Supplement Table 3 Association of the grandmother's and the mother's smoking during pregnancy with asthma development in the grandchild: results from complete case analyses

| Outcome | Exposure | n, total | n, cases | Crude RR(95\% CI) | Adj RR(95\% CI) ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Asthma at 36 months | Mother and grand maternal smoking during pregnancy |  |  |  |  |
| ( $\mathrm{N}=53,169$ ) | Neither | 32,701 | 1,735 | 1 | 1 |
|  | Only grandmother | 10,411 | 686 | 1.24 (1.14, 1.36) | 1.16 (1.06, 1.27) |
|  | Only mother | 1,728 | 106 | 1.16 (0.95, 1.40) | 1.08 (0.88, 1.32) |
|  | Both grandmother and mother | 1,685 | 117 | 1.31 (1.09, 1.57) | 1.14 (0.94, 1.38) |
| Asthma at 7 years | Mother and grand maternal smoking during pregnancy |  |  |  |  |
| ( $\mathrm{N}=25,394$ ) | Neither | 15,426 | 708 | 1 | 1 |
|  | Only grandmother | 4,973 | 299 | 1.31 (1.15, 1.50) | 1.22 (1.06, 1.40) |
|  | Only mother | 858 | 49 | 1.24 (0.94, 1.65) | 1.10 (0.82, 1.49) |
|  | Both grandmother and mother | 775 | 49 | 1.38 (1.04, 1.83) | 1.29 (0.96, 1.73) |
| Use of asthma medications at 7 | Mother and grand maternal smoking during pregnancy |  |  |  |  |
| years based on | Neither | 26,600 | 1,157 | , | 1 |
| prescription | Only grandmother | 9,172 | 483 | 1.21 (1.09, 1.34) | 1.13 (1.02, 1.26) |
| registry | Only mother | 2,180 | 122 | 1.29 (1.07, 1.54) | 1.13 (0.94, 1.37) |
| $(\mathrm{N}=45,607)$ | Both grandmother and mother | 2,181 | 143 | 1.51 (1.27, 1.79) | 1.26 (1.05, 1.52) |

Adjusted for maternal age, maternal parity, maternal education, maternal salary, maternal pre-pregnancy BMI, and maternal asthma.
There were a total of 6,097 children in the analysis of asthma at 36 months, 2,884 children in the analysis of asthma at 7 years and 5,474 children in the analysis of use of asthma medication in the prescription database with missing information on the combined exposure of both grandmother and mother smoking during pregnancy. The amount of individuals with missing information on one or more covariates in the multivariable analyses was approximately $15 \%$.

