

Web Table 1. Association of Physician-Diagnosed Sleep Apnea, Self-Identified Habitual Snoring, and Other Potential Confounders or Mediators With Incident Atrial Fibrillation in 2,770 Participants with MRI Examinations in Multivariate Models, 2000–2011

	Model 1 ^a		Model 2 ^b		Model 3 ^c		Model 4 ^d	
	HR	95% CI	HR	95% CI	HR	95% CI	HR	95% CI
Age, years	1.09 ^f	1.06, 1.11	1.08 ^f	1.06, 1.11	1.10 ^f	1.07, 1.12	1.09 ^f	1.07, 1.12
Male sex	2.00 ^f	1.28, 3.13	2.11 ^f	1.35, 3.31	1.06	0.62, 1.81	1.01	0.59, 1.73
African-American race	0.59 ^f	0.36, 0.95	0.58 ^f	0.36, 0.94	0.51 ^f	0.31, 0.84	0.50 ^f	0.31, 0.82
Hispanic ethnicity	0.73	0.39, 1.37	0.71	0.38, 1.33	0.90	0.48, 1.69	0.86	0.46, 1.62
Body mass index ^e	1.03	0.99, 1.08	1.02	0.98, 1.07	0.98	0.93, 1.03	0.97	0.93, 1.02
SBP, mmHg	1.01	1.00, 1.02	1.01	1.00, 1.02	1.01	1.00, 1.01	1.01	1.00, 1.01
Antihypertensive agents	1.38	0.93, 2.04	1.35	0.91, 2.01	1.32	0.88, 1.97	1.35	0.90, 2.00
Lipid-lowering agents	0.57 ^f	0.34, 0.98	0.60	0.36, 1.02	0.68	0.40, 1.15	0.65	0.38, 1.11
Chronic kidney disease	1.40	0.85, 2.31	1.41	0.86, 2.32	1.39	0.84, 2.29	1.34	0.82, 2.20
Log interleukin-6, pg/mL	—	—	1.44 ^f	1.06, 1.95	1.47 ^f	1.08, 1.99	1.47 ^f	1.08, 2.00

Electrocardiographic LAE	—	—	—	—	1.19	0.76, 1.87	1.19	0.75, 1.86
MRI measured LV mass, g	—	—	—	—	1.01 ^f	1.00, 1.02	1.01 ^f	1.00, 1.02
MRI measured RV mass, g	—	—	—	—	1.07 ^f	1.02, 1.13	1.08 ^f	1.02, 1.14
Interim CHD or HF	—	—	—	—	—	—	3.87 ^f	2.22, 6.73
Habitual snoring	1.04	0.65, 1.65	1.04	0.65, 1.65	1.07	0.67, 1.71	1.14	0.71, 1.82
Sleep apnea	2.19 ^f	1.09, 4.37	2.12 ^f	1.06, 4.25	2.21 ^f	1.09, 4.46	2.22 ^f	1.09, 4.52

Abbreviations: CHD, coronary heart disease; CI, confidence interval; HF, heart failure; HR, hazard ratio; LAE, left atrial enlargement; LV, left ventricle; MESA, Multi-Ethnic Study of Atherosclerosis; MRI, magnetic resonance imaging; RV, right ventricle; SBP, systolic blood pressure.

^a Adjusted for age, sex, race, site, insurance status, educational status, body mass index, diabetes, SBP, total and high-density lipoprotein cholesterol, chronic kidney disease, smoking status, alcohol drinking status, antihypertensive agents, and lipid-lowering agents.

^b Additionally adjusted for log interleukin-6.

^c Additionally adjusted for electrocardiographic LAE, MRI measured LV, and RV mass.

^d Additionally adjusted for events of interim CHD or HF.

^e Weight (kg)/height (m)².

^f $P < 0.05$.

Web Table 2. Association of Physician-Diagnosed Sleep Apnea with Incident Atrial Fibrillation in Stratified Multivariable Cox Proportional Hazard Regression Model by Race/Ethnicity, Age, Sex, and Body Mass Index in the MRI Subcohort in MESA, 2000–2011

	HR^a	95% CI	No. of AF Events	P Value	P for Interaction
Race/ethnicity					
Caucasian	1.75	0.70, 4.36	69	0.23	0.99
African-American	4.09	1.09, 15.39	28	0.038	
Hispanic	1.34	0.14, 13.03	25	0.80	
Age					
≥65 years	1.26	0.44, 3.63	88	0.67	0.065
<65 years	4.84	1.76, 13.29	34	0.002	
Sex					
Female	3.51	0.94, 13.10	41	0.061	0.20
Male	2.16	0.94, 4.97	81	0.071	
Body mass index ^b					
≥30	5.11	2.00, 13.03	41	0.0006	0.070
<30	0.80	0.19, 3.40	81	0.77	

Abbreviations: AF, atrial fibrillation; CI, confidence interval; HR, hazard ratio.

^a All subgroup analyses were adjusted for age, sex, race, site, health insurance status, educational status, smoking status, alcohol drinking status, body mass index, diabetes, systolic blood pressure, total and high-density lipoprotein cholesterol, chronic kidney disease, antihypertensive agents, and lipid-lowering agents. Unaffected participants were the reference group.

^b Weight (kg)/height (m)².