**Supplementary Table 1.** Multivariate analysis for metachronous advanced colorectal neoplasia when group 1 was confined to 1301 patients with a surveillance interval of 5 years or more

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Adjusted HR  (95% CI) | P value | Adjusted HR  (95% CI) | P value | Adjusted HR  (95% CI) | P value |
| Overall, n=2983 |  |  |  |  |  |  |
| Group 1, n=1301 | 1 (reference) |  | 0.20 (0.10–0.39) | <0.001 | 0.13 (0.07–0.25) | <0.001 |
| Group 2, n=293 | 5.06 (2.56–10.00) | <0.001 | 1 (reference) |  | 0.66 (0.32–1.39) | 0.278 |
| Group 3, n=258 | 7.61 (3.98–14.58) | <0.001 | 1.51 (0.72–3.15) | 0.278 | 1 (reference) |  |
| Group 4, n=1131 | 6.53 (4.08–10.47) | <0.001 | 1.29 (0.70–2.39) | 0.413 | 0.86 (0.48–1.52) | 0.602 |
| <50 years, n=2252 |  |  |  |  |  |  |
| Group 1, n=1136 | 1 (reference) |  | 0.36 (0.12-1.07) | 0.066 | 0.09 (0.04-0.21) | <0.001 |
| Group 2, n=157 | 2.75 (0.94-8.05) | 0.629 | 1 (reference) |  | 0.26 (0.08-0.84) | 0.025 |
| Group 3, n=137 | 10.76 (4.85-23.84) | <0.001 | 3.92 (1.19-12.89) | 0.025 | 1 (reference) |  |
| Group 4, n=822 | 5.37 (3.09-9.35) | <0.001 | 1.96 (0.68-5.65) | 0.214 | 0.50 (0.23-1.07) | 0.073 |
| ≥ 50 years, n=731 |  |  |  |  |  |  |
| Group 1, n=165 | 1 (reference) |  | 0.10 (0.03–0.34) | <0.001 | 0.10 (0.03–0.35) | <0.001 |
| Group 2, n=136 | 10.27 (2.98–35.39) | <0.001 | 1 (reference) |  | 1.04 (0.39–2.76) | 0.944 |
| Group 3, n=121 | 9.91 (2.84–34.63) | <0.001 | 0.97 (0.36–2.57) | 0.944 | 1 (reference) |  |
| Group 4, n=309 | 11.80 (3.95–35.29) | <0.001 | 1.15 (0.52–2.52) | 0.728 | 1.19 (0.53–2.70) | 0.676 |

Values were adjusted for age, sex, smoking status, family history of CRC, nonsteroidal anti-inflammatory drugs use, body mass index, hypertension, and diabetes mellitus.

HR, hazard ratio; CI, confidence interval

**Supplementary Table 2.** Multivariate analysis for metachronous advanced colorectal neoplasia when group 4 was confined to 1069 patients with one advanced adenoma

