

Figure S1 Changes in respiratory pathophysiologic indicators (measured at the same clinical visit) associated with a two-point decrease in C-ACT score: stratified by questions answered by the child and the caregiver. Points and bars show mean and 95% confidence intervals for outcome changes associated with a two-point decrease in C-ACT score within the same participants. For $FeNO$ data, the analysis was performed on log-transformed $FeNO$ data; and the result was converted back to un-transformed data for presentation in this figure. R_5 , airway resistance at 5 Hz; R_{20} , airway resistance at 20 Hz; R_5-R_{20} , difference between R_5 and R_{20} ; X_5 , airway reactance at 5 Hz; F_{res} , resonant frequency; FEF_{25-75} , forced expiratory flow during 25% to 75% of FVC; FEV_1 , forced expiratory volume during the 1st second; FVC, forced vital capacity; $FeNO$, fractional exhaled nitric oxide; C-ACT, Childhood Asthma Control Test.

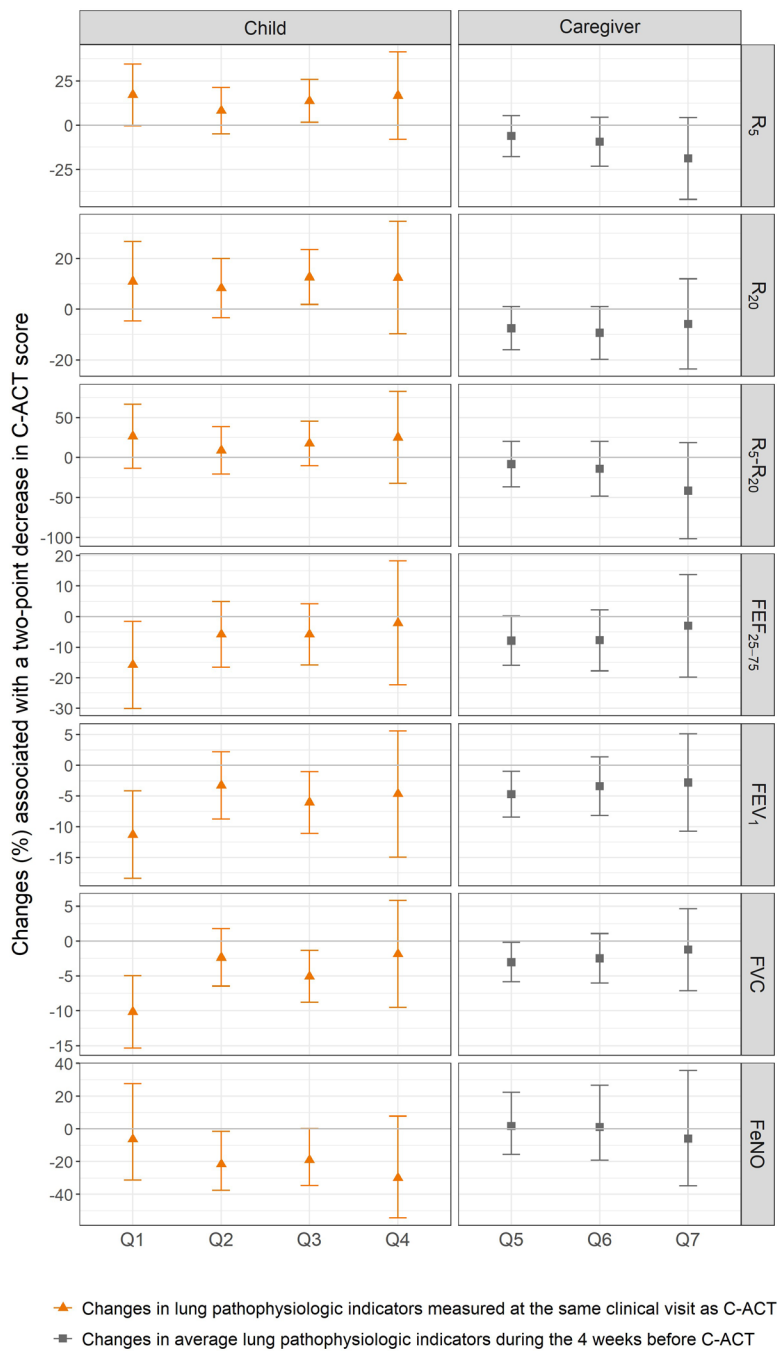


Figure S2 Changes in respiratory pathophysiologic indicators associated with a two-point decrease in C-ACT score on individual questions. For questions answered by the child (Q1 to Q4), association with lung pathophysiologic indicators measured at the same clinical visit as C-ACT was reported. For questions answered by the caregiver (Q5 to Q7), association with lung pathophysiologic indicators averaged during the previous 4 weeks before C-ACT was reported. Points and bars show mean and 95% confidence intervals