (26.4)	44 (20.2)	
Education, n (%)					0.10
Less than HS		77 (14.7)	113 (15.7)	22 (10.1)	
HS or some college		159 (30.3)	249 (34.7)	78 (35.8)	
College degree		289 (55.1)	356 (49.6)	118 (54.1)	
Income [‡] , n (%)					0.17
<\$20k		93 (17.9)	150 (21.3)	51 (24.1)	
\$20k to <\$50k		171 (33.0)	245 (34.9)	74 (34.9)	
≥\$50k		255 (49.1)	308 (43.8)	87 (41.0)	
Smoking Status, n (%)					0.009
Never		274 (52.0)	329 (46.0)	84 (38.9)	
Former		214 (40.6)	340 (47.5)	118 (54.6)	

Current	39 (7.4)	47 (6.6)	14 (6.5)	
Pack-years	7.0 ± 13.9	10.2 ± 20.0	14.7 ± 23.5	<0.001
Anthropometry				
BMI (kg/m ²)	28.5 ± 5.9	29.0 ± 5.3	27.7 ± 4.9	0.29
Waist size (cm)	97.0 ± 14.8	100.6 ± 14.2	99.6 ± 13.5	0.001
Cardiovascular Risk Factors				
Diabetes, n (%)	73 (13.9)	141 (19.7)	61 (28.1)	<0.001
Systolic BP (mmHg)	119.9 ± 20.0	123.1 ± 20.0	127.7 ± 20.3	<0.001
BP medication, n (%)	198 (37.5)	409 (56.9)	141 (64.7)	<0.001
Total Cholesterol (mg/dl)	192.0 ± 35.3	184.2 ± 34.1	175.0 ± 36.2	<0.001
HDL-C (mg/dl)	57.7 ± 16.3	55 ± 16.4	54.2 ± 14.9	0.002
LDL-C (mg/dl)	113 ± 31.7	107 ± 30.0	99.2 ± 33.0	<0.001
Lipid medication, n (%)	114 (21.6)	284 (39.5)	115 (52.8)	<0.001
Sleep Characteristics				
Hypoxemia & Disordered Breathing				
Average Oxygen Saturation In Sleep	94.7 ± 1.4	94.3 ± 1.7	94.1 ± 2.0	<0.001
Percentage Sleep time SAO ₂ <90%	2.4 ± 5.5	4.1 ± 9.1	4.6 ± 12.1	<0.001
Percent Time in apnea+hypopnea	9.7 ± 10.5	13.5 ± 13.4	14.2 ± 12.2	<0.001
# Apnea/Hypopnea Events Per Night	73.3 ± 93.6	100.6 ± 115.4	107.9 ± 113.2	<0.001
AHI (continuously measured)	11.6 ± 14.2	16.1 ± 18.0	16.1 ± 16.0	<0.001
Sleep Architecture				

Percent Time in Stage N3	11.3 ± 9.1	10.2 ± 9.1	7.8 ± 7.8	<0.001
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Sleep Fragmentation

Arousal Index	20.3 ± 11.2	22.6 ± 12.2	24.8 ± 12.8	<0.001
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Arousal Index—REM	17.1 ± 11.3	18.1 ± 12.3	17.5 ± 11.8	0.43
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Arousal Index—NREM	20.8 ± 12.0	23.5 ± 12.9	26.2 ± 13.8	<0.001
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Average Sleep Efficiency %	91.1 ± 3.3	90.7 ± 3.7	90.8 ± 3.7	0.13
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Average Sleep WASO	38.6 ± 15.9	39.8 ± 16.9	41.1 ± 17.9	0.07
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Sleep Duration, n (%)				0.005
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399-444 min	147 (39.5)	173 (46.5)	52 (14.0)	
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<399 min	232 (34.3)	361 (53.3)	84 (12.4)	
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>444 min	120 (35.2)	153 (44.9)	68 (19.9)	
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*Numbers in table are mean ± sd, or n (% col).

†P-values are based on Chi-squared tests for categorical variables, and trend tests for continuous variables.

‡Income refers to total gross family income.

e-Table 2. Age-stratified prevalence ratios (95% CI's)* of coronary calcification prevalence (CAC >0) for sleep phenotypes where there was a significant interaction (p<0.01) when age was modeled continuously: The Multi-Ethnic Study of Atherosclerosis 2010-2013

Sleep Characteristic	Age ≤ 67		Age > 67	
	N CAC >0	397/766	540/699	
	PR (95% CI)	p-value	PR (95% CI)	p-value
Average Oxygen Saturation (per SD)	0.93 [0.88,0.98]	0.004	0.97 [0.94,1.00]	0.05
Percentage Sleep time SA02<90% (per SD)	1.05 [1.01,1.08]	0.009	1.03 [1.01,1.05]	0.001
Percent Time in apnea+hypop (per SD)	1.06 [1.01,1.10]	0.01	1.03 [1.00,1.06]	0.07
# Apnea/Hypopnea Events Per Night(per SD)	1.05 [1.01,1.09]	0.02	1.04 [1.00,1.07]	0.02
Apnea-hypopnea Index (per SD)	1.06 [1.01,1.10]	0.01	1.04 [1.01,1.07]	0.02
Arousal Index--ALL (per SD)	1.04 [0.98,1.10]	0.17	1.00 [0.97,1.04]	0.80
Arousal Index--NREM (per SD)	1.04 [0.98,1.09]	0.19	1.00 [0.97,1.04]	0.80

*Models adjust for age, gender, race, education, income and smoking