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Adjusted HR  (95% CI) | P value | Adjusted HR  (95% CI) | P value | Adjusted HR  (95% CI) | P value |
| Overall, n=9671 |  |  |  |  |  |  |
| Group 1, n=8051 | 1 (reference) |  | 0.48 (0.27–0.85) | 0.012 | 0.31 (0.18–0.52) | <0.001 |
| Group 2, n=293 | 2.09 (1.18–3.72) | 0.012 | 1 (reference) |  | 0.64 (0.31–1.34) | 0.235 |
| Group 3, n=258 | 3.26 (1.92–5.54) | <0.001 | 1.56 (0.75–3.25) | 0.235 | 1 (reference) |  |
| Group 4, n=1069 | 2.64 (1.91–3.64) | <0.001 | 1.26 (0.68–2.34) | 0.461 | 0.81 (0.46–1.43) | 0.467 |
| <50 years, n=7627 |  |  |  |  |  |  |
| Group 1, n=6540 | 1 (reference) |  | 0.78 (0.29-2.13) | 0.626 | 0.21 (0.11-0.42) | <0.001 |
| Group 2, n=157 | 1.28 (0.47-3.50) | 0.626 | 1 (reference) |  | 0.27 (0.08-0.89) | 0.031 |
| Group 3, n=137 | 4.72 (2.38-9.36) | <0.001 | 3.68 (1.13-11.99) | 0.031 | 1 (reference) |  |
| Group 4, n=793 | 2.20 (1.45-3.34) | <0.001 | 1.72 (0.60-4.92) | 0.316 | 0.47 (0.22-0.99) | 0.048 |
| ≥50 years, n=2044 |  |  |  |  |  |  |
| Group 1, n=1511 | 1 (reference) |  | 0.36 (0.17–0.75) | 0.007 | 0.37 (0.17–0.80) | 0.012 |
| Group 2, n=136 | 2.79 (1.33–5.85) | 0.007 | 1 (reference) |  | 1.02 (0.39–2.67) | 0.976 |
| Group 3, n=121 | 2.71 (1.24–5.92) | 0.013 | 0.97 (0.37–2.55) | 0.949 | 1 (reference) |  |
| Group 4, n=276 | 3.45 (2.04–5.84) | <0.001 | 1.24 (0.56–2.72) | 0.600 | 1.27 (0.56–2.86) | 0.572 |

Values were adjusted for age, sex, smoking status, family history of CRC, nonsteroidal anti-inflammatory drugs use, body mass index, hypertension, and diabetes mellitus.

HR, hazard ratio; CI, confidence interval

**Supplementary Table 3.** Subgroup analysis for risk of metachronous advanced colorectal neoplasia by age

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 3-year cumulative incidence rate | 5-year cumulative incidence rate | Adjusted HR  (95% CI) | P value | Adjusted HR  (95% CI) | P value |
| 30-39 years, n=3209 |  |  |  |  |  |  |
| Group 1, n=2795 | 0.8% | 2.6% | 1 (reference) |  | 0.35 (0.11-1.12) | 0.077 |
| Group 2 + Group 3, n=38+24 | 1.5% | 9.7% | 2.90 (0.89-9.44) | 0.077 | 1 (reference) |  |
| Group 4, n=342 | 1.6% | 4.0% | 1.59 (0.76-3.36) | 0.222 | 0.55 (0.15-2.09) | 0.380 |
| 40-49 years, n=4447 |  |  |  |  |  |  |
| Group 1, n=3745 | 0.9% | 2.8% | 1 (reference) |  | 0.39 (0.20-0.76) | 0.006 |
| Group 2 + Group 3, n=119+103 | 1.1% | 7.7% | 2.58 (1.31-5.05) | 0.006 | 1 (reference) |  |
| Group 4, n=480 | 3.6% | 7.3% | 2.72 (1.67-4.41) | <0.001 | 1.05 (0.50-2.24) | 0.891 |
| 50-64 years, n=1891 |  |  |  |  |  |  |
| Group 1, n=1387 | 1.5% | 5.7% | 1 (reference) |  | 0.46 (0.24-0.91) | 0.025 |
| Group 2 + Group 3, n=118+107 | 4.3% | 16.7% | 2.16 (1.10-4.23) | 0.025 | 1 (reference) |  |
| Group 4, n=279 | 6.5% | 17.6% | 3.20 (1.88-5.47) | <0.001 | 1.48 (0.72-3.05) | 0.283 |
| ≥ 65 years, n=186 |  |  |  |  |  |  |
| Group 1, n=124 | 0.0% | 3.9% | 1 (reference) |  | 0.08 (0.01-0.54) | 0.010 |
| Group 2 + Group 3, n=18+14 | 13.1% | 34.2% | 12.78 (1.84-88.64) | 0.010 | 1 (reference) |  |
| Group 4, n=30 | 14.1% | 14.1% | 10.81 (1.48-78.78) | 0.019 | 0.85 (0.13-5.48) | 0.861 |

Values were adjusted for age, sex, smoking status, family history of CRC, nonsteroidal anti-inflammatory drugs use, body mass index, hypertension, and diabetes mellitus.

HR, hazard ratio; CI, confidence interval