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| **Supplementary Table 8. Sensitivity Analysis for Effect of Longer Use of Proton Pump Inhibitor and Histamine-2 Receptor Antagonist on the Risk of Incident Gastric Cancer (cDDD ≥ 545, 730, 910, and 1,095 days)** | | | | | | | | | |
|  | | No. of subjects | Person-years | No. of gastric cancer cases | Incidence rate/1000 person-years (95% CI) | Crude hazard ratio (95% CI) | *P* | Adjustedhazard ratio (95% CI)a | *P* |
| **cDDD ≥ 545 days** | |  |  |  |  |  |  |  |  |
| Full unweighted cohort b | |  |  |  |  |  |  |  |  |
|  | PPI | 18609 | 59350 | 155 | 2.61 (2.20, 3.02) | 1.15 (0.93, 1.42) | 0.993 | 1.0 (0.78, 1.27) | 0.197 |
|  | H2RA | 20058 | 91385 | 200 | 2.19 (1.89, 2.49) | 1.00 (reference) |  | 1.00 (reference) |  |
| Propensity-score -weighted cohort c | |  |  |  |  |  |  |  |  |
|  | PPI | 12570 | 44212 | 110 | 2.48 (2.02, 2.95) | 1.01 (0.77, 1.12) | 0.948 | 1.00 (0.77, 1.31) | 0.975 |
|  | H2RA | 12282 | 44104 | 108 | 2.44 (1.99, 2.91) | 1.00 (reference) |  | 1.00 (reference) |  |
| **cDDD ≥ 730 days** | |  |  |  |  |  |  |  |  |
| Full unweighted cohort b | |  |  |  |  |  |  |  |  |
|  | PPI | 12204 | 35663 | 92 | 2.58 (2.05, 3.11) | 1.18 (0.90, 1.56) | 0.965 | 0.99 (0.73, 1.36) | 0.239 |
|  | H2RA | 14111 | 60884 | 129 | 2.12 (1.75, 2.48) | 1.00 (reference) |  | 1.00 (reference) |  |
| Propensity-score -weighted cohort c | |  |  |  |  |  |  |  |  |
|  | PPI | 8364 | 26977 | 70 | 2.59 (1.99, 3.20) | 0.99 (0.71, 1.38) | 0.947 | 0.97(0.70, 1.35) | 0.875 |
|  | H2RA | 8173 | 27144 | 71 | 2.61 (2.01, 3.22) | 1.00 (reference) |  | 1.00 (reference) |  |
| **cDDD ≥ 910 days** | |  |  |  |  |  |  |  |  |
| Full unweighted cohort b | |  |  |  |  |  |  |  |  |
|  | PPI | 8522 | 22995 | 67 | 2.91 (2.22, 3.61) | 1.18 (0.86, 1.61) | 0.978 | 0.98 (0.67, 1.42) | 0.297 |
|  | H2RA | 10502 | 42647 | 100 | 2.34 (1.89, 2.80) | 1.00 (reference) |  | 1.00 (reference) |  |
| Propensity-score -weighted cohort c | |  |  |  |  |  |  |  |  |
|  | PPI | 5865 | 17484 | 52 | 2.97 (2.17, 3.78) | 0.97 (0.66, 1.43) | 0.898 | 0.98 (0.66, 1.43) | 0.478 |
|  | H2RA | 5739 | 17687 | 53 | 3.00 (2.19, 3.80) | 1.00 (reference) |  | 1.00 (reference) |  |
| **cDDD ≥ 1,095 days** | |  |  |  |  |  |  |  |  |
| Full unweighted cohort b | |  |  |  |  |  |  |  |  |
|  | PPI | 5946 | 15116 | 37 | 2.45 (1.66, 3.24) | 1.10 (0.74, 1.65) | 0.789 | 0.94 (0.58, 1.51) | 0.633 |
|  | H2RA | 7773 | 30268 | 65 | 2.15 (1.46, 2.84) | 1.00 (reference) |  | 1.00 (reference) |  |
| Propensity-score -weighted cohort c | |  |  |  |  |  |  |  |  |
|  | PPI | 4155 | 11597 | 28 | 2.41 (1.52, 3.308) | 0.89 (0.54, 1.48) | 0.655 | 0.89 (0.54, 1.47) | 0.649 |
|  | H2RA | 4076 | 11788 | 32 | 2.71 (1.77, 3.65) | 1.00 (reference) |  | 1.00 (reference) |  |
| cDDD, cumulative defined daily dose; H2RA, histamine-2 receptor antagonist; PPI, proton pump inhibitor; CI, confidence interval  a Adjusted for age, sex, calendar period of prescription, time from medication start to 365 cDDD-days (months), socioeconomic characteristics (income, smoking, and alcohol use), indication of drug use (GERD or peptic ulcer), Charlson Comorbidity Index, *H. pylori* eradication, and use of other medications (aspirin, metformin, and statin).  b Unadjusted and adjusted subdistribution hazards were obtained from the Fine and Gray model between PPI long-term users and H2RA long-term users from the unweighted cohort, which accounted for competing risks.  c Unadjusted and adjusted subdistribution hazards were obtained from the Fine and Gray model between PPI long-term users and H2RA long-term users from the propensity-score weighted cohort, which accounted for competing risks. | | | | | | | | | |