

Appendix 1: Safety data – minor adverse events

One participant was admitted to hospital one week following colonoscopy with a bacterial gastroenteritis (later shown to be related to food contamination with salmonella), which was complicated by an intravenous catheter infection; one participant experienced abdominal pain following the colonoscopy procedure in recovery that settled without intervention.

There was a very small increase in mean serum creatinine from 122.1 (standard deviation 47.2) to 124.4 (50.6) $\mu\text{mol/L}$ ($p=0.03$, paired students t test); as noted in the manuscript there was no significant change in estimated glomerular filtration rate.

Three participants had unexplained increases in serum creatinine of $>30\%$; all returned to baseline within one month. One additional participant had an increase of $>30\%$ associated with a urinary tract infection which later resolved.

Appendix 2: Staging and location information for the five screen-detected cases of colorectal cancer

Case	Location	Faecal haemoglobin result	Procedure	TNM classification	AJCC stage
1	Rectum	Negative	Transendoscopic microsurgery	pT1 N0 M0	I
2	Transverse colon	Positive	Right hemicolectomy	pT3 N0 M0	IIA
3	Sigmoid colon	Positive	Polypectomy	pT1 N0 M0	I
4	Descending colon	Positive	Left hemicolectomy	pT3 N0 M0	IIA
5	Caecum	Negative	Right hemicolectomy	pT1 N0 M0	I

Abbreviations – TNM: tumour, nodes, metastasis staging; pT~: pathological tumour classification, i.e. classified according to histology; AJCC: American Joint Committee on Cancer

Appendix 3: Distribution of colorectal neoplastic lesions in study participants

	<i>Number of cancers/adenomas (%)</i>				<i>Total in location (%)</i>
	Cancers	Advanced Adenomas*	Non-advanced Adenomas†	Total Advanced Neoplasia	
Proximal colon (caecum, ascending and transverse colon)	2 (40.0%)	10 (34.5%)	27 (38.6%)	12 (35.2%)	39 (37.5%)
Distal colon (descending and sigmoid colon)	2 (40.0%)	17 (58.6%)	35 (50.0%)	19 (55.9%)	54 (51.9%)
Rectum	1 (20.0%)	2 (6.9%)	8 (11.4%)	3 (8.8%)	11 (10.6%)
Total	5	29	70	34	104

*Includes one tubulovillous adenoma diagnosed in a participant with cancer.

†Includes all adenomas found in all participants with any type of neoplasia.

Appendix 4: Prevalence of non-neoplastic colorectal disease in study participants

Non-neoplastic disease	Primary screening diagnosis (n=229)		
	Number of participants (% of whole population)		
	No Neoplasia (n=157)	Any neoplasia (n=72)	Total (n=229)
Diverticular disease	52 (22.7%)	24 (10.5%)	76 (33.2%)
Unspecified polyp(s)	15 (6.6%)	5 (2.2%)	20 (8.7%)
Hyperplastic polyp(s)	14 (6.1%)	8 (3.5%)	22 (9.6%)
Hemorrhoids	19 (8.3%)	4 (1.7%)	23 (10.0%)
Angiodysplasia	2 (0.9%)	1 (0.4%)	3 (1.3%)
Other	8 (3.5%)	0	8 (3.5%)

Note: up to 4 separate diagnoses were recorded for each participant at colonoscopy