

Supplementary materials for

Bleeding and perforation complications after follow-up colonoscopies in FIT-based colorectal cancer screening: Insights from a retrospective case-control study

Supplementary Table S1. Number of colonoscopies, rates of colonoscopy-related bleeding and perforation during the study period (2013-2019)

Year of index colonoscopy	Number of colonoscopies	Number of bleeding events	% bleeding [95% CI]	Number of perforation events	% perforation
2013	847	8	0.94 [0.41 – 1.85]	2	0.24 [0.03 – 0.85]
2014	15133	152	1.00 [0.85 – 1.18]	10	0.07 [0.03 – 0.12]
2015	13131	142	1.08 [0.91 – 1.27]	15	0.11 [0.06– 0.19]
2016	12525	116	0.93 [0.77 – 1.11]	6	0.05 [0.02 – 0.10]
2017	14544	46	0.32 [0.23 – 0.42]	11	0.08 [0.04 – 0.14]
2018	11573	31	0.27 [0.18 – 0.38]	6	0.05 [0.02 – 0.11]
2019	1970	1	0.05 [0.001 – 0.28]	2	0.10 [0.01 – 0.37]
Total	69723	496	0.71 [0.65 – 0.78]	52	0.07 [0.06 – 0.10]

Supplementary Table S2. Numbers and percentages of bleeding and perforation events by interval between index colonoscopy and occurrence of the complication.

Interval (day)	Cumulative number of bleeding events	Cumulative % Bleeding (N = 496)	Cumulative number of perforation events	Cumulative % Perforation (N = 52)
0	345	69,56	24	46,15
1	398	80,24	34	65,38
2	421	84,88	43	82,69
3	428	86,29	44	84,62
4	437	88,10	44	84,62
5	444	89,52	47	90,38
6	454	91,53	47	90,38
7	467	94,15	47	90,38
8	471	94,96	48	92,31
9	480	96,77	49	94,23
10	487	98,19	50	96,15
11	489	98,59	50	96,15
12	490	98,79	50	96,15
13	493	99,40	51	98,08
14	496	100,00	52	100,00

Supplementary Table S3. List of nomenclature codes used to identify bleeding and perforation within 14 days after colonoscopy

Nomenclature code	Description
<i>Bleeding</i>	
473771-473782	Haemostasis in urgency, for digestive bleeding, with decrease in haemoglobin level of more than 2 g or need for transfusion (before 1/11/2016)/ Haemostasis of the digestive tract, by endoscopy (after 1/11/2016)
453235-453246	Digital angiography of the thoracic and/or abdominal aorta and its branches
589131-589142	Percutaneous occlusion under the control of medical imaging of the arterial or venous vascularization of pathological lesions or of arterial bleeding in the facial, thoracic, abdominal or pelvic region, including the manipulations and controls during the treatment and the catheters used, excluding the embolization catheter(s) used, the pharmaceuticals, the contrast agents and the embolization equipment
<i>Perforation</i>	
243611-243622	Surgery for perforation of an abdominal organ other than the appendix
474810-474821	Treatment of a fistula or perforation of the digestive tract, by endoscopy

Supplementary Table S4. List of nomenclature codes used to identify anaesthesia

Nomenclature code	Description
200211-200222	Anaesthesia performed during a dispensation: Ranked in a category equal to or lower than K 180 or N 300 or I 350 and higher than K 120 or N 200 or I 250
201073-201084	Anaesthesia performed during a dispensation: Ranked in a category lower than K 120 or N 200 or I 200 and higher than K 75 or N 125 or I 125
201110-201121	Anaesthesia performed during a dispensation: Ranked in a category equal to or lower than K 75 or N 125 or I 125 and higher than K 24 or N 40 or I 40
201132-201143	Anaesthesia performed during a dispensation: Ranked in a category equal to or lower than K 24 or N 40 or I 40
200196-200200	Anaesthesia performed during a dispensation: Ranked in a category equal to or lower than K 240 or N 400 or I 450 and higher than K 180 or N 300 or I 350

Supplementary Table S5. List of nomenclature codes used to identify polypectomy

Nomenclature code	Description
473955-473966	Excision of one or more polyps from the colon, ileum, or jejunum, by endoscopy and with a diathermy loop
473211-473222	Excision of one or more polyps in the colon, ileum, or jejunum, by endoscopy and with a diathermy loop
244370-244381	Endoscopic removal of benign tumors or polyps of the sigmoid, per session
244355-244366	Removal of benign tumors or polyps from the rectum, including rectoscopy, per session
473756-473760	Ileoscopy with removal of tumors and/or coagulation of lesions

Supplementary Table S6. List of antiplatelet/antithrombotic drugs

Group	Drug
Antiplatelet	acetylsalicylic acid, clopidogrel, prasugrel, ticlopidine, cangrelor, ticagrelor, dipyridamole, epoprostenol, eptifibatide, tirofiban
NSAIDs	aceclofenac, diclofenac, ketorolac, ibuprofen, ketoprofen, naproxen, indometacine, meloxicam, piroxicam, tenoxicam, celecoxib, etoricoxib, nabumeton
Anticoagulant	acenocoumarol, phenprocoumon, warfarin, apixaban, dabigatran, edoxaban, rivaroxaban, heparin, dalteparin, enoxaparin, nadroparin, tinzaparin, danaparoid, bivalirudin, fondaparinux, protein C [human plasma], antitrombin III [human plasma]
Thrombolytics	alteplase, tenecteplase, urokinase
Other anti-thrombotic agents	caplacizumab