

Supplementary Table 6: Average annual change* in lung function and symptoms domain of health status related to step count, sedentary time and moderate-to-vigorous physical activity (MVPA) at baseline (multivariable linear regression model†) after excluding extreme values of physical activity variables.

	Step count		MVPA		Sedentary time	
	Per 1000 increase in steps.day ⁻¹ Estimate (95% CI)	p-value	Per 10 minutes.day ⁻¹ increase Estimate (95% CI)	p-value	Per hour.day ⁻¹ increase Estimate (95% CI)	p-value
ΔFEV ₁ (ml.year ⁻¹)	8.3 (1.2 to 15.3)	0.02	6.49 (1.0 to 12.0)	0.02	-2.93 (-18.6 to 12.7)	0.71
ΔFVC (ml.year ⁻¹)	13.3 (2.2 to 24.3)	0.02	6.98 (-2.0 to 15.9)	0.12	-17.94 (-45.6 to 9.7)	0.20
ΔDL _{co} (ml/min/mmHg.year ⁻¹)	0.17 (0.04 to 0.30)	0.01	0.03 (-0.08 to 0.15)	0.58	-0.28 (-0.59 to 0.03)	0.08
ΔSGRQ _{symptoms} score (points.year ⁻¹)	-0.47 (-0.90 to -0.03)	0.03	-0.29 (-0.64 to 0.05)	0.10	0.37 (-0.53 to 1.27)	0.42

MVPA = moderate-to-vigorous physical activity, FEV₁ = forced expiratory volume in 1 second, FVC = forced vital capacity, DL_{co} = diffusion capacity of the lung carbon monoxide, SGRQ = Saint George's respiratory questionnaire. Analyses are based on 103 patients (step count and MVPA) or 102 patients (sedentary time).

* Negative values represent a decline in the outcome measure.

† Every cell is a single multivariable model adjusted for baseline value of the corresponding outcome and (i) age, sex, exacerbation history ($\geq 1 / 0$), BMI, Charlson index, smoking status (current / not current), pack-years and duration of daylight for lung function variables, or (ii) age, sex, exacerbation history ($\geq 1 / 0$), smoking status, FEV₁% predicted, 6MWD and duration of daylight for SGRQ. The full list of potential confounders included: age, sex, education, marital status, work status, baseline smoking status, smoking history expressed as pack-years, medication (including long acting bronchodilators, inhaled corticosteroids and a combined inhaled therapy), diet (including vegetables, meat and fruit intake), Charlson index, BMI, FFM, FFMI, mMRC, COPD exacerbation history, FEV₁ % predicted, hand grip force, 6MWD and duration of daylight. Criteria for keeping them in the final model are detailed in the methods (complete version).