

Appendix 3 (as supplied by the author): Patient characteristics

Study	N	Recruit- ment diagnosis	Male	Female	Age mean (SD/ range)	BMI mean (SD/ range)	Neck circum- ference	ESS mean (SD/ range)	Berlin risk score	Comorbidities
Abraham et al. ⁽¹⁾	50	SDB	34	16	55.5 yrs (±12.8) (23-78)	32.6 kg/m ² (±6.5) (19-40 kg/m ²)	-	10.6 (±4.4) (1-23)	-	All patients are stable CHF, NYHA class III heart failure Ischemic heart failure: 23 Dilated heart failure: 21 Hypertrophic heart failure: 2
Alonso-Alvarez et al. ⁽²⁾	45	OSA	39	6	52.3 yrs (±11)	28.7 kg/m ² (±4)	40.2 cm (2)	8.9 (3) (0-19)	-	Hypertension: 8 Arrhythmias: 5 Heart disease: 3 Cardiovascular accident: 2 COPD: 1 Asthma: 1
Amir et al. ⁽³⁾	53*	OSA	36	17	47.79 yrs (±11.3)	32.04 kg/m ² (±7.9)	-	-	-	-
Andreu et al. ⁽⁴⁾	65*	OSAS	54	11	52 yrs (10)	34.0 kg/m ² (7)	45.5 cm (3.5)	-	-	Hypertension: 32
Askenov et al. ⁽⁵⁾ †	452	OSA	-	-	59.1 yrs (-)	34.7 kg/m ² (-)	-	14.03 (-)	-	-
Ayappa et al. ⁽⁶⁾	97*	SDB	69	28	44.0 yrs (19-74)	28.7 kg/m ² (19-70 kg/m ²)	-	8.7	-	-
Bajwa et al. ⁽⁷⁾ †	7	OSA	-	-	-	-	-	-	-	-
Berry et al. ⁽⁸⁾	106	OSA	93	13	53.5 yrs (pooled)	34.2 kg/m ² (pooled)	-	16.4 (pooled)	-	-
Bridevaux et al. ⁽⁹⁾ †	11	OSAS	-	-	54 yrs (±14)	-	-	-	-	-
Campbell et al. ⁽¹⁰⁾	31	OSA	24	6	49.1 yrs (±13.8) Range (23-78)	31 kg/m ² (±6.1)	-	10.8 (±4.9) Range (0-20)	-	-

Candela et al. ⁽¹¹⁾	92*	SRBD	72	20	52.3 yrs (±11.8) (24-77)	31.8 kg/m ² (6.6) (22-59 kg/m ²)	41.2 cm (3.6) (33-50 cm)	11.2 (4.8) (2-22)	-	Hypertension: 37 COPD: 8
Cheliout-Heraut et al. ⁽¹²⁾	83*	OSA	60	30	55.4 yrs (±8.7) (47-70)	-	-	-	-	-
Chung et al. ⁽¹³⁾	21*	OSA	11	10	54 yrs (±11)	36 kg/m ² (±9)	-	-	-	-
Churchward et al. ⁽¹⁴⁾	20	OSA	16	4	50.0 yrs (13)	34.0 kg/m ² (8.3)	-	-	-	-
Cilli et al. ⁽¹⁵⁾	55	OSA	49	6	46.0 yrs (-)	-	-	-	-	-
Danzi-Soares et al. ⁽¹⁶⁾	70*	OSAS	53	17	58 yrs (±7)	27.6 kg/m ² (25.8, 31.1)	40 cm (37.4-42.0)	7 (5-11)	49 patients high risk	All patients have coronary artery disease
Divo et al. ⁽¹⁷⁾	14	SDB	12	2	52.7 (±14.3)	-	-	-	-	-
Driver et al. ⁽¹⁸⁾	73*	OSA	30	43	53.0 yrs (±12) (20-71 yrs)	32.2 kg/m ² (±6.8)	-	-	-	-
Ferre et al. ⁽¹⁹⁾	37	SDB	24	13	55.1 yrs (11.5)	27.3 kg/m ² (3.9)	-	10.0 (8)	-	-
Finkel et al. ⁽²⁰⁾ †	26	OSA	-	-	-	-	-	-	-	-
Fordyce et al. ⁽²¹⁾	9	OSA	6	3	40.3 yrs (-)	25.4 kg/m ² (-)	38.2 cm (-)	-	-	-
Furokawa et al. ⁽²²⁾	74*	SDB	51	30	64.9 yrs (±9.6)	25.9 kg/m ² (±4.3)	-	6.5 (±4.1)	-	All patients enrolled are hypertensive
Garcia-Diaz et al. ⁽²³⁾	62*	SAHS	54	8	54.0 yrs (±10.4)	30.1 kg/m ² (±3.9)	-	12 (±3.7)	-	Hypertension: 27 Other cardiovascular comorbidity: 9
Gjevre et al. ⁽²⁴⁾	47	OSA	0	47	52 yrs (±11)	34.86 kg/m ² (±9.04)	-	9.64 (±4.44)	31 high risk	-
Goodrich et al. ⁽²⁵⁾	48*	OSA	35	13	44 yrs (22-69)	-	-	-	-	-
Grant et al. ⁽²⁶⁾ †	95	SA	-	-	-	-	-	-	-	-
Grover et al. ⁽²⁷⁾ †	5	SRBD	-	-	- (29-59 yrs)	-	-	-	-	-
Hernandez et al. ⁽²⁸⁾	88	SAHS	71	17	50.3 yrs (11.6)	29.6 kg/m ² (4.2)	-	-	-	-

