

Supplementary Materials

Supplementary tables presenting SF36 domain scores at baseline and follow-up according to the 0-100 scales. Intention-to-treat analyses (Table S1), per protocol analyses (Table S2) and complete case analyses (Table S3) are provided. Table S4 present complete case analyses of the norm-based SF36 domain scores and PSQI global score at baseline and follow-up.

Supplementary Table S1 SF36 domains (0-100 scales) at baseline and final follow-up (12 months), intention-to-treat.

SF36 domains	Baseline		Final follow-up		P
	CPAP (n=55)	MAS (n=49)	CPAP (n=55)	MAS (n=49)	
Physical functioning	83.7 (16.7)	81.6 (16.1)	87.1 (15.6)	83.0 (18.5)	.22
Role-physical	75.7 (25.0)	70.9 (31.1)	82.2* (22.7)	75.0 (30.8)	.19
Bodily pain	68.4 (29.1)	60.2 (26.8)	70.5 (27.3)	61.7 (29.6)	.12
General health	65.4 (20.6)	63.9 (22.8)	69.6 (20.9)	66.1 (23.5)	.43
Vitality	46.7 (20.7)	40.1 (19.5)	55.5* (20.8)	55.4* (21.0)	.98
Social functioning	77.0 (24.8)	71.9 (24.5)	83.2 (24.3)	80.6 (20.6)	.57
Role-emotional	84.7 (21.7)	84.4 (21.9)	87.6 (23.1)	87.6 (19.8)	1.00
Mental health	78.2 (13.9)	78.1 (15.8)	79.7 (16.3)	81.6 (12.0)	.50

CPAP=Continuous Positive Airway Pressure

MAS=Mandibular Advancement Splint

SF36 domains: Mean (standard deviation)

P: t-test between MAS and CPAP treatment groups at final follow-up

*Statistically significant change from baseline to final follow-up within treatment group, paired t-test (P<0.05)

Supplementary Table S2 SF36 domains (0-100 scales) at baseline and final follow-up (12 months), per protocol (compliant patients only).

SF36 domains	Baseline		Final follow-up		P
	CPAP (n=18)	MAS (n=36)	CPAP (n=18)	MAS (n=36)	
Physical functioning	83.1 (16.9)	84.0 (14.1)	86.4 (15.5)	86.5 (16.1)	.98
Role-physical	74.3 (22.9)	71.4 (33.0)	78.1 (26.1)	78.0 (30.0)	.98
Bodily pain	66.2 (31.4)	62.0 (26.8)	64.2 (30.0)	62.8 (29.2)	.87
General health	64.3 (21.6)	66.4 (22.3)	71.3 (22.4)	71.4 (21.7)	.98
Vitality	47.2 (25.5)	41.0 (19.2)	62.2* (18.0)	60.9* (16.3)	.80
Social functioning	81.3 (24.3)	71.9 (25.8)	91.7* (16.6)	83.7* (18.1)	.12
Role-emotional	87.5 (19.6)	83.6 (23.7)	92.6 (16.6)	89.1 (19.4)	.52
Mental health	80.3 (11.8)	77.5 (17.3)	85.8 (11.4)	83.5* (11.5)	.48

CPAP=Continuous Positive Airway Pressure

MAS=Mandibular Advancement Splint

SF36 domains: Mean (standard deviation)

P: t-test between MAS and CPAP treatment groups at final follow-up

*Statistically significant change from baseline to final follow-up within treatment group, paired t-test (P<0.05)

Supplementary table S3 SF36 domains (0-100 scales) at baseline and final follow-up (12 months), complete cases.

