Table S5. Hazard ratios of incidence of colorectal cancer with cholecystectomy and appendectomy based on the follow-up time among those who had available medical check-up data

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Follow up time | Person-years | Colorectal cancer | | Colon cancer (C18)1 | | Rectal cancer (C19-C20)1 | |
| **No. of event** | **Adjusted HR**  **(95% CI)** | **No. of event** | **Adjusted HR**  **(95% CI)** | **No. of event** | **Adjusted HR**  **(95% CI)** |
| Cholecystectomy | **Non-exposure** | 2,483,065 | 1,241 | 1.00 (reference) | 710 | 1.00 (reference) | 560 | 1.00 (reference) |
|  | **0~1 year** | 3,045 | 6 | 2.39 (1.07 - 5.32) | 4 | 2.73 (1.02 - 7.29) | 2 | 1.80 (0.45 - 7.21) |
|  | **1~2 years** | 2,687 | 1 | 0.43 (0.06 - 3.08) | 1 | 0.74 (0.10 - 5.27) | 0 | NA |
|  | **2~3 years** | 2,361 | 4 | 1.94 (0.73 - 5.18) | 3 | 2.51 (0.81 - 7.80) | 1 | 1.09 (0.15 - 7.74) |
|  | **3~4 years** | 2,023 | 0 | NA | 0 | NA | 0 | NA |
|  | **4~5 years** | 1,719 | 0 | NA | 0 | NA | 0 | NA |
|  | **5~ years** | 5,686 | 4 | 0.69 (0.26 - 1.83) | 2 | 0.58 (0.15 - 2.32) | 2 | 0.79 (0.20 - 3.15) |
| Appendectomy | **Non-exposure** | 2,470,332 | 1,243 | 1.00 (reference) | 710 | 1.00 (reference) | 561 | 1.00 (reference) |
|  | **0~1 year** | 4,202 | 6 | 3.07 (1.38 - 6.85) | 5 | 4.50 (1.87 - 10.84) | 1 | 1.13 (0.16 - 8.01) |
|  | **1~2 years** | 3,908 | 1 | 0.53 (0.08 - 3.79) | 1 | 0.93 (0.13 - 6.62) | 0 | NA |
|  | **2~3 years** | 3,605 | 2 | 1.12 (0.28 - 4.47) | 1 | 0.98 (0.14 - 6.95) | 2 | 2.47 (0.62 - 9.91) |
|  | **3~4 years** | 3,302 | 0 | NA | 0 | NA | 0 | NA |
|  | **4~5 years** | 2,973 | 1 | 0.63 (0.09 - 4.49) | 1 | 1.10 (0.15 - 7.80) | 0 | NA |
|  | **5~ years** | 12,278 | 3 | 0.42 (0.13 - 1.29) | 2 | 0.48 (0.12 - 1.92) | 1 | 0.31 (0.04 - 2.20) |

Adjusted for sex, diabetes mellitus, inflammatory bowel disease, smoking status, alcohol consumption, and BMI; Age was used as time scale in Cox proportional hazard model.

HR, hazard ratio; CI, confidence interval.

1From the 10th International Classification of Diseases codes.