**Supplementary**

**Table 1. the effect of the interaction between ambient air pollutants and cigarette smoking on the risk of HCC-related mortality for two pollutant models**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Pollutant** | **Units** | **Overall** | | **Overall** | |  | **Non-smoker** | |  | **Smoker** | | ***P*-value\*** |
| **HR†** | **95% CI** | **HR§** | **95% CI** |  | **HR†** | **95% CI** |  | **HR†** | **95% CI** |
| **PM2.5** | **Per 1 μg/m3** | **1.11** | **(1.08-1.14)** | **1.11** | **(1.08-1.14)** |  | **1.13** | **(1.08-1.18)** |  | **1.11** | **(1.07-1.15)** | **0.90** |
| **NO2** | **Per 1 ppb** | **1.08** | **(1.03-1.13)** | **1.08** | **(1.03-1.13)** |  | **1.03** | **(0.96-1.11)** |  | **1.13** | **(1.06-1.21)** | **0.21** |

†**Adjusted age, gender, BMI, marital status, anti-HCV, the year of diagnosis**, **invasion, stage, AST, AFP, HBV DNA load, Child Pugh score, tumor size, temperature, and relative humidity.**

§**Adjusted age, gender, BMI, marital status, smoke, invasion, anti-HCV, the year of diagnosis**, **stage, AST, AFP, HBV DNA load, Child Pugh score, tumor size, temperature, and relative humidity.**

**\**P*-value for interaction of air and smoke**