**eTable 1.** *Classification of asthma and asthma severity based on symptom frequency and reported inhaled steroid use.* Relevant questions from the screening questionnaire are shown.

I. A child will be considered to have **probable asthma** (of any severity) if any of the following are true:

1. three or more of the six non-exercise related symptoms (i.e., questions 3, 4, 5, 6, 9, and 10) were reported (at any level of frequency greater than "never"):

Q3. In the past 12 months, how often, on average has your child seemed congested in the chest or coughed up phlegm (mucus) when he/she did not have a cold or the flu?

Q4. In the past 12 months, has your child had wheezing or whistling in the chest when he/she had a cold or the flu?

Q5. In the past 12 months, how often, on average has your child had wheezing or whistling in the chest when he/she did not have a cold or the flu?

Q6. In the past 12 months, has your child’s wheezing or whistling in the chest ever been severe enough to limit your child’s speech to only one or two words at a time between breaths?

Q9. In the past 12 months, how often, on average did your child wake up from sleep due to wheezing, dry cough, tightness of the chest, or shortness of breath?

Q10. In the past 12 months, how often, how many days (or part of days) of school has your child missed because of wheezing or asthma?

1. either exercise symptom (i.e., questions 7 and 8) was reported with a frequency of three times or more in the past year:

Q7. In the past 12 months, how often, on average has your sounded wheezy during or after exercise, running, or playing hard?

Q8. In the past 12 months, how often, on average has your child coughed during or after exercise, running, or playing hard?

1. there is a diagnosis of asthma (i.e., yes on question 13) with any symptoms (questions 3 through 10) or doctor-prescribed medication use (i.e., yes on questions 14 and 15):

Q13. Has any doctor, nurse, or other health professional ever said that your child has asthma, reactive airway disease, asthmatic bronchitis or wheezy bronchitis?

Q14. In the past 12 months, has your child taken any medications, inhalers (puffers), or nebulizers (breathing treatments) prescribed by a doctor for any of the conditions just mentioned?

Q15. Does your child take any doctor-prescribed medications for a breathing problem every day, even when he/she is not having trouble breathing?

II. A child will be considered to have **probable moderate to severe asthma** if, first, the child meets the diagnostic criteria for asthma above, and, second, any of the following are true:

1. any daytime symptom (i.e., questions 3 through 9) is reported as being present "every day"
2. sleep disturbance (question 10) is reported "more than *two times* per week" or "most nights"
3. daily use of doctor-prescribed medication use (i.e., yes on questions 14 and 15)

III. A child will be considered to have **probable mild persistent asthma** [of any severity] if, first, the child meets the diagnostic criteria for asthma above, second, the criteria for probable or known moderate to severe asthma are **not** met, and, thirdly, any of the following are true:

1. one or more daytime symptoms are reported as being present "more than 2 times per week"
2. sleep disturbance reported is reported “more than *one time* per month”
3. daily use of doctor-prescribed medication use (i.e., yes on questions 14 and 15)

IV. A child will be considered to have **probable mild intermittent asthma** if, first, the child meets the diagnostic criteria for asthma above, and, second, neither the criteria for probable or known moderate to severe asthma nor the criteria for probable or known mild persistent asthma are met.

**eTable 2.** *Respiratory symptom score.* Total score was the sum of all reported components.

 Mild Moderate Severe

Fever: (1)

Cough: (1) (2) (3)

Runny nose: (1) (2)

Stuffy nose: (1) (2)

Sore throat: (1)

Duration of illness >4 days (1)

Wheezing: (5)

Difficulty Breathing: (5)

Breathing fast: (5)

NOT going to school OR

NOT doing usual activities: (5)

**Table 3.** *Initial surveillance period nasal biomarker levels.*

mRNA\* N (total) N (% detectable)\*\* Median IQR (Min-Max)

CXCL8 123 96 (78%) 5.28 (2.9-10.6) (0-94.35)

CXCL10 123 96 (78%) 0.005 (0-0.019) (0-3.84)

IRF7 123 96 (78%) 0.05 (0.02-0.11) (0-0.58)

RIG-I 123 96 (78%) 0.01 (0-0.03) (0-60.97)

MDA5 123 96 (78%) 0.01 (0-0.03) (0-1.39)

TLR3 123 56 (45.5%) (0-1)

IFNλ1 123 25 (20.3%) (0-1)

\*normalized to GAPDH

\*\*indicates number of samples with detectable signal at cycle number ≤35

Protein (pg/ml)\* N (total) Median IQR (Min-Max)

CXCL8 136 128.05 (62.2-359.4) (5.4-3763.5)

CXCL10 134 478.05 (264.3-672.9) (21.6-3176.2)

IL-4 139 15.3 (3.3-71.6) (0-428.9)

IL-13 133 0.00 (0-41.9) (0-254.6)

sICAM-1 135 366.1 (104.7-802.1) (0-3341.7)

CCL2 137 74.7 (20.4-145.8) (0-452)

CCL4 135 459 (32.1-1683.9) (0-32230)

CCL5 137 4.4 (0-19.8) (0-121.8)

CCL20 140 390 (76.9-810.8) (0-8493.3)

CCL24 139 5.37 (0-20.5) (0-73.3)

\*lower limits of detection: CXCL8, 1.2 pg/ml; CXCL10, 0.3 pg/ml; IL-4, 1.5 pg/ml; IL-13, 0.1 pg/ml; sICAM-1, 2.72 pg/ml; CCL2, 0.6 pg/ml; CCL4, 4.7 pg/ml; CCL5, 0.2 pg/ml; CCL20, 2.0 pg/ml; CCL24, 0.34 pg/ml

Abbreviations: CCL, C-C motif chemokine ligand; CXCL, C-X-C motif chemokine ligand; GAPDH, glyceraldehyde 3-phosphate dehydrogenase; IFN. interferon; IL, interleukin; IRF7, interferon regulatory factor-7; MDA5, melanoma differentiation-associated protein 5; RIG-I, retinoic-acid-inducible protein 1; sICAM, soluble intercellular adhesion molecule; TLR3, Toll-like receptor 3.