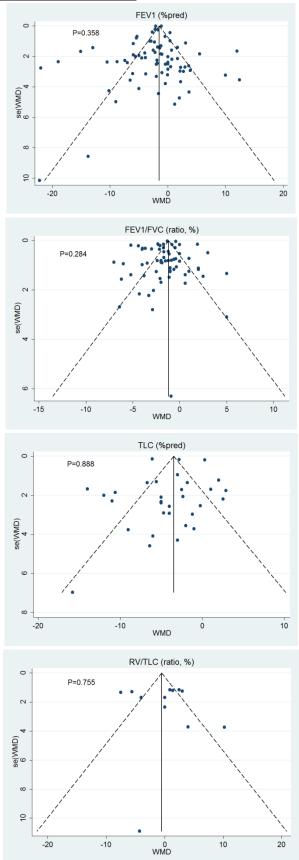
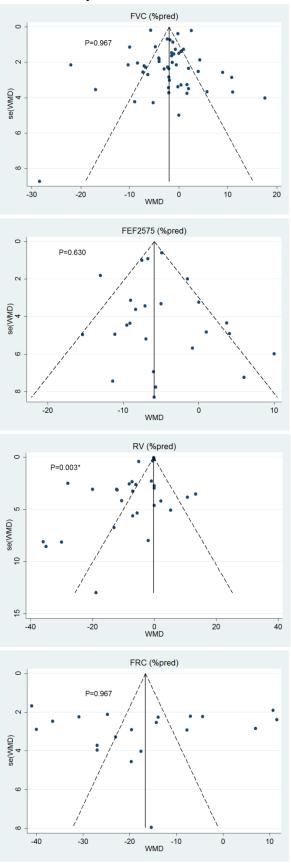
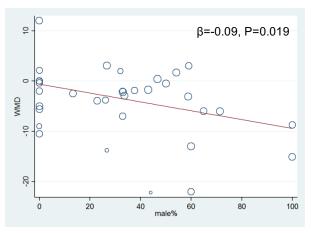
## Supplemental Figure E8 – Funnel plots and Egger's test for small-study effects



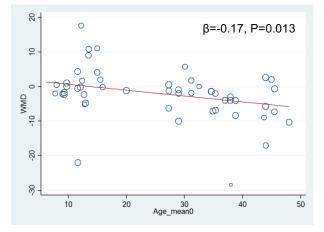


#### Supplemental Figure E9 – Effect modification of obesity on lung function by age and gender

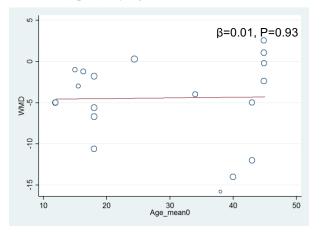
A. FEV<sub>1</sub> (%pred) by gender in adults



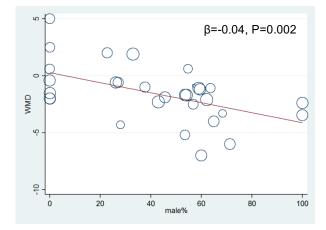
C. FVC (%pred) by age in children and adults



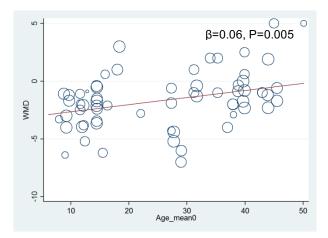
E. TLC (%pred) by age in non-asthmatics



B. FEV<sub>1</sub>/FVC (%) by gender in asthmatics



D. FEV<sub>1</sub>/FVC (%) by age in children and adults



### **ONLINE SUPPLEMENTARY MATERIAL**

**Overweight, obesity, and lung function in children and adults – a meta-analysis** Erick Forno<sup>1\*</sup>, Yueh-Ying Han<sup>1\*</sup>, James Mullen<sup>2</sup>, Juan C. Celedón<sup>1</sup>

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Adults	Control Normal weight	Control Overweight/obese	Asthma Normal weight	Asthma Overweight/obese
FEV <sub>1</sub> (%pred)	105.03 ± 6.64	97.34 ± 6.30	85.36 ± 16.04	82.62 ± 15.61
FVC (%pred)	106.27 ± 9.12	96.83 ± 4.34	97.47 ± 7.44	94.07 ± 8.44
FEV <sub>1</sub> /FVC (%)	83.98 ± 4.60	83.26 ± 3.64	73.88 ± 7.26	72.86 ± 7.57

# Supplementary Table E1 – Spirometric values by age, asthma, and obesity status

Children	Control Normal weight	Control Overweight/obese	Asthma Normal weight	Asthma Overweight/obese
FEV <sub>1</sub> (%pred)	100.23 ± 5.16	99.35 ± 6.97	91.07 ± 4.77	91.94 ± 4.64
FVC (%pred)	102.04 ± 3.43	105.04 ± 12.13	99.71 ± 4.23	100.25 ± 5.42
FEV <sub>1</sub> /FVC (%)	92.27 ± 3.71	89.02 ± 4.68	85.20 ± 6.34	83.32 ± 5.79

Tables show the mean ( $\pm$ SD) reported FEV<sub>1</sub>, FVC, and FEV<sub>1</sub>/FVC for all studies included in the corresponding analyses.

### SUPPLEMENTAL FIGURES – TITLES AND LEGENDS

#### **<u>Supplemental Figure E1</u>** – Obesity and FEV<sub>1</sub> (%pred) by asthma status.

WMD: Weighted mean difference. OV=overweight, OB=obese, OVOB=overweight or obese.

#### **<u>Supplemental Figure E2</u>** – Obesity and FEV<sub>1</sub> (liters) by age group.

WMD: Weighted mean difference. OV=overweight, OB=obese, OVOB=overweight or obese.

<u>Supplemental Figure E3</u> – Obesity and FVC (%pred) by weight group. WMD: Weighted mean difference. OV=overweight, OB=obese, OVOB=overweight or obese.

# <u>Supplemental Figure E4</u> – Obesity and FEF<sub>25.75</sub> (%pred) by age group. WMD: Weighted mean difference. OV=overweight, OB=obese, OVOB=overweight or obese.

# <u>Supplemental Figure E5</u> – Obesity and TLC (%pred) by asthma status. WMD: Weighted mean difference. OV=overweight, OB=obese, OVOB=overweight or obese.

<u>Supplemental Figure E6</u> – Obesity and TLC (%pred) by weight group. WMD: Weighted mean difference. OV=overweight, OB=obese, OVOB=overweight or obese.

<u>Supplemental Figure E7</u> – Obesity and FRC (%pred) by weight group. WMD: Weighted mean difference. OV=overweight, OB=obese.

**Supplemental Figure E8** – Funnel plots and Egger's test for small-study effects.

**Supplemental Figure E9** – Effect modification of obesity on lung function by age and gender.