

Supplementary Materials: The role of socioeconomic status in the association of lung function and air pollution– a pooled analysis of three adult ESCAPE cohorts

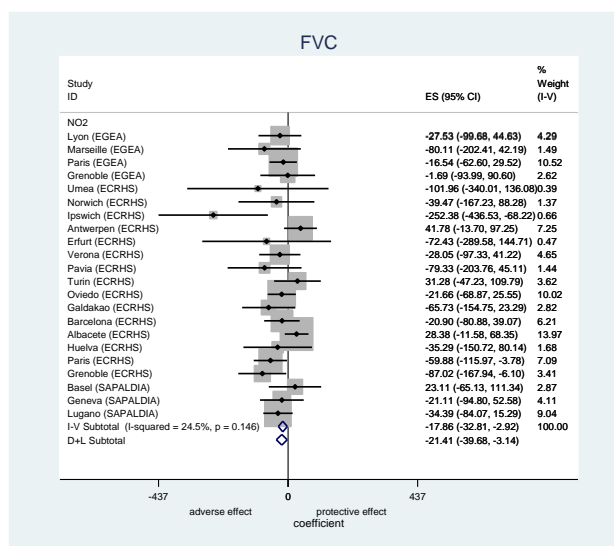


Figure S1. Meta-analysis of the association of NO₂ with FVC in the full sample, by study center and overall Forest plot displaying the study area-specific mixed linear regression model estimates of the association of NO₂ (per 10 µg/m³ increment) with FVC. I-squared: Variation in estimated effects attributable to heterogeneity. I-V Subtotal: Fixed effects model using the inverse variance method, D+L Subtotal: Random effects model using the DerSimonian and Laird method. The mixed linear regression models were adjusted for age, age squared, height, height squared, sex, BMI, BMI squared, smoking status, pack-years, interaction of smoking status and pack-years, pack-years squared, interaction of smoking status and pack-years squared, and education (models M1 + education). Negative estimates indicate lower lung function with increasing exposure. ES: Effect size.

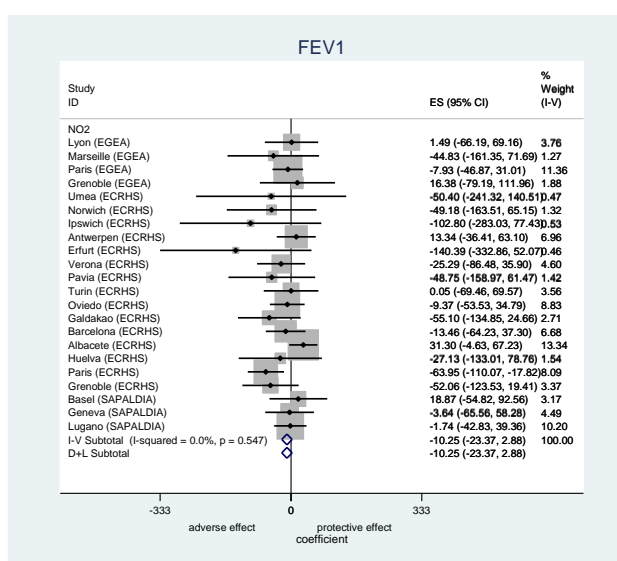


Figure S2. Meta-analysis of the association of NO₂ with FEV1 in the full sample, by study center and overall. Forest plot displaying the study area-specific mixed linear regression model estimates of the association of NO₂ (per 10 µg/m³ increment) with FEV1. I-squared: Variation in estimated effects

attributable to heterogeneity. I-V Subtotal: Fixed effects model using the inverse variance method, D+L Subtotal: Random effects model using the DerSimonian and Laird method. The mixed linear regression models were adjusted for age, age squared, height, height squared, sex, BMI, BMI squared, smoking status, pack-years, interaction of smoking status and pack-years, pack-years squared, interaction of smoking status and pack-years squared, and education (models M1 + education). Negative estimates indicate lower lung function with increasing exposure. ES: Effect size.

Table S1. Sensitivity analyses.

Outcome	Sample	Model	NO₂ (95% CI)	p-value
FVC	Full	Meta-Analysis (fixed)	-17.9 (-32.8; -2.9)	0.019
FVC	Full	Meta-Analysis (random)	-21.4 (-39.7; -3.1)	
FVC	Full	All variables (three-level pooled model) ¹	-16.3 (-31.2; -1.5)	0.031
FVC	Reduced	All variables (three-level pooled model) ²	-19.2 (-34.9; -3.5)	0.017
FEV1	Full	Meta-Analysis (fixed)	-10.3 (-23.4; 2.9)	0.126
FEV1	Full	Meta-Analysis (random)	-10.3 (-23.4; 2.9)	
FEV1	Full	All variables (three-level pooled model) ¹	-12.3 (-24.9; 0.2)	0.054
FEV1	Reduced	All variables (three-level pooled model) ²	-16.3 (-30.2; -2.4)	0.022

n = 6502 (full sample), n = 4766 (reduced sample). For the three-level-models ¹ family and ² neighborhood respectively were considered as additional random effect nested in study area.



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