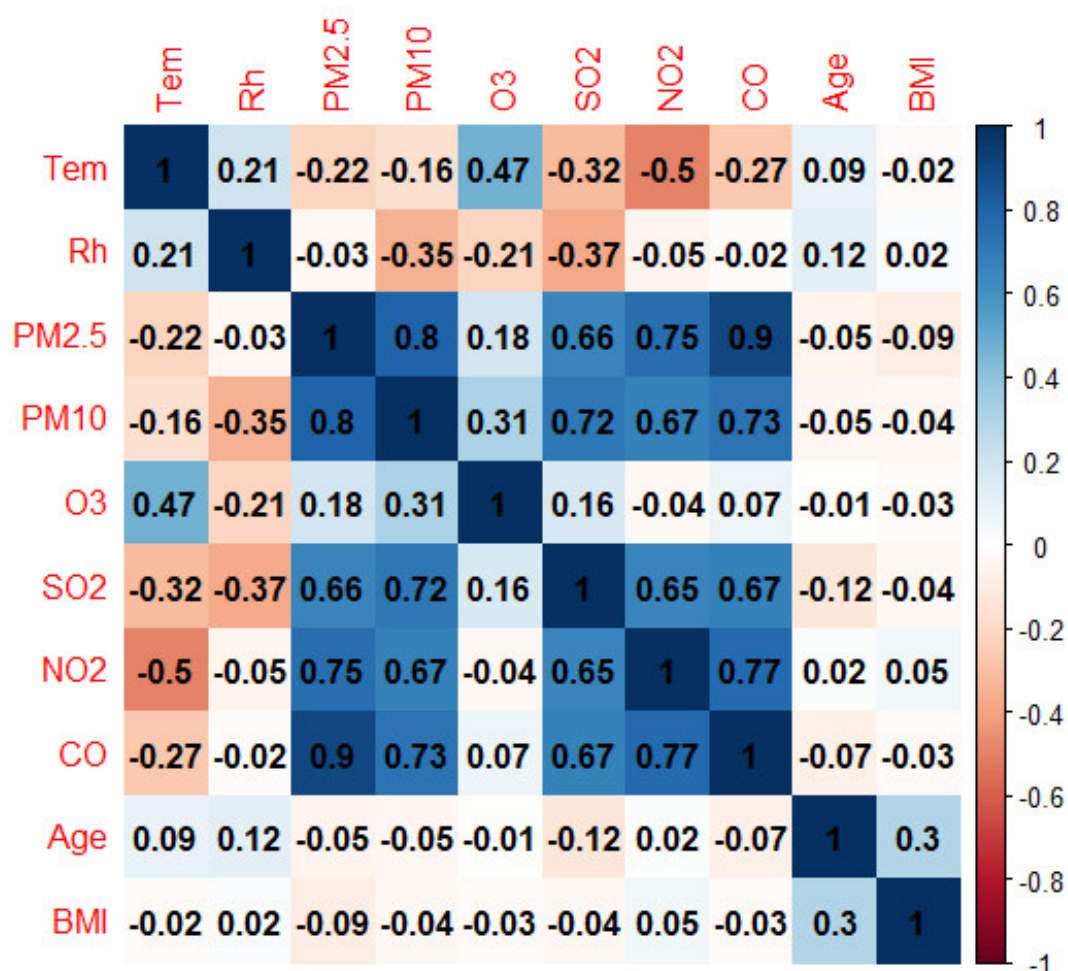
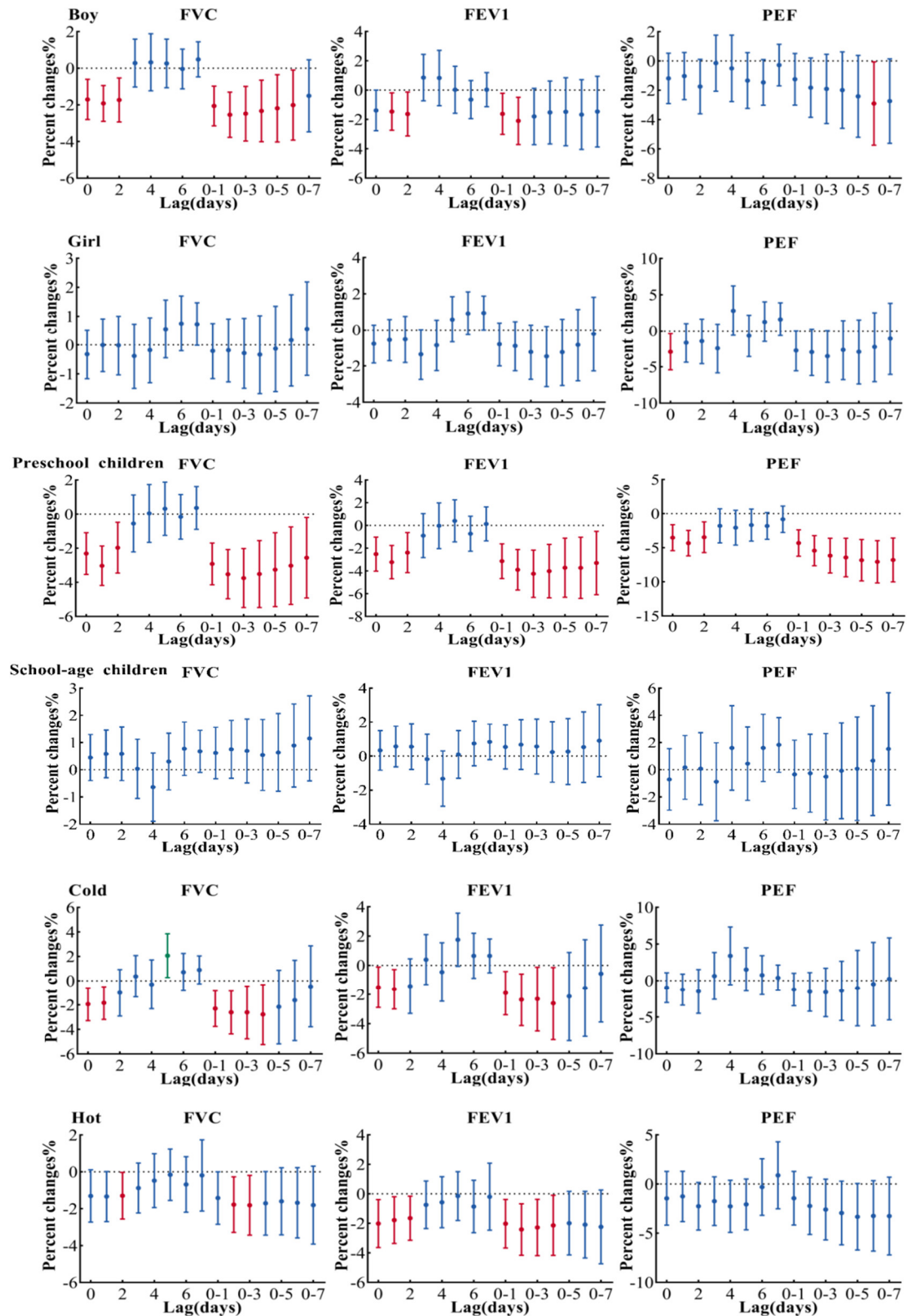