Kuna et al. ⁽²⁹⁾	39	OSA	39	0	54.0 yrs (±9.6)	35.8 kg/m ² (±7)	-	-	-	-
Kuna et al. ⁽³⁰⁾	284*	OSA	275	15	53.5 yrs pooled	34.5 kg/m ² pooled	-	-	-	-
Kushida et al. ⁽³¹⁾	11	OSA	7	4	42.1 yrs (-)	26.1 kg/m ² (-)	-	8.1 (-)	-	-
Lettieri et al. ^{(32)†}	210	OSA	-	-	-	-	-	-	-	-
Levendowski et al. ^{(33)†}	37	OSA	-	-	-	-	-	-	-	-
Masa et al. ⁽³⁴⁾	348*	SAHS	263	85	48.7 yrs (±11.8)	31 kg/m ² (±6.6)	-	11.6 (±5.5)	-	Smokers: 87 Cardiac disease: 135 Cerebrovascular disease: 7 Hypertension: 112 Depression and anxiety: 85
Masdeu et al. ⁽³⁵⁾	85	OSA	61	24	42.4 yrs (27-74)	29 kg/m ² (21-70)	-	-	-	-
Nakayama et al. ⁽³⁶⁾	292*	OSA	322	0	43.8 yrs (±8.4)	23.7 kg/m ² (±3.1)	-	8.1 (±4.3)	-	Hypertension: 50
Ng et al. ⁽³⁷⁾	80*	OSAS	63	17	51.4 yrs (11.9)	27.1 kg/m ² (4.2)	38.6 cm (3.6)	9.7 (5.3)	-	-
Ng et al. ⁽³⁸⁾	50	OSAS	44	6	50 yrs (±11.8)	27.9 kg/m ² (±4.8)	-	10.1 (±5.5)	-	-
Nigro et al. ⁽³⁹⁾	66*	OSA	47	19	51.5 yrs (±14.1)	29.3 kg/m ² (±5.4)	-	-	-	-
Onder et al. ⁽⁴⁰⁾	56*	OSA	36	20	42 yrs pooled	30.5 kg/m ² pooled	-	-	-	-
Orr et al. ^{(41)†}	48	-	-	-	-	-	-	-	-	-
Polese et al. ⁽⁴²⁾	43	OSA	19	24	70.0 yrs (±5)	30.0 kg/m ² (±6)	-	9.0 (±7)	-	-
Quintana-Gallego et al. ⁽⁴³⁾	75*	SDB	65	10	56.1 yrs (±11.7)	28.6 kg/m ² (±4.4)	-	-	-	CHF/Ischemic heart failure: 32 Idiopathic heart disease: 30 Heart failure due to other reasons: 14
Rosen et al. ⁽⁴⁴⁾	197*	OSA	225	148	45.9 yrs pooled	37.25 kg/m ² pooled	-	14.25 pooled	-	-

