Appendix: Questionnaire items for the adjunct study

1. Questionnaire for background

Which diseases have you have been diagnosed with over the course of your life?

Check all that apply.

- □ asthma
- □ allergic rhinitis / pollinosis
- □ chronic sinusitis
- □ chronic otitis media
- □ atopic dermatitis
- □ drug allergy
- □ urticaria
- □ contact dermatitis
- □ sick building syndrome
- □ chemical sensitivity

- □ other allergic diseases

For those who have been diagnosed with asthma, please check all boxes that apply:

- □ had asthma symptoms within 2 years
- □ currently regularly visit a clinic
- □ currently regularly take medications
- □ currently regularly inhale steroids
On a typical day, how often are you exposed to sunlight for more than 15 minutes from 9 am to 3 pm? Please include the time spent exposed to sunlight under trees or under light clouds.

◎ More than 5 days a week
◎ 3-4 days a week
◎ 1-2 days a week
◎ rarely

How often, for leisure purposes only, are you exposed to sunlight for more than 15 minutes from 9 am to 3 pm? Please include the time spent exposed to sunlight under trees or under light clouds.

◎ almost weekly
◎ 2-3 times a month
◎ once a month
◎ rarely
35

36 On a typical day, do you protect your hands and neck from UV rays?

37

38 ◎ Never expose bare skin under direct sunlight, even in the winter

39 ◎ Often block UV rays with cream or sunshades in seasons with strong UV rays

40 ◎ Seldom protect against UV rays

41

42

43 Please check one that applies regarding your own (i.e., the mother’s) skin reaction to sun exposure

44 ◎ constantly red, without darkening of skin

45 ◎ constantly red, with some darkening of skin

46 ◎ occasionally reddens, always with darkening of skin

47 ◎ never reddens, but skin always darkens

48 ◎ skin is very dark

50

51 The following question is to be answered by the child’s biological father.
Please check any of the following diagnoses he has received.

- □ asthma
- □ allergic rhinitis / pollinosis
- □ allergic conjunctivitis
- □ chronic sinusitis
- □ chronic otitis media
- □ urticaria
- □ atopic dermatitis
- □ drug allergy
- □ contact dermatitis
- □ food allergy
- □ sick building syndrome
- □ chemical sensitivity
- □ other allergic diseases or otolaryngology diseases

Please indicate where, in relation to major roads (e.g., expressways, national highways, prefectural roads, city roads), the child lives for the first year of life.

- ◎ within 30 m from a major road
- ◎ 30-50 m from a major road
- ◎ more than 50 m away from a major road
2. Questionnaire issued on Asian dust days and on control days during pregnancy

How long did you spend outside today?

- ◎ less than 10 minutes
- ◎ less than 1 hour
- ◎ less than 3 hours
- ◎ more than 3 hours

Were you wearing a mask then?

- ◎ yes
- ◎ no

Did you open windows at home today?

- ◎ no
- ◎ yes (sometimes)

Did you use an air purifier today?
Did you hang clothes to dry outside today?

Did you air out your futon outside today?

Over the course of the week, how often were you exposed to sunlight for more than 15 minutes during the period from 9 am to 3 pm? Please include the time spent exposed to sunlight under trees or under light clouds.

* Choose ‘already answered’ if you already answered this question within a week.

* Count only instances in which the exposed skin surface was equivalent to an area of more than two adult palms.
* Do not include skin covered by UV or foundation cream, or through windows/clothes.

◎ More than 5 days a week

◎ 3-4 days a week

◎ 1-2 days a week

◎ Rarely

◎ Already answered

Continue to Allergy Control Score™
Child's birthday: 20_ _/ _ _ / _ _

Child's sex: male / female

Check all boxes that apply regarding your thoughts on “baby sunbathing / UV protection.”

- [ ] Not conscious of infant sunbathing / UV protection
- [ ] Infants should be exposed to UV rays as little as possible
- [ ] Infants should sunbathe only through glass (e.g., windows)
- [ ] Sunbathing by infants should be for a limited duration on comfortable days
- [ ] It is important for infants to be exposed to weak sunlight a few times a week
- [ ] Infants should sunbathe to the extent that they get a tan
4. Questionnaire issued on Asian dust days and on control days after childbirth

How long was your child outside today?

◎ fewer than 10 minutes

◎ less than 1 hour

◎ fewer than 3 hours

◎ more than 3 hours

Did you open windows at home today?

◎ no

◎ yes (sometimes)

Did you use an air purifier today?

◎ yes

◎ no

Did you hang clothes to dry outside today?

◎ yes

◎ no
Did you hang your futon outside today?

- [ ] yes

- [ ] no/hung out with covers
5. Questionnaire at 3 months of age

ISAAC Questionnaire

Has a doctor diagnosed your child with asthma or asthmatic bronchitis?

◎ Yes

◎ No

Within the last 3 months, has your child had any significant issues lasting for at least 3 consecutive days involving lung symptoms affecting the lower airways (specifically, any symptom that severely affected the child’s breathing, such as noisy breathing (wheezing or whistling sounds), shortness of breath, or persistent cough severely affecting sleep or the well-being of the child)?

◎ No

◎ Yes (check any box that applies)

☐ visited a clinic

☐ was hospitalized

Please indicate the frequency of child sunbathing over the course of a month (i.e., staying outside under light sunshine for several minutes).
* Do not include the time exposed through glass (e.g., windows).

* Excluding areas in which UV cream is used, please include exposure time for surfaces that correspond to an area of two adult palms.

* Include times spent in the sun for several minutes, even if sunbathing was not the intention.

◎ almost every day
◎ 3-4 times a week
◎ once or twice a week
◎ did not sunbathe
6. Questionnaire issued every 6 months after childbirth

ISAAC questionnaire

Has a doctor diagnosed your child with asthma or asthmatic bronchitis?

◎ Yes

◎ No

Check any of diseases below which the child was diagnosed with.

□ allergic rhinitis or pollinosis

□ atopic dermatitis

□ food allergy

Choose the frequency the child spent outside for more than 10 minutes during the period from 9 am to 3 pm in the last month.

◎ almost every day

◎ 3-4 times a week

◎ 1-2 times a week
seldom