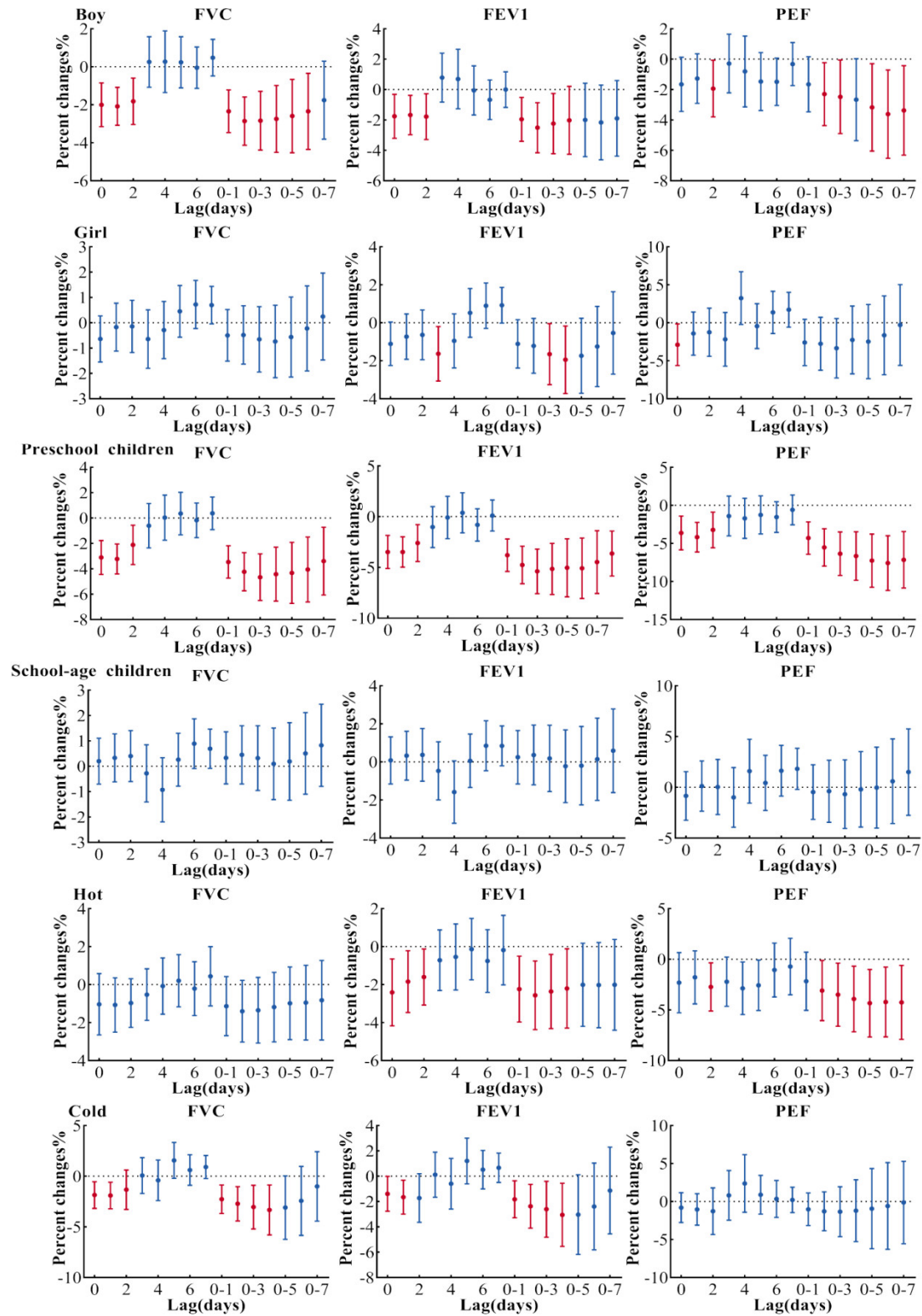
## Supplementary Material



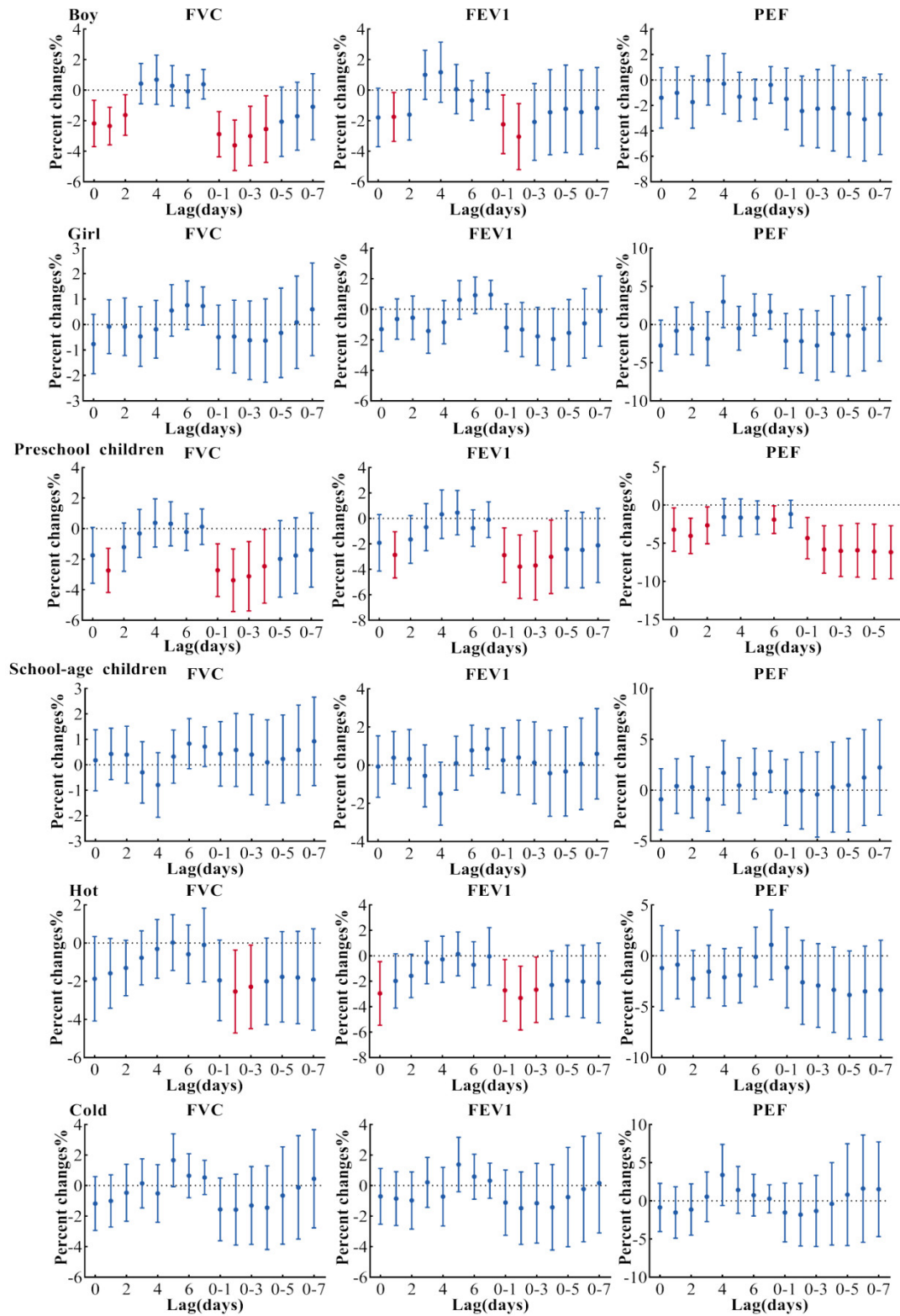
**Figure. S1.** Pearson's correlation coefficients between factors affecting lung function. Tem, Daily temperature; Rh, Relative humidity; PM<sub>2.5</sub>, fine particulate matter with aerodynamic diameter  $\leq 2.5 \mu\text{m}$ ; PM<sub>10</sub>, particulate matter with aerodynamic diameter  $\leq 10 \mu\text{m}$ ; O<sub>3</sub>, ozone; SO<sub>2</sub>, sulfur dioxide; NO<sub>2</sub>, nitrogen dioxide; CO, carbon monoxide.



