Table S6. Hazard ratios of incidence of colon and rectal cancer with cholecystectomy and appendectomy with and without lag periods among subjects who had medical check-up data

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 　 | Person-years | Colorectal cancer | Colon cancer (C18]1 | Rectal cancer (C19-C20]1 |
| **No. of event** | **Sex adjusted HR****(95% CI)2** | **Adjusted HR****(95% CI)3** | **No. of event** | **Sex adjusted HR****(95% CI)2** | **Adjusted HR****(95% CI)3** | **No. of event** | **Sex adjusted HR****(95% CI)2** | **Adjusted HR****(95% CI)3** |
| No lag periods |  |  |  |  |  |  |  |  |  |  |
|  Cholecystectomy | 17,521  | 15  | 0.94 (0.56 - 1.56) | 0.93 (0.56 - 1.55) | 10  | 1.08 (0.58 - 2.02) | 1.06 (0.57 - 1.98) | 5  | 0.70 (0.29 - 1.68) | 0.70 (0.29 - 1.70) |
|  Appendectomy | 30,269  | 13  | 0.81 (0.47 - 1.39) | 0.81 (0.47 - 1.39) | 10  | 1.08 (0.58 - 2.01) | 1.08 (0.58 - 2.01) | 4  | 0.55 (0.21 - 1.48) | 0.55 (0.21 - 1.48) |
| With lag periods |  |  |  |  |  |  |  |  |  |  |
| Cholecystectomy(1 year of lag) | 14,475  | 9  | 0.67 (0.35 - 1.28) | 0.66 (0.34 - 1.27) | 6  | 0.76 (0.34 - 1.71) | 0.75 (0.34 - 1.67) | 3  | 0.50 (0.16 - 1.54) | 0.50 (0.16 - 1.55) |
| Appendectomy(3 years of lag) | 18,547 | 4 | 0.38 (0.14 – 1.01) | 0.38 (0.14 – 1.01) | 3 | 0.49 (0.16 – 1.53) | 0.49 (0.16 – 1.53) | 1 | 0.21 (0.03 - 1.51) | 0.21 (0.03 – 1.51) |

HR, hazard ratio; CI, confidence interval.

1From the 10th International Classification of Diseases codes.

2Age was used as time scale in Cox proportional hazard model.

3Adjusted for sex, diabetes mellitus, inflammatory bowel disease, smoking status, alcohol consumption, and BMI.