**Supplement Table 1**. The risk of Uveitis in patients exposed to various air pollutants stratified by quartile of daily average concentration by IDW methods (sensitivity analysis) in Cox proportional hazard regression.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | | Event | IR | cHR | (95%CI) | aHR† | (95%CI) |
|  | **Carbon monoxide (CO)** | | | | | | |
| Quartile 1, <0.45 ppm | | 398 | 0.76 | Reference group | | Reference group | |
| Quartile 2, 0.45-0.54 ppm | | 256 | 0.65 | 0.85 | (0.73-1.00) | 0.98 | (0.77-1.06) |
| Quartile 3, 0.54-0.66 ppm | | 457 | 0.73 | 0.95 | (0.83-1.09) | 1.04 | (0.90-1.19) |
| Quartile 4, >0.66 ppm | | 1,097 | 2.28 | 2.98 | (2.66-3.34)\*\*\* | 3.09 | (2.75-3.46)\*\*\* |
|  | **Nitric oxide (NO)** | | | | | | |
| Quartile 1, <5.01 ppb | | 500 | 0.95 | Reference group | | Reference group | |
| Quartile 2, 5.01-7.29 ppb | | 349 | 0.69 | 0.72 | (0.62-0.83)\*\*\* | 0.76 | (0.66-0.87)\*\*\* |
| Quartile 3, 7.29-13.6 ppb | | 558 | 1.19 | 1.25 | (1.10-1.41)\*\*\* | 1.34 | (1.18-1.51)\*\*\* |
| Quartile 4, >13.6 ppb | | 801 | 1.53 | 1.61 | (1.44-1.80)\*\*\* | 1.73 | (1.54-1.93)\*\*\* |
|  | **Nitrogen oxides (NOx)** | | | | | | |
| Quartile 1, <21.9 ppm | | 476 | 0.91 | Reference group | | Reference group | |
| Quartile 2, 21.9-28.8 ppm | | 394 | 0.78 | 0.86 | (0.75-0.98)\* | 0.92 | (0.80-1.05) |
| Quartile 3, 28.8-36.4 ppm | | 436 | 1.08 | 1.18 | (1.04-1.35)\* | 1.25 | (1.09-1.42)\*\*\* |
| Quartile 4, >36.4 ppm | | 902 | 1.51 | 1.65 | (1.47-1.84)\*\*\* | 1.81 | (1.61-2.02)\*\*\* |
|  | **Total hydrocarbon (THC)** | | | | | | |
| Quartile 1, <10.3 ppm | | 108 | 0.26 | Reference group | | Reference group | |
| Quartile 2, 10.3-21.9 ppm | | 174 | 0.39 | 1.49 | (1.17-1.90)\*\* | 1.48 | (1.16-1.88)\*\* |
| Quartile 3, 21.9-27.3 ppm | | 744 | 2.43 | 9.24 | (7.55-11.3)\*\*\* | 8.71 | (7.12-10.6)\*\*\* |
| Quartile 4, >27.3 ppm | | 1,182 | 1.37 | 5.22 | (4.28-6.36)\*\*\* | 4.94 | (4.05-6.01)\*\*\* |
|  | **Methane (CH4)** | | | | | | |
| Quartile 1, <8.53 ppm | | 115 | 0.23 | Reference group | | Reference group | |
| Quartile 2, 8.53-17.1 ppm | | 213 | 0.58 | 2.49 | (1.98-3.12)\*\*\* | 2.48 | (1.97-3.11)\*\*\* |
| Quartile 3, 17.1-23.3 ppm | | 687 | 2.13 | 9.09 | (7.46-11.0)\*\*\* | 8.64 | (7.09-10.5)\*\*\* |
| Quartile 4, >23.3 ppm | | 1,193 | 1.41 | 6.05 | (5.00-7.33)\*\*\* | 5.74 | (4.74-6.95)\*\*\* |

IR, incidence rate (per 1,000 person-years)

cHR, crude hazard ratio; aHR, adjusted hazard ratio; CI, confidence interval

The daily average air pollutant concentrations were categorized into 4 groups based on quartiles for each air pollutant.