**Figure. S2.** Association between each lung function index and PM<sub>2.5</sub> in the stratified analysis of PM<sub>2.5</sub> single pollution model. Preschool children : Age < 6 years old; School-age children: age ≥ 6 years old. Cold season refers to the period of Nov to Mar; Hot season means May to Sept. Estimates are adjusted for questionnaire information, relative humidity, temperature, age, BMI, sex, holiday, day of week and times of the measurement. FVC, forced vital capacity; FEV1, forced expiratory volume in 1 second; PEF, peak expiratory flow.



**Figure. S3.** Association between each lung function index and PM<sub>2.5</sub> in a stratified analysis of a two-pollution model (adjusted PM<sub>2.5</sub>+O<sub>3</sub>). Preschool children: Age < 6 years old; School-age children: age ≥ 6 years old. Cold season refers to the period of Nov to Mar; Hot season means May to Sept. Estimates are adjusted for questionnaire information, relative humidity, temperature, age, BMI, sex, holiday, day of week and times of the measurement. FVC, forced vital capacity; FEV1, forced expiratory volume in 1 second; PEF, peak expiratory flow.



**Figure. S4.** Association between each lung function index and PM<sub>2.5</sub> in a stratified analysis of a two-pollution model (adjusted PM<sub>2.5</sub>+SO<sub>2</sub>). Preschool children: Age < 6 years old; School-age children: age ≥ 6 years old. Cold season refers to the period of Nov to Mar; Hot season means May to Sept. Estimates are adjusted for questionnaire information, relative humidity, temperature, age, BMI, sex, holiday, day of week and times of the measurement. FVC, forced vital capacity; FEV1, forced expiratory volume in 1 second; PEF, peak expiratory flow.

# Questionnaire

## Basic demographic information

1.Name:\_\_\_\_\_

2.Gender: ☐Boy ☐Girl

3.Age:\_\_\_\_\_

4.Date of birth:\_\_\_\_\_

5.Weight:\_\_\_\_\_kg

6.High:\_\_\_\_\_cm

7.Date of visit:\_\_\_\_\_

## Asthma related information

1.Does your child have eczema/ringworm, or a doctor-diagnosed atopic dermatitis?

☐Yes ☐No

2.Does your child have frequently nasal congestion, itching, runny nose, sneezing, or a doctor-diagnosed allergic rhinitis?

☐Yes ☐No

3.Does your child have an established food or drug allergy?

☐Yes ☐No

4.Dose the child's mother had any of the following allergic diseases?

☐Atopic dermatitis or urticaria ☐Allergic rhinitis ☐Asthma ☐No

5.Dose the child's father had any of the following allergic diseases?

☐Atopic dermatitis or urticaria ☐Allergic rhinitis ☐Asthma ☐No

6.Dose anyone frequently smoked in places where your child often had activities or rest? The frequency is:

☐No   ☐ < 1 unit/day   ☐ 1~5 unit/day   ☐ > 5 unit/day

7.Dose any smoker come into contact with your child (regardless of where the smoker was smoking)? frequency is

☐No   ☐ < 1 h/day   ☐ 1~4 h/day   ☐ 4~8 h/day   ☐ > 8 h/day