

**Table S1. Comparison between participants who did and did not undergo abdominal CT**

	CT (-)	CT (+)	p-value
Number, n	67	237	
Male/Female, n	46/21	183/54	0.15
Age, y	55.4 ± 14.9	55.5 ± 13.4	0.87
BMI, kg/m <sup>2</sup>	25.7 ± 4.1	27.1 ± 6.0	0.15
WC, cm	91.8 ± 9.3	94.9 ± 12.0	0.062
Smoking status, current/past/never, n (%)	15/23/29 (22.4/34.3/43.3)	33/92/112 (13.9/38.8/47.3)	0.24
Comorbidities			
HT, n (%)	42 (62.7)	135 (57.0)	0.40
HL, n (%)	41 (61.2)	156 (65.8)	0.48
DM, n (%)	13 (19.4)	52 (21.9)	0.65
CVD, n (%)	5 (7.5)	24 (10.1)	0.51
OSA, non/mild/moderate/severe, n (%)	16/18/9/24 (23.9/26.9/13.4/35.8)	33/58/63/83 (13.9/24.5/26.6/35)	0.067

Values are given as mean ± SD.

BMI, body mass index; WC, waist circumstance; HT, hypertension; HL, hyperlipidemia; DM, diabetes mellitus; CVD, cardiovascular disease; OSA, obstructive sleep apnea.

**Table S2. Comparison between participants who did and did not undergo blood examinations of calcium, osteocalcin, and 25-hydroxy vitamin D**

	Blood examination (-)	Blood examination (+)	p-value
Number, n	130	104	
Male/Female, n	99/31	81/23	0.75
Age, y	55.0 ± 14.3	56.1 ± 12.2	0.86
BMI, kg/m <sup>2</sup>	26.9 ± 6.5	27.2 ± 4.5	0.077
WC, cm	94.9 ± 13.4	95.0 ± 10.2	0.38
Smoking status, current/past/never, n (%)	19/54/57 (14.6/41.5/43.9)	13/37/54 (12.5/35.6/51.9)	0.47
Comorbidities			
HT, n (%)	75 (57.7)	58 (53.8)	0.77
HL, n (%)	84 (66.2)	71 (68.3)	0.56
DM, n (%)	31 (23.9)	19 (18.3)	0.30
CVD, n (%)	15 (11.5)	7 (6.7)	0.21
OSA, non/mild/moderate/severe, n (%)	24/29/36/41 (18.5/22.3/27.7/31.5)	9/28/26/41 (8.7/26.9/25/39.4)	0.13

Values are given as mean ± SD.

BMI, body mass index; WC, waist circumstance; HT, hypertension; HL, hyperlipidemia; DM, diabetes mellitus; CVD, cardiovascular disease; OSA, obstructive sleep apnea.

**Table S3. Clinical characteristic of participants who underwent blood examinations of calcium, osteocalcin, and 25-hydroxy vitamin D**

	Total	Non OSA	Mild OSA	Moderate OSA	Severe OSA	p-value
Number	104	9	28	26	41	
Male/Female, n	81/23	7/2	20/8	22/4	32/9	0.71
Age, y	56.1 ± 12.2	56.6 ± 15.3	55.8 ± 13.4	55.3 ± 11.8	56.7 ± 11.3	0.97
BMI, kg/m <sup>2</sup>	27.2 ± 4.5	24.5 ± 3.8	25.7 ± 3.7	27.0 ± 4.7	29.1 ± 4.4 <sup>a, b</sup>	0.0021
WC, cm	95.0 ± 10.2	88.2 ± 9.3	91.7 ± 9.9	94.9 ± 11.0	98.9 ± 8.8 <sup>a, b</sup>	0.0042
Ca, mg/dL	9.3 ± 0.4	9.2 ± 0.3	9.2 ± 0.4	9.3 ± 0.2	9.3 ± 0.5	0.54
25-hydroxy vitamin D	22.9 ± 5.2	25.0 ± 7.9	22.0 ± 4.9	24.2 ± 4.4	22.2 ± 4.9	0.19
Osteocalcin	4.2 ± 2.1	3.9 ± 2.2	4.8 ± 1.8	4.9 ± 2.4	3.6 ± 2.1	0.048
CRP, mg/dL	0.10 ± 0.11	0.067 ± 0.11	0.054 ± 0.058	0.10 ± 0.11	0.14 ± 0.13 <sup>b</sup>	0.0096
Smoking status, current/past/never	13/37/54	2/5/2	4/6/18	2/13/11	5/13/23	0.19
Comorbidities						
HT, n (%)	58 (55.8)	3 (33.3)	16 (57.1)	15 (46.2)	27 (65.9)	0.21
HL, n (%)	71 (68.3)	7 (77.9)	15 (53.6)	21 (80.8)	28 (68.3)	0.17
DM, n (%)	19 (18.3)	2 (22.2)	0 (0) <sup>a</sup>	6 (23.1) <sup>b</sup>	11 (26.8) <sup>b</sup>	0.0035
CVD, n (%)	7 (6.7)	0 (0)	2 (7.1)	4 (15.4)	1 (2.4)	0.16
AHI, /h	27.2 ± 19.4	3.4 ± 1.6	10.4 ± 2.5	21.0 ± 4.2 <sup>a, b</sup>	47.9 ± 12.8 <sup>a, b, c</sup>	<0.0001

Values are given as mean ± SD.

<sup>a</sup> p < 0.05 versus non OSA; <sup>b</sup> p < 0.05 versus mild OSA; <sup>c</sup> p < 0.05 versus moderate OSA

OSA, obstructive sleep apnea; BMI, body mass index; WC, waist circumstance; CRP, C-reactive protein; HT, hypertension; HL, hyperlipidemia; DM, diabetes mellitus; CVD, cardiovascular disease; AHI, apnea-hypopnea index.