SUPPLEMENTARY MATERIAL (ADDENDUM)

Multiple linear regression analysis was performed to examine the relationship between potential predictive factors and CPAP compliance (Table 1). First, bivariate analysis was conducted for the following variables: gender, age, education, body mass index (BMI) at baseline, apnea-hypoxia index (AHI) at baseline, percentage of sleep time below 90% oxygen saturation (CT90%) at baseline, ESS at baseline and at six months, EuroQol at baseline and at six months, drowsy driving at baseline and at six months, cardiovascular pathology, nasal problem at baseline and at 6 months, depression at baseline, self-reported daytime sleepiness, fatigue and general status in comparison to baseline at three and six months, self-reported side effects at three and six months, self-reported CPAP use at three and six months, and physical activity at three and six months. For the bivariate analyses, we used a simple linear regression to explore the independent relationship between each potential predictor and CPAP compliance, and variables that showed a significant result at univariate level ($p < 0{\cdot}1$) were included in the multivariate model, using the backward elimination method. Variables with high correlations ($r > |\pm 0{\cdot}3|$) were previously excluded from multivariate analyses.

Results about the comparison of CPAP treatment side effects at the end of 6-month follow-up between the two groups are summarized in Table 2. Table 3 reports results of the satisfaction questionnaire administered at the end of the study to both groups, while in Table 4 we found the answers to the part of the satisfaction survey specific for the telemedicine group.

Figure 1 illustrates the results of the non-inferiority analysis of the telemedicine-based strategy vs. the face-to-face one.

Table 1. Linear regression coefficient analysis with compliance CPAP as a dependent outcome variable.

	Bivariate			Multivariate		
	β	**95% CI**	**p-value**	**β**	**95% CI**	**p-value**
Age (years)	0.06	0.02 to 0.09	0.003	0.05	0.02 to 0.09	0.006
ESS at 6 months	-0.09	-0.19 to 0.01	0.083	-	-	-
Self-reported daytime sleepiness at 6 months	0.26	-0.04 to 0.57	0.093	-	-	-
Self-reported daytime sleepiness, fatigue and general status in comparison to baseline at 3 months	0.57	0.01 to 1.13	0.044	-	-	-
Self-reported daytime fatigue at 6 months	-0.62	-1.06 to -0.18	0.006	-0.55	-0.98 to -0.12	0.013
Self-reported CPAP use at 3 months	0.72	0.53 to 0.91	<0.001	-	-	-
Self-reported CPAP use at 6 months	0.79	0.68 to 0.90	<0.001	-	-	-

Abbreviations: β, regression coefficient; CI, confidence interval

Table 2 . Comparison of CPAP treatment side effects at the end of 6-month follow-up between telemedicine and control group.

	CONTROL (N=64)	TELEMEDICINE (N=64)	Odds ratio[a] (control group data were reference values)	95% CI for the Odds ratio		p-value
	Follow-up N (%)	Follow-up N (%)		Lower	Upper	
Nasal problems	16 (25)	24 (37)	1.80	0.84	3.85	0.13
Leaks	25 (39)	25 (39)	1.00	0.49	2.03	>0.99
Skin lesions	6 (9)	6 (9)	1.00	0.30	3.28	>0.99
Dry mouth	26 (41)	29 (45)	1.21	0.60	2.44	0.59
Involuntary removal	16 (25)	14 (22)	0.84	0.37	1.91	0.68
Claustrophobia	7 (11)	5 (8)	0.69	0.21	2.30	0.55
Social problems	2 (3)	3 (5)	1.52	0.25	9.45	0.65
Noise	8 (13)	4 (6)	1.96	0.76	5.06	0.16
Conjunctivitis	5 (8)	6 (9)	1.22	0.35	4.22	0.75
Headache	5 (8)	4 (6)	0.79	0.20	3.07	0.73
Insomnia	3 (5)	7 (11)	2.50	0.62	10.12	0.20
Cold sensation	3 (5)	7 (11)	2.50	0.62	10.12	0.20
Aerophagia or thoracic pain	4 (6)	9 (14)	2.45	0.72	8.43	0.15

Abbreviations: SD, standard deviation. [a]Estimate of the odds ratio comparing telemedicine versus standard (standard being the reference group) derived using the logistic regression model for the treatment side effects variables as response and with treatment group as factor.

Table 3: Satisfaction of the subjects in the two follow-up groups.

Questions	Multiple-choice answers	CONTROL	TELEMEDICINE	P
Are you satisfied with your CPAP follow-up?	Very dissatisfied	0	0	0.139
	Dissatisfied	0	0	
	Indifferent	0	0	
	Satisfied	18 (28%)	11 (17%9	
	Very Satisfied	46 (72%)	53 (83%)	
How would you describe the access to the clinical staff?	Very difficult	0	0	0.842
	Difficult	0	0	
	Normal	1 (2%)	2 (3%)	
	Easy	20 (31%)	20 (32%)	
	Very easy	43 (67%)	42 (67%)	
Did you understand the instructions provided by the clinical staff?	Not at all	0	0	0.818
	Not very well	0	0	
	Normal	0	0	
	Yes, well	12 (19%)	11 (17%)	
	Yes, very well	52 (81%)	53 (83%)	

Table 4: Satisfaction of the subjects in the telemedicine group.

Questions	Multiple-choice answers	TELEMEDICINE
Would you like to use this telemedicine-based approach for your CPAP follow-up again in the future?	No	2 (3%)
	Maybe	2 (3%)
	Yes	56 (94%)
Would you recommend this telemedicine-based approach to others?	No	1 (2%)
	Maybe	1 (2%)
	Yes	59 (96%)
Could you hear and see the doctor well during the interview?	I could not hear and/or see well the doctor	6 (10%)
	Yes, I could hear and see the doctor with some problems	12 (20%)
	Yes, I could hear and see the doctor perfectly	43 (70%)
Did you feel comfortable during the teleconsultations?	No	0
	Quite	19 (32%)
	Much	41 (68%)
Would you have preferred a hospital-based follow-up?	No	40 (66%)
	Maybe	14 (23%)
	Yes	7 (11%)
Did you feel safe about your privacy in the teleconsultation?	No	2 (3%)
	Indifferent	2 (3%)
	Yes	57 (94%)

Figure 1. Non-inferiority analysis (PP population) for the adequacy of CPAP adherence between telemedicine and control groups. CPAP, continuous positive airways pressure; PP, per-protocol.