Appendix 2 – Detailed breakdown of adenocarcinoma and serious colorectal disease cases.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Age** | **Gender** | **Max FIT (µg/g)** | **Symptoms** | **Conclusion** |
| 83 | Female | 450 | None reported | Adenocarcinoma |
| 55 | Female | 450 | Iron deficiency anaemia | Lower GI: Inflammatory disease |
| 53 | Female | 450 | Anaemia | Adenocarcinoma |
| 52 | Male | 389.5 | Rectal bleeding | Lower GI: Large polyp (>10 mm) |
| 56 | Male | 213.9 | Diarrhoea with blood in stool | Lower GI: Inflammatory disease |
| 85 | Male | 210.1 | Iron deficiency anaemia | Adenocarcinoma |
| 46 | Male | 119.1 | Melena | Lower GI: Inflammatory disease |
| 80 | Female | 63.9 | Change in bowel habit | Adenocarcinoma |
| 83 | Female | 38 | Anaemia | Adenocarcinoma |
| 55 | Female | 14.8 | Change of bowel habit | Adenocarcinoma |
| 51 | Female | 8.7 | Iron deficiency anaemia | Lower GI: Large polyp (>10 mm) |
| 60 | Male | 6.2 | Anaemia | Lower GI: Inflammatory disease |
| 50 | Female | 1.9 | Abdominal pain | Lower GI: Large polyp (>10 mm) |
| 80 | Male | 1.7 | Anaemia | Lower GI: Inflammatory disease |
| 74 | Female | 1.3 | New onset constipation | Lower GI: Large polyp (>10 mm) |
| 86 | Male | 1.2 | Change in bowel habit | Lower GI: Inflammatory disease |
| 80 | Male | 1 | Change in bowel habit | Adenocarcinoma |
| 77 | Male | 1 | Loose stools | Neural endocrine tumour |
| 45 | Female | 0.5 | Loose stools and abdominal pains | Lower GI: Large polyp (>10 mm) |
| 26 | Male | 0.5 | Loose stools | Lower GI: Large polyp (>10 mm) |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | Sensitivity | Specificity | PPV | NPV |
| Adenocarcinoma | FOB | 85.7  (42.1 to 99.6) | 65.8  (59.1 to 72.0) | 7.3  (2.7 to 15.2) | 99.3  (96.3 to 100.0) |
| FIT at 7µg/g | 85.7  (42.1 to 99.6) | 89.2  (84.3 to 92.9) | 20.0  (7.7 to 38.6) | 99.5  (97.2 to 100.0) |
| FIT at 10µg/g | 85.7  (42.1 to 99.6) | 90.5  (85.9 to 94.0) | 22.2  (8.6 to 42.3) | 99.5  (97.3 to 100.0) |
| FIT at 20µg/g | 71.4  (29.0 to 96.3) | 92.8  (88.6 to 95.8) | 23.8  (8.2 to 47.2) | 99.0  (96.6 to 99.9) |
| FIT at 50µg/g | 57.1  (18.4 to 90.1) | 95.9  (92.4 to 98.1) | 30.8  (9.1 to 61.4) | 98.6  (96.0 to 99.7) |
| Significant colorectal disease | FOB | 63.2  (38.4 to 83.7) | 66.7  (59.9 to 73.0) | 14.6  (7.8 to 24.2) | 95.2  (90.4 to 98.1) |
| FIT at 7µg/g | 52.6  (28.9 to 75.6) | 90.5  (85.7 to 94.1) | 33.3  (17.3 to 52.8) | 95.5  (91.6 to 97.9) |
| FIT at 10 µg/g | 47.4  (24.4 to 71.1) | 91.4  (86.8 to 94.8) | 33.3  (16.5 to 54.0) | 95.0  (91.1 to 97.6) |
| FIT at 20µg/g | 42.1  (20.3 to 66.5) | 93.8  (89.6 to 96.7) | 38.1  (18.1 to 61.6) | 94.7  (90.7 to 97.3) |
| FIT at 50µg/g | 36.8  (16.3 to 61.6) | 97.1  (93.9 to 98.9) | 53.8  (25.1 to 80.8) | 94.4  (90.5 to 97.1) |

Appendix 3. Comparison of diagnostic accuracy of gFOB and FIT at different concentration thresholds for detection of adenocarcinoma and significant colorectal disease (adenocarcinoma; high risk adenoma; inflammatory bowel disease) excluding nine patients with rectal bleeding.