for outcome changes associated with a two-point decrease in C-ACT score within the same participants. Q1 to Q7 indicate the first question to the seventh question of the C-ACT. R_5 , airway resistance at 5 Hz; R_{20} , airway resistance at 20 Hz; R_5-R_{20} , difference between R_5 and R_{20} ; FEF_{25-75} , forced expiratory flow during 25% to 75% of FVC; FEV_1 , forced expiratory volume during the 1st second; FVC, forced vital capacity; FeNO, fractional exhaled nitric oxide; C-ACT, Childhood Asthma Control Test.

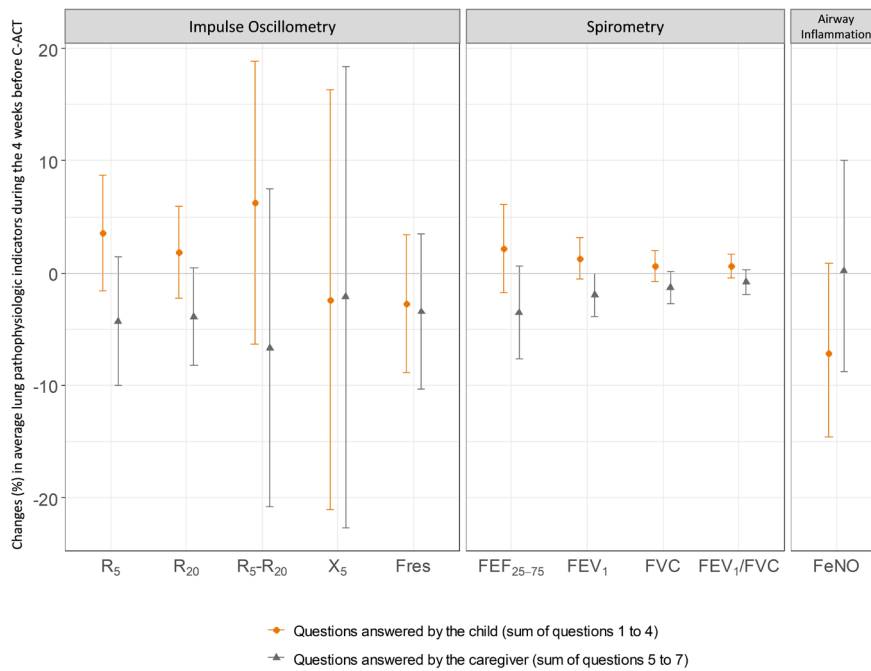


Figure S3 Changes in respiratory pathophysiologic indicators (averaged during the previous 4 weeks) associated with a two-point decrease in C-ACT score: stratified by questions answered by the child and the caregiver. Points and bars show mean and 95% confidence intervals for outcome changes associated with a two-point decrease in C-ACT score within the same participants. For $FeNO$ data, the analysis was performed on log-transformed $FeNO$ data; and the result was converted back to un-transformed data for presentation in this figure. R_5 , airway resistance at 5 Hz; R_{20} , airway resistance at 20 Hz; R_5-R_{20} , difference between R_5 and R_{20} ; X_5 , airway reactance at 5 Hz; F_{res} , resonant frequency; FEF_{25-75} , forced expiratory flow during 25% to 75% of FVC; FEV_1 , forced expiratory volume during the 1st second; FVC, forced vital capacity; $FeNO$, fractional exhaled nitric oxide; C-ACT, Childhood Asthma Control Test.