Santos-Silva et al. ⁽⁴⁵⁾	82	OSA	46	34	47.0 yrs (±14)	28.0 kg/m ² (±5)	36.6 cm (±4.9)	10.4 (±5.8)	Low risk: 26 High risk: 54	-
Shrivastava et al. ⁽⁴⁶⁾	99	SDB	-	-	-	-	-	-	-	-
Skomro et al. ⁽⁴⁷⁾ Canada	33	OSA	27	6	48.3 yrs (13.1)	-	-	11.7 (4.2)	-	-
Skomro et al. ⁽⁴⁸⁾	102	OSA	60	29	48.8 yrs pooled	33 kg/m ²	-	12.65 pooled	-	-
Smith et al. ⁽⁴⁹⁾	20	SDB	14	6	61.0 yrs (18-80)	29.0 kg/m ² (±6)	-	8.0 (±4)	-	CHF/Ischemic heart disease: 13 Dilated cardiomyopathy: 7 Atrial fibrillation: 3
Su et al. ⁽⁵⁰⁾	60	OSAS	25	35	45.2 yrs (12.3) (19-74)	35.6 kg/m ² (10.1) (16.9-60.7 kg/m ²)	-	-	-	Hypertension?
Sullivan et al. ^{(51)†}	34	-	-	-	-	-	-	-	-	-
Takama et al. ⁽⁵²⁾	83*	SDB	48	35	70 yrs (±10)	26.1 kg/m ² (pooled) for only reported moderate and severe patients	-	-	-	Hypertension: 75 Dyslipidaemia: 66 Diabetes: 45 Coronary artery disease: 38 Valvular disease: 16 Cardiomyopathy: 16 Other comorbidities: 13
Tiihonen et al. ⁽⁵³⁾	19	SA	11	8	46.8 yrs. (±12.7)	31.4 kg/m ² (±10.3)	-	-	-	-
Tiihonen et al. ⁽⁵⁴⁾	10	OSA	5	5	46.7 yrs (±12.6)	37.3 kg/m ² (±10.5)	-	-	-	-
To et al. ⁽⁵⁵⁾	141*	OSAS	132	43	48.9 yrs (-)	28.7 kg/m ² (-)	-	10.4 (-)	-	Hypertension: 85 Diabetes: 27 Hyperlipidaemia: 25 Fatty liver: 15 Cerebrovascular accident: 11

Tonelli de Oliveria et al. ⁽⁵⁶⁾	149*	OSAS	111	38	45.0 yrs (±12)	29.2 kg/m ² (±5.5)	-	11.0 (±5)	-	Hypertension: 47
To et al. ⁽⁵⁷⁾	371	OSA	274	97	50.2 yrs pooled	29 kg/m ² pooled	-	14.1 pooled	-	-
Yagi et al. ⁽⁵⁸⁾	22	SAS	17	5	52.9 yrs (13.3) (31-74)	25.7 kg/m ² (4.4) (19-39kg/m ²)	-	-	-	-
Yin et al. ⁽⁵⁹⁾	44*	OSA	40	4	52.3 yrs (13.5)	26.7 kg/m ² (5.3)	-	-	-	-
Total	5026	-	3169	1077	50.8 pooled	30.4 pooled	41.1 pooled	11.6 pooled	-	1382

BMI = body mass index; CHF = congestive heart failure; COPD = chronic obstructive pulmonary disease; ESS = Epworth Sleepiness Scale; NYHA = New York Heart Association; OSA = obstructive sleep apnea; OSAS = obstructive sleep apnea syndrome; SA = sleep apnea; SAS = sleep apnea syndrome; SAHS = sleep apnea hypopnea syndrome; SD = standard deviation; SDB = sleep disordered breathing; SRBD = sleep related breathing disorder

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