**Supplementary Table 1. Colonoscopy surveillance features associated with CRC at the index AA/TSA/ASSA polypectomy site.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Polyp patients with post-polypectomy CRC** | **Polyp patients without subsequent CRC** | **Time interval from first polypectomy to cancer in years**µ**(median, IQR)** |
|  | **N=84(%)** | **N=252 (%)** |  |
| Surveillance colonoscopy performed later than would have been recommended by current guidelines π | 23 (27.4%) | 86 (34.1%) | 5.9 (3.9-9.8) |
| Possible missed polyp or rapidly growing cancer (had negative colonoscopy in follow up and then developed cancer or developed colon cancer earlier than surveillance would have been recommended by current guidelines π  | 25 (29.8%) | Not applicable- | 3.5 (2.2-6.8) |
| Persistent/recurrent polyp after polypectomy | 21 (25.0%) | 52 (20.6%) | 0.7 (0.2-2.5) |
| Incomplete colonoscopy ( poor prep, redundant colon, sigmoid fixation) at AA/TSA/ASSA follow up and this colonoscopy not completed within 12 months of the failed colonoscopy  | 8 (9.5%) | 14 (5.6%) | 6.8 ( 3.1-9.3) |
| Incorrect surveillance interval recommended π | 7 (8.3%)  | 75 (29.8%) | 6.0 (4.8-7.7) |
| Surveillance colonoscopy performed on time(± 1 month) π  | 0 | 25(9.9%) |  |

π= based on the 2012 guidelines for colonoscopy surveillance after polypectomy or endoscopist’s judgment of complete resection 11

µ = interval may have included multiple colonoscopies

**Supplementary Table 2. Colonoscopy surveillance features associated with post-colonoscopy CRC at site distinct from index AA/TSA/ASSA**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Polyp patients with subsequent CRC** | **Polyp patients without subsequent CRC** | **Time interval from first polypectomy to cancer in years**µ **(median, IQR)** |
|  | **N=54 (%)** | **N=162 (%)** |  |
| Surveillance colonoscopy performed later than would have been recommended by current guidelines π | 17 (31.5%) | 48(29.6%) | 6.9 (5.6-14.3) |
| Possible missed polyp or rapidly growing cancer (had negative colonoscopy in follow up and then developed cancer or developed colon cancer earlier than surveillance would have been recommended by current guidelines π | 15 (27.8%) | - | 3.17 (1.1-5.0) |
| Persistent/recurrent polyp after polypectomy | 4 (7.4%) | 42 (25.9%) | 0.12 (0.07-0.16) |
| Incomplete colonoscopy ( poor prep, redundant colon, sigmoid fixation) at AA/TSA/ASSA follow up and this colonoscopy not completed within 12 months of the failed colonoscopy |  14 (25.9%) | 12 (7.4%) | 5.8 (3.1-10.6) |
| Incorrect surveillance interval recommended π  | 4 (7.4%) | 45(27.8%) | 8.2 (3.0-19.3) |
| Surveillance colonoscopy performed on time(± 1 month) | - | 15(9.3%) |  |

π Based on the 2012 guidelines for colonoscopy surveillance after polypectomy or endoscopist’s judgment of complete resection11

µThis interval may have included multiple colonoscopies