**Supplementary table 1. Adenoma and polyp detection rates of each endoscopist.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| EN | No of CFS | Subjects ≥ 1 polyp (n, %)CAP/CHROMO vs. SC | *P-*value | Subjects ≥ 1 adenoma (n, %)CAP/CHROMO vs. SC | *P-* value | Subjects ≥ 1 AN (n, %)CAP/CHROMO vs. SC | *P-*value |
| 1 | 56 | 20 (66.7%) vs. 11 (42.3%) | 0.067 | 13 (43.3%) vs. 7 (26.9%) | 0.201 | 4 (13.3%) vs. 3 (11.5%) | 0.839 |
| 2 | 3 | 1 (50.0%) vs. 0 (0.0%) | 0.386 | 0 vs. 0 | - | 0 vs. 0 | - |
| 3 | 98 | 43 (93.5%) vs. 34 (65.4%) | 0.001 | 35 (76.1%) vs. 27 (51.9%) | 0.013 | 6 (13.0%) vs. 6 (11.5%) | 0.821 |
| 4 | 59 | 18 (62.1%) vs. 14 (46.7%) | 0.235 | 16 (55.2%) vs. 12 (40.0%) | 0.243 | 5 (17.2%) vs. 4 (13.3%) | 0.676 |
| 5 | 51 | 19 (73.1%) vs. 12 (48.0%) | 0.067 | 13 (50.0%) vs. 9 (36.0%) | 0.313 | 4 (15.4%) vs. 5 (20.0%) | 0.666 |
| 6 | 33 | 11 (68.8%) vs. 13 (76.5%) | 0.619 | 7 (43.8%) vs. 10 (58.8%) | 0.387 | 1 (6.3%) vs. 1 (5.9%) | 0.965 |
| 7 | 54 | 18 (66.7%) vs. 14 (51.9%) | 0.268 | 4 (14.8%) vs. 5 (18.5%) | 0.715 | 2 (7.4%) vs. 1 (3.7%) | 0.552 |
| 8 | 233 | 80 (69.6%) vs. 68 (57.6%) | 0.058 | 62 (53.9%) vs. 54 (45.8%) | 0.213 | 8 (7.0%) vs. 5 (4.2%) | 0.366 |
| 9 | 5 | 2 (66.7%) vs. 1 (50.0%) | 0.709 | 2 (66.7%) vs. 1 (50.0%) | 0.709 | 2 (66.7%) vs. 1 (50.0%) | 0.709 |
| 10 | 50 | 18 (69.2%) vs. 12 (50.0%) | 0.166 | 13 (50.0%) vs. 9 (37.5%) | 0.374 | 5 (19.2%) vs. 2 (8.3%) | 0.267 |
| 11 | 492 | 187 (73.6%) vs. 144 (60.5%) | 0.002 | 155 (61.0%) vs. 123 (51.7%) | 0.037 | 20 (7.9%) vs. 20 (8.4%) | 0.830 |
| 12 | 69 | 23 (71.9%) vs. 14 (37.8%) | 0.005 | 21 (65.6%) vs. 13 (35.1%) | 0.012 | 5 (15.6%) vs. 3 (8.1%) | 0.331 |
| 13 | 140 | 62 (87.3%) vs. 51 (73.9%) | 0.044 | 51 (71.8%) vs. 42 (60.9%)  | 0.170 | 9 (12.7%) vs. 9 (13.0%) | 0.948 |
| 14 | 11 | 2 (40.0%) vs. 3 (50.0%) | 0.740 | 2 (40.0%) vs. 2 (33.3%) | 0.819 | 0 vs. 0 | - |
| 15 | 80 | 20 (57.1%) vs. 30 (66.7%) | 0.383 | 19 (54.3%) vs. 25 (55.6%) | 0.910 | 4 (11.4%) vs. 3 (6.7%) | 0.455 |
| 16 | 71 | 20 (62.5%) vs. 24 (61.5%) | 0.934 | 18 (56.3%) vs. 20 (51.3%) | 0.676 | 2 (6.3%) vs. 0 (0.0%) | 0.113 |
| 17 | 56 | 17 (65.4%) vs. 15 (50.0%) | 0.246 | 16 (61.5%) vs. 12 (40.0%) | 0.108 | 1 (3.8%) vs. 3 (10.0%) | 0.373 |
| 18 | 180 | 41 (45.6%) vs. 33 (36.7%) | 0.226 | 33 (36.7%) vs. 26 (28.9%) | 0.266 | 8 (8.9%) vs. 4 (4.4%) | 0.232 |
| 19 | 122 | 37 (61.7%) vs. 27 (43.5%) | 0.045 | 24 (40.0%) vs. 23 (37.1%) | 0.742 | 4 (6.7%) vs. 6 (9.7%) | 0.544 |
| 20 | 21 | 7 (70.0%) vs. 6 (54.5%) | 0.466 | 5 (50.0%) vs. 6 (54.5%) | 0.835 | 1 (10.0%) vs. 4 (36.4%) | 0.157 |

Abbreviations: EN, endoscopist; CFS, colonoscopy; CAP/CHROMO, cap/chromoendoscopy; SC, standard colonoscopy; AN, advanced neoplasia.

**Supplementary table 2. Comparison of detection rates of adenoma and advanced adenoma between the SC and CAP/CHROMO groups during follow-up.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | PreviousCAP/CHROMO group(n = 200) | Previous SC group(n = 206) | *P*-value |
| Age (years) (mean ± SD) | 56.9 ± 6.8 | 57.9 ± 7.3 | 0.192 |
| Male/female | 111/89 | 125/81 | 0.290 |
| Mean follow-up duration (days) (mean ± SD) | 1253 ± 355 | 1295 ± 353 | 0.241 |
| Subjects with adenoma (ADR)  | 81 (40.5%)  | 94 (45.6%) | 0.297 |
| Subjects with proximal adenoma (proximal ADR) | 62 (31.0%) | 65 (31.6%) | 0.904 |
| Subjects with advanced adenoma (AADR) | 4 (2%) | 10 (4.9%) | 0.115 |
| Subjects with cancer (Interval CRC) | 0 | 0 | - |

Abbreviations: CAP/CHROMO, cap/chromoendoscopy; SC, standard colonoscopy; SD, standard deviation; ADR, adenoma detection rate; AADR, advanced adenoma detection rate; CRC, colorectal cancer.