SF36 domains	Baseline		Final follow-up		P
	CPAP (n=34)	MAS (n=39)	CPAP (n=34)	MAS (n=39)	
Physical functioning	84.1 (15.5)	81.2 (17.0)	87.1 (13.9)	83.3 (19.8)	.35
Role-physical	74.1 (25.1)	69.6 (32.2)	80.7 (22.9)	75.2 (31.9)	.40
Bodily pain	65.1 (29.4)	60.2 (27.0)	68.9 (28.4)	60.6 (29.5)	.23
General health	63.9 (20.8)	64.3 (22.7)	69.2 (20.7)	69.5 (22.5)	.96
Vitality	46.0 (21.9)	39.1 (19.9)	58.1* (19.3)	58.7* (19.1)	.90
Social functioning	73.9 (25.1)	70.8 (25.5)	86.4* (22.1)	83.7* (19.9)	.58
Role-emotional	83.3 (22.2)	82.5 (22.8)	88.5 (19.4)	88.7 (18.8)	.97
Mental health	77.4 (13.9)	77.9 (16.7)	81.0 (15.0)	83.1* (11.7)	.52

CPAP=Continuous Positive Airway Pressure

MAS=Mandibular Advancement Splint

SF36 domains: Mean (standard deviation)

P: t-test between MAS and CPAP treatment groups at final follow-up

*Statistically significant change from baseline to final follow-up within treatment group, paired t-test (P<0.05)

Supplementary Table S4 SF36 domains (norm-based scales) and PSQI global score at baseline and final follow-up (12 months), complete cases only.

SF36 domains	Baseline		Follow-up		Adj. difference (95% CI) [§]	P [§]
	CPAP (n=34)	MAS (n=39)	CPAP (n=34)	MAS (n=39)		
Physical functioning	48.4 (8.3)	47.1 (8.7)	49.9 (7.7)	48.2 (10.4)	-1.2 (-4.3 – 1.9)	.45
Role-physical	49.2 (6.4)	48.1 (8.6)	50.9 (6.4)	49.6 (8.7)	-1.6 (-4.9 – 1.7)	.34
Bodily pain	47.8 (11.7)	46.1 (10.3)	49.3 (11.2)	46.2 (11.4)	-1.8 (-6.3 – 2.8)	.44
General health	45.6 (9.9)	46.0 (10.6)	48.0 (9.8)	48.4 (10.4)	-0.1 (-3.8 – 3.6)	.96
Vitality	42.3 (11.8)	39.0 (10.2)	48.6* (10.3)	49.2* (9.5)	1.7 (-3.0 – 6.4)	.48
Social functioning	42.7 (12.9)	41.5 (12.7)	49.0* (11.5)	47.8* (10.0)	-0.6 (-5.6 – 4.4)	.81
Role-emotional	47.8 (8.4)	47.7 (8.4)	49.7 (7.4)	49.9 (7.1)	0.6 (-2.6 – 3.8)	.72
Mental health	47.0 (10.3)	47.6 (12.0)	49.7 (10.9)	51.3* (8.3)	1.1 (-3.0 – 5.3)	.59
Physical Component Score	48.4 (7.4)	46.8 (9.6)	49.8 (7.5)	47.3 (10.7)	-1.3 (-4.2 – 1.6)	.38
Mental Component Score	44.6 (11.6)	44.3 (12.2)	49.2* (10.4)	50.6* (8.1)	2.1 (-1.9 – 6.1)	.29
PSQI global score	7.7 (3.4)	8.0 (3.3)	6.4* (2.7)	5.8* (2.6)	-0.8 (-1.8 – 0.1)	.09

CPAP=Continuous Positive Airway Pressure

MAS=Mandibular Advancement Splint

PSQI=Pittsburgh Sleep Quality Index

SF36=Medical Outcomes Study Short-Form 36-Element Health Survey

SF36 domains and PSQI global score: Mean (standard deviation)

*Statistically significant change from baseline to follow-up within treatment group, paired t-test (P<0.05)

§Difference between MAS and CPAP treatment groups at follow-up, based on linear regression analysis adjusted for baseline variables (Age, BMI, sex, smoking, baseline AHI, and the baseline SF36 domain/PSQI global score), reference group: CPAP