

## **Online Data Supplement**

### **Sleep Disturbance in Smokers with Preserved Pulmonary Function and Chronic Obstructive Pulmonary Disease**

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Supplemental Table: Adjusted and unadjusted correlation of general and respiratory-specific health status and symptoms with sleep disturbance in the overall population.

	Unadjusted	Adjusted
Age (years)	<b>-0.24 (-0.32,-0.16)</b>	<b>-0.11 (-0.20,-0.03)</b>
Sex (Female)	<b>1.69 (0.06,3.32)</b>	0.82 (-0.61,2.25)
Non-White	1.60 (-0.42,3.63)	0.73 (-1.03,2.49)
BMI (kg/m <sup>2</sup> )	0.07 (-0.05,0.18)	-0.08 (-0.19,0.03)
Non-Hypoxic	ref	ref
Hypoxic Uses Oxygen	-0.16 (-1.96,1.63)	0.57 (-1.13,2.26)
Hypoxic No Oxygen	2.02 (-1.11,5.14)	1.99 (-0.64,4.62)
No Sleep Apnea	ref	ref
Sleep Apnea-Non-adherent to CPAP	<b>4.22 (2.18,6.26)</b>	1.21 (-0.64,3.05)
Sleep Apnea- Adherent to CPAP	1.66 (-1.83,5.14)	-2.07 (-5.36,1.22)
PND	<b>7.54 (5.9,9.19)</b>	<b>3.57 (1.91,5.23)</b>
Cough	<b>2.10 (0.50,3.71)</b>	0.58 (-1.57,2.73)
Phlegm	1.50 (-0.24,3.25)	-0.61 (-2.88,1.66)
Wheezing	<b>4.27 (2.71,5.84)</b>	0.10 (-1.45,1.66)
Depression (T-score)	<b>0.47 (0.4,0.55)</b>	<b>0.25 (0.13,0.37)</b>
Pain Interference (T-score)	<b>0.48 (0.4,0.55)</b>	<b>0.24 (0.15,0.33)</b>
Anxiety (T-score)	<b>0.45 (0.37,0.53)</b>	0.0 (-0.12,0.12)
Dyspnea (T-score)	<b>0.42 (0.33,0.51)</b>	<b>0.14 (0.03,0.25)</b>
Currently Smoking	<b>3.19 (1.54,4.83)</b>	0.58 (-1.13,2.3)
Number of Comorbidities	<b>1.13 (0.82,1.43)</b>	0.23 (-0.09,0.55)
Baseline LABA	-0.99 (-2.70,0.73)	-1.21 (-3.35,0.94)
Baseline ICS	-0.07 (-1.69,1.56)	0.25 (-1.76,2.25)
BASELINE SABA	1.91 (0.33,3.49)	-0.41 (-1.94,1.12)
BASELINE LAMA	0.26 (-1.53,2.05)	0.68 (-1.08,2.43)
Baseline SAMA	1.21 (-0.72,3.15)	0.56 (-1.13,2.24)
Oral Corticosteroid	-2.07 (-7.05,2.91)	-0.64 (-4.88,3.6)
FEV1 Percent Predicted	<b>0.04 (0.00,0.07)</b>	<b>0.04 (0.0,0.07)</b>

Table of beta coefficient with 95% CI for each hypothesized correlate of sleep disturbance. Beta coefficients refer to the magnitude of change in Sleep Disturbance T-Score for a one unit change in the exposure outlined in that row. Units for continuous exposures are noted in parentheses. Unadjusted correlates arise from univariate linear regression models (modeling Sleep Disturbance T-Score as outcome). Adjusted models include all other exposures in table. Significant relationships at p<0.05 level noted in bold. FEV1-forced expiratory Volume in 1 second, BMI-body mass index, PND-paroxysmal nocturnal dyspnea, FACIT-Functional Assessment of Chronic Illness Therapy, LABA-long acting beta agonist, LAMA-long acting muscarinic antagonist, SABA-short acting beta agonist, SAMA-short acting muscarinic antagonist, ICS-inhaled corticosteroid, SA-Sleep Apnea.