

Online supplementary material

Cancer risk in patients with sleep apnoea following adherent 5-year CPAP therapy.

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Table S1: definition of covariates

Variables	Definition
Obesity	According to the WHO definition, obesity was defined by a body mass index of at least 30 kg/m ²
Hypertension (HTN)	Blood pressure measurements taken in the sleep clinic were not used to diagnose HTN, as clinical blood pressure measured on only one occasion cannot be used as a reliable indicator for the definition of HTN. Only patients who were previously diagnosed as hypertensive based on data reported during baseline standardized health interview, and were taking antihypertensive medication were considered as having HTN [1].
Diabetes mellitus	Patients who were previously diagnosed with diabetes according to data from baseline standardized health interview, and use of oral hypoglycemic medications and/or insulin were considered as having diabetes mellitus [2].
Chronic obstructive pulmonary disease (COPD)	A COPD label was assigned for participants who were previously diagnosed with COPD, chronic bronchitis or emphysema, according to data from baseline standardized health interview [3] .
Cardiovascular diseases	Based on data reported by participants during the baseline standardized health interview, cardiovascular diseases were defined as history of physician-diagnosed angina, myocardial infarction, coronary revascularization procedure, heart failure, atrial fibrillation and/or stroke [4].
Smoking status	Never smokers were defined as people who had never smoked in their lifetime; former smokers were defined as people who had previously smoked but had stopped smoking for at least one year at the time of their diagnostic sleep study; a current smoker label was assigned if a patient was a smoker within the past year.
Excessive daytime sleepiness	Excessive daytime sleepiness was assessed using the Epworth Sleepiness Score [5, 6].
Depression	Patients who were previously diagnosed with depression according to data from baseline standardized health interview, and use of antidepressant medications were considered as depression [7].

Table S2: Comparison of imputed and non-imputed dataset

	Non imputed					Imputed				
	N	Mean	Std	Min	Max	N	Mean	Std	Min	Max
Body mass index	4479	32,1	6,7	15,3	69,3	89980	32,1	6,7	15,3	69,3
Epworth score	4373	10,5	5,0	0,0	24,0	89980	10,5	5,0	0,0	24,0
Apnea Hypopnea Index	4489	41,2	20,8	5,5	159,0	89980	41,1	20,8	5,5	159,0
Prevalent hypertension	4029	0,4	0,5	0,0	1,0	89980	0,4	0,5	0,0	1,0
Prevalent CV disease	4338	0,2	0,4	0,0	1,0	89980	0,2	0,4	0,0	1,0
Prevalent Diabetes	4056	0,2	0,4	0,0	1,0	89980	0,2	0,4	0,0	1,0

Abbreviations : N, number; Std, standard deviation; Min, minimum ; Max, Maximum ; CV, cardiovascular

Table S3: Logistic regression model to assess the probability of being CPAP adherent

Variable	Odds Ratio [95%CI]	p value
Age	1.01 [1 ; 1.01]	0.0038
Sex (male)	1.16 [1.02 ; 1.33]	0.0260
Epworth score ≥ 10	1.03 [0.91 ; 1.17]	0.6208
BMI categories, kg/m ²		0.0007
<25	0.76 [0.65 ; 0.89]	
25-30	1.07 [0.91 ; 1.26]	0.4253
>30	1 [.;.]	.
Prevalent hypertension	1.14 [0.99 ; 1.32]	0.0732
Prevalent CV diseases	0.83 [0.7 ; 0.98]	0.0250
Prevalent Diabetes	0.81 [0.68 ; 0.96]	0.0181

Table S4: Primary outcome final model

Variable	OR [95%CI]	Pvalue
CPAP adherence	0.94 [0.78 ; 1.14]	0.5227
Epworth score ≥ 10	0.79 [0.65 ; 0.95]	0.0139
Age	1.04 [1.03 ; 1.05]	<.0001
Sex (male)	1.11 [0.9 ; 1.38]	0.3275
Body mass index (ref >30 kg/m ²)		
<25	0.91 [0.71 ; 1.17]	0.4678
25-30	1.08 [0.84 ; 1.38]	0.5630
Prevalent hypertension	0.81 [0.65 ; 1]	0.0520
Prevalent diabetes	1.23 [0.97 ; 1.58]	0.0920

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