**Twin Research and Human Genetics**

The STOPPA Twin Study Explains the Exhaled Nitric Oxide and Asthma Link By Genetics and Sensitization

Björn Nordlund, Cecilia Lundholm, Vilhelmina Ullemar, Marianne van Hage, Anne K. Örtqvist, and Catarina Almqvist

|  |
| --- |
| Supplementary Table 1. Backgrounds factors and characteristics of the study population compared with children not in the study population due to missing data regarding FENO and/or current asthma, n=752.  |
|  | Study population | Missing data FENO/asthma | p-value |
|  | n | % | n | % |  |
| Age, total n=752 |  |  |  |  |  |
|  Mean (SD) |  | 12.6 (1.5) |  | 12.2 (1.3) | 0.027 |
| Sex, total n=752 |  |  |  |  |  |
|  Male | 365 | 54 | 33 | 46 |  |
|  Female | 316 | 46 | 38 | 54 | 0.25 |
| Family history of atopy\*, total n=630 |  |  |  |  |  |
|  No | 217 | 38 | 35 | 59 |  |
|  Yes | 354 | 62 | 24 | 41 | 0.001 |
| Tobacco smoke¶, total n=742 |  |  |  |  |  |
|  No | 519 | 77 | 49 | 71 |  |
|  Yes | 154 | 23 | 20 | 29 | 0.25 |
| Zygosity, total n=752 |  |  |  |  |  |
|  MZ | 364 | 53 | 46 | 65 |  |
|  DZ | 317 | 47 | 25 | 35 | 0.07 |
| Phadiatop, total n=699 |  |  |  |  |  |
|  Negative | 383 | 60 | 39 | 61 |  |
|  Positive | 252 | 40 | 25 | 39 | 0.92 |
| Current asthma, total n=725 |  |  |  |  |  |
|  No | 550 | 81 | 35 | 80 |  |
|  Yes | 131 | 19 | 9 | 20 | 0.84 |
| Asthma medication, total n=633 |  |  |  |  |  |
|  No | 470 | 83 | 53 | 83 |  |
|  Yes | 99 | 17 | 11 | 17 | 0.97 |
| ICS ¶¶ - regularly, total n=614 |  |  |  |  |  |
|  No | 516 | 92 | 52 | 93 |  |
|  Yes | 42 | 8 | 4 | 7 | 0.92 |

\*Family history of atopic disease: Parental reported doctor’s diagnosis of asthma, eczema or hay fever to pollen or furred animal

¶ Parental smoking: Mother and/or father was a current smoker

¶¶ Regular use of inhaled corticosteroids (ICS) during the last 12 months§ p-value for test of difference between the study population and children not in the study population; χ2-test for categorical variables and t-test for quantitative variables.

Positive Phadiatop = IgE ≥0.35 kUA/l



Supplementary Figure 1