†Adjusted for age, sex, urbanization level, and comorbidities, including diabetes mellitus, hypertension, hyperlipidemia, asthma, COPD, psoriatic diseases, rheumatoid arthritis, SLE, and Behcet’s syndrome.

\*p<0.05, \*\*p<0.01, \*\*\*p<0.001

**Supplement Table 2.** Differences in Uveitis incidences and associated HRs in participants exposed to daily average concentrations of CO, NO, NOx, THC and CH4stratify by follow-up period.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Pollutant levels, unit | cHR(95%CI) | aHR(95%CI) | cHR(95%CI) | aHR(95%CI) |
|  | Follow-up period ≦5 | | Follow-up period >5 | |
| CO |  |  |  |  |
| <0.61, per ppm | 1.00 | 1.00 | 1.00 | 1.00 |
| 0.61-0.76 per ppm | 1.00(0.82, 1.21) | 1.08(0.89, 1.31) | 0.95(0.81, 1.10) | 1.01(0.87, 1.17) |
| >0.76 per ppm | 2.91(2.48, 3.41)\*\*\* | 3.23(2.74, 3.81)\*\*\* | 1.65(1.44, 1.88)\*\*\* | 1.72(1.49, 1.98)\*\*\* |
| NO |  |  |  |  |
| <6.54 per ppb | 1.00 | 1.00 | 1.00 | 1.00 |
| 6.54-11.1 per ppb | 1.18(0.99, 1.40) | 1.31(1.09, 1.56)\*\* | 1.33(1.15, 1.54)\*\*\* | 1.41(1.21, 1.63)\*\*\* |
| >11.1 per ppb | 1.89(1.62, 2.20)\*\*\* | 2.14(1.82, 2.53)\*\*\* | 1.39(1.21, 1.60)\*\*\* | 1.44(1.24, 1.67)\*\*\* |
| NOx |  |  |  |  |
| <27.1 per ppm | 1.00 | 1.00 | 1.00 | 1.00 |
| 27.1-36.4 per ppm | 1.30(1.09, 1.55)\*\* | 1.43(1.20, 1.70)\*\*\* | 1.21(1.05, 1.40)\*\*\* | 1.30(1.12, 1.51)\*\*\* |
| >36.4 per ppm | 2.27(1.94, 2.66)\*\*\* | 2.51(2.13, 2.96)\*\*\* | 1.49(1.29, 1.70)\*\*\* | 1.53(1.33, 1.77)\*\*\* |
| THC |  |  |  |  |
| <2.33 per ppm | 1.00 | 1.00 | 1.00 | 1.00 |
| 2.33-2.52 per ppm | 9.24(5.78, 14.8)\*\*\* | 1.77(1.47, 2.12)\*\*\* | 1.77(1.47, 2.12)\*\*\* | 1.73(1.44, 2.07)\*\*\* |
| >2.52 per ppm | 18.3(11.6, 29.1)\*\*\* | 2.02(1.68, 2.42)\*\*\* | 2.02(1.68, 2.42)\*\*\* | 2.05(1.70, 2.47)\*\*\* |
| CH4 |  |  |  |  |
| <2.02 per ppm | 1.00 | 1.00 | 1.00 | 1.00 |
| 2.02-2.09 per ppm | 6.27(3.82, 10.3)\*\*\* | 6.37(3.89, 10.5)\*\*\* | 1.37(1.13, 1.65)\*\* | 1.39(1.15, 1.69)\*\*\* |
| >2.09 per ppm | 22.7(14.1, 36.3)\*\*\* | 21.3(13.3, 34.2)\*\*\* | 2.43(2.04, 2.90)\*\*\* | 2.41(2.02, 2.87)\*\*\* |

IR, incidence rate (per 1000 person-years)

cHR, crude hazard ratio; aHR, adjusted hazard ratio; CI, confidence interval

The daily average air pollutant concentrations were categorized into 3 groups based on tertile for each air pollutant.

†Adjusted for age, sex, urbanization level, and comorbidities, including diabetes mellitus, hypertension, hyperlipidemia, asthma, COPD, psoriatic diseases, rheumatoid arthritis, SLE, and Behcet’s syndrome.

\*p<0.05, \*\*p<0.01, \*\*\*p<0.001