

Table 2. Cox proportional hazard model analysis for risk of asthma

| | No. of asthma | PY | ID | Univariate | p value | Multivariate | p value |
|------------------|------------------|--------|------|------------------|---------|------------------|---------|
| | | | | HR (95% C.I.) | | HR (95% C.I.) | |
| Group | | | | | | | |
| Non-constipation | 3740 | 662847 | 5.6 | 1 | | 1 | |
| Constipation | 6622 | 610672 | 10.8 | 1.88 (1.81-1.96) | <0.001 | 1.91 (1.84-1.99) | <0.001 |
| Age | | | | | | | |
| <20 | 2250 | 249050 | 9.0 | 1 | | 1 | |
| 20-39 | 1551 | 410253 | 3.8 | 0.40 (0.37-0.42) | <0.001 | 0.37 (0.35-0.40) | <0.001 |
| 40-64 | 2721 | 377274 | 7.2 | 0.75 (0.71-0.80) | <0.001 | 0.68 (0.64-0.72) | <0.001 |
| ≥65 | 3840 | 236941 | 16.2 | 1.60 (1.52-1.69) | <0.001 | 1.31 (1.23-1.39) | <0.001 |
| Gender | | | | | | | |
| Female | 6252 | 903955 | 6.9 | 1 | | 1 | |
| Male | 4110 | 369563 | 11.1 | 1.57 (1.51-1.63) | <0.001 | 1.17 (1.12-1.22) | <0.001 |
| Hypertension | 2243 | 145764 | 15.4 | 1.98 (1.89-2.07) | <0.001 | 1.22 (1.15-1.29) | <0.001 |

| | | | | | | | |
|------------------------|------|--------|------|------------------|--------|------------------|--------|
| Hyperlipidemia | 517 | 43009 | 12.0 | 1.37 (1.25-1.50) | <0.001 | 0.91 (0.82-0.99) | 0.037 |
| Chronic liver disease | 334 | 26518 | 12.6 | 1.50 (1.35-1.68) | <0.001 | 1.21 (1.09-1.36) | <0.001 |
| Chronic kidney disease | 79 | 5131 | 15.4 | 1.65 (1.32-2.06) | <0.001 | 1.06 (0.85-1.32) | 0.624 |
| Diabetes | 836 | 61790 | 13.5 | 1.57 (1.46-1.69) | <0.001 | 0.96 (0.89-1.03) | 0.273 |
| COPD | 568 | 12955 | 43.8 | 5.16 (4.74-5.61) | <0.001 | 3.21 (2.94-3.50) | <0.001 |
| Autoimmune disease | 104 | 7533 | 13.8 | 1.63 (1.35-1.98) | <0.001 | 1.42 (1.17-1.73) | <0.001 |
| Corticosteroids | 1876 | 250654 | 7.5 | 0.93 (0.89-0.98) | 0.007 | 0.80 (0.76-0.84) | <0.001 |
| Antihistamines | 6212 | 915347 | 6.8 | 0.65 (0.62-0.68) | <0.001 | 0.61 (0.59-0.64) | <0.001 |

ID: Incidence density (per 1000 person-years).

PY: person-years.

COPD: Chronic obstructive pulmonary disease.