**Table S3**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Cases** | **Age-adjusted HR**  **(95% CI)** | **Cases** | **Multivariate-adjusted HR1 (95% CI)** | **Cases** | **Latency multivariate-adjusted HR2 (95% CI)** |
| All-Cancer - Never Smokers |  |  |  |  |  |  |
| 0 – 113.7 | 249 | 1.0 (Ref) | 239 | 1.0 (Ref) | 212 | 1.0 (Ref) |
| 113.8 – 152.9 | 197 | 0.98 (0.82, 1.18) | 193 | 1.02 (0.84, 1.24) | 163 | 0.96 (0.78, 1.18) |
| 153.0 – 201.1 | 186 | 1.03 (0.84, 1.25) | 176 | 1.03 (0.84, 1.26) | 140 | 0.91 (0.73, 1.13) |
| 201.2 – 535.3 | 168 | 1.01 (0.82, 1.24) | 165 | 1.03 (0.83, 1.27) | 140 | 0.95 (0.76, 1.20) |
| *P for trend* |  | 0.80 |  | 0.78 |  | 0.55 |
| All-Cancer - Former Smokers |  |  |  |  |  |  |
| 0 – 113.7 | 336 | 1.0 (Ref) | 324 | 1.0 (Ref) | 275 | 1.0 (Ref) |
| 113.8 – 152.9 | 208 | 0.91 (0.76, 1.08) | 202 | 0.93 (0.78, 1.12) | 180 | 0.97 (0.80, 1.18) |
| 153.0 – 201.1 | 200 | 0.98 (0.82, 1.18) | 192 | 0.98 (0.81, 1.19) | 174 | 1.04 (0.85, 1.27) |
| 201.2 – 535.3 | 156 | 0.85 (0.70, 1.04) | 152 | 0.84 (0.68, 1.04) | 133 | 0.85 (0.68, 1.07) |
| *P for trend* |  | 0.21 |  | 0.18 |  | 0.32 |
| All-Cancer - Current Smokers |  |  |  |  |  |  |
| 0 – 113.7 | 177 | 1.0 (Ref) | 166 | 1.0 (Ref) | 138 | 1.0 (Ref) |
| 113.8 – 152.9 | 95 | 0.79† (0.62, 1.02) | 93 | 0.79 (0.61, 1.02) | 81 | 0.83 (0.63, 1.10) |
| 153.0 – 201.1 | 101 | 0.80† (0.62, 1.03) | 98 | 0.80† (0.61, 1.03) | 84 | 0.82 (0.62, 1.09) |
| 201.2 – 535.3 | 112 | 0.72\* (0.56, 0.93) | 108 | 0.72\* (0.55, 0.94) | 99 | 0.79 (0.60, 1.05) |
| *P for trend* |  | 0.02 |  | 0.02 |  | 0.10 |
| Lung Cancer - Never Smokers |  |  |  |  |  |  |
| 0 – 113.7 | 7 | 1.0 (Ref) | 7 | 1.0 (Ref) | 7 | 1.0 (Ref) |
| 113.8 – 152.9 | 5 | 1.29 (0.40, 4.13) | 5 | 1.23 (0.38, 3.99) | 5 | 1.20 (0.37, 3.93) |
| 153.0 – 201.1 | 4 | 1.32 (0.37, 4.71) | 3 | 0.90 (0.22, 3.66) | 2 | 0.57 (0.11, 2.89) |
| 201.2 – 535.3 | 1 | 0.39 (0.05, 3.28) | 1 | 0.34 (0.04, 2.97) | 1 | 0.34 (0.04, 3.04) |
| P for trend |  | 0.63 |  | 0.4 |  | 0.29 |
| Lung Cancer - Former Smokers |  |  |  |  |  |  |
| 0 – 113.7 | 23 | 1.0 (Ref) | 23 | 1.0 (Ref) | 21 | 1.0 (Ref) |
| 113.8 – 152.9 | 19 | 1.58 (0.85, 2.94) | 17 | 1.51 (0.79, 2.89) | 15 | 1.50 (0.76, 2.98) |
| 153.0 – 201.1 | 15 | 1.60 (0.82, 3.14) | 13 | 1.21 (0.59, 2.50) | 12 | 1.28 (0.60, 2.73) |
| 201.2 – 535.3 | 9 | 1.17 (0.53, 2.59) | 9 | 1.22 (0.54, 2.77) | 8 | 1.23 (0.20, 2.93) |
| *P for trend* |  | 0.44 |  | 0.55 |  | 0.52 |
| Lung Cancer - Current Smokers |  |  |  |  |  |  |
| 0 – 113.7 | 56 | 1.0 (Ref) | 52 | 1.0 (Ref) | 41 | 1.0 (Ref) |
| 113.8 – 152.9 | 20 | 0.61† (0.36, 1.01) | 19 | 0.67 (0.39, 1.15) | 15 | 0.71 (0.39, 1.30) |
| 153.0 – 201.1 | 13 | 0.42\*\* (0.22, 0.78) | 13 | 0.45\* (0.24, 0.86) | 13 | 0.63 (0.33, 1.22) |
| 201.2 – 535.3 | 19 | 0.54\* (0.31, 0.95) | 19 | 0.61 (0.34, 1.10) | 17 | 0.79 (0.42, 1.49) |
| *P for trend* |  | 0.01 |  | 0.01 |  | 0.14 |

1Adjusted for: age (continuous), sex, ethnicity (white/other), marital status (married or living with someone/divorced, separated, or widowed/single, never married), highest level of education (high school or less/some post-high school education/post-high school certificate or degree), total household income ($0 to $49,999/$50,000 to $99,999/{greater than or equal to} $100,000), geographical area of residence (urban/rural), alcohol consumption (grams of ethanol per day), energy intake (kilocalories per day), BMI (continuous), history of cardiovascular condition (yes/no), history of respiratory condition (yes/no), and family history of cancer (yes/no)

2Cancers occurring less than 2 years after baseline data collection removed

\*\*p<0.01, \*p<0.05, †p<0.1

Note 1: p-value for interaction between smoking status categories for total PA and all-cancers = 0.01

Note 2: p-value for interaction between smoking status categories for total PA and lung cancer = 0.31