Supplemental Table 1: The cross-sectional association between chronic cough and depressive symptoms at baseline (stratified)

Participants with respiratory disease (n=950)	CES-D scores median (IQR)	Model 1 standardized mean adjusted difference (95% CI) in depressive symptoms at baseline	Model 2 standardized mean adjusted difference (95% CI) in depressive symptoms at baseline
No chronic cough (n=680) Chronic cough (n=270)	5 (2 – 12) 7 (3 – 13)	Ref. 0.12 (-0.02 – 0.25)	Ref. 0.06 (-0.08 – 0.19)
Participants without respiratory disease $(n = 4,902)$	CES-D scores median (IQR)	Model 1 standardized mean adjusted difference (95% CI) in depressive symptoms at baseline	Model 2b standardized mean adjusted difference (95% CI) in depressive symptoms at baseline

CES-D scores were square root-transformed and z-standardized; Respiratory disease= chronic rhinosinusitis, obstructive airway disease, or lung cancer; Model 1 – adjusted for age and sex; Model 2 – adjusted for age, sex, BMI, smoking, chronic rhinosinusitis, GERD, obstructive airway disease, lung cancer, diabetes, and heart failure; Model 2b – adjusted for age, sex, BMI, smoking, GERD, diabetes, and heart failure. 25 participants did not have CES-D score data.

Supplemental Table 2: The cross-sectional association between chronic cough and clinically relevant depressive symptoms at baseline (stratified)

Participants with respiratory disease (n=950)	CES-D score ≥ 16	Model 1	Model 2
	(n=165, 17.4%)	OR (95% CI)	OR (95% CI)
No chronic cough (n=680)	121 (17.8%)	Ref.	Ref.
Chronic cough (n=270)	44 (16.3%)	0.89 (0.60 – 1.31)	0.78 (0.52 – 1.17)
Participants without respiratory disease (n = 4,902)	CES-D score ≥ 16	Model 1	Model 2b
	(n=590, 12.0%)	OR (95% CI)	OR (95% CI)
No chronic cough (n=4,448)	515 (11.6%)	Ref.	Ref.
Chronic cough (n=454)	75 (16.5%)	1.49 (1.14 – 1.96)	1.35 (1.02 – 1.77)

Model 1 – adjusted for age and sex; Model 2 – adjusted for age, sex, BMI, smoking, chronic rhinosinusitis, GERD, obstructive airway disease, lung cancer, diabetes, and heart failure; Model 2b – adjusted for age, sex, BMI, smoking, GERD, diabetes, and heart failure. 25 participants did not have CES-D score data.