Table 4. Faecal immunochemical test sensitivity, specificity, PPV, and NPV for CRC at various thresholds in participants who completed 1-3 tests and had at least one colonic examination performed, by sex

Sex	FIT threshold (µg/g)	Test	Completed FIT [a]	Tested +ve		CRCs Total cases	CRCs FIT +ve cases	Sensitivity (95% CI)	Specificity (95% CI)	PPV (95% CI)	NPV (95% CI)
			n	n	%	n	n	%	%	%	%
Men	40	1st	3454	246	7.1	13	5	38.5 (13.9 to 68.4)	93.0 (92.1 to 93.8)	2.0 (0.7 to 4.7)	99.8 (99.5 to 99.9)
		2nd [b]	3184	168	5.3	7	4	57.1 (18.4 to 90.1)	94.8 (94.0 to 95.6)	2.4 (0.7 to 6.0)	99.9 (99.7 to 100.0)
		3rd [c]	2892	133	4.6	2	0	0.0 (0.0 to 84.2)	95.4 (94.6 to 96.1)	0.0 (0.0 to 2.7)	99.9 (99.7 to 100.0)
		Cumulative test analysis 2 tests [d]	3430	414	12.1	12	9	75.0 (42.8 to 94.5)	88.2 (87.0 to 89.2)	2.2 (1.0 to 4.1)	99.9 (99.7 to 100.0)
		3 tests [e]	3306	547	16.5	11	9	81.8 (48.2 to 97.7)	83.7 (82.4 to 84.9)	1.6 (0.8 to 3.1)	99.9 (99.7 to 100.0)
		Programme analysis 2 tests [f]	3454	414	12.0	13	9	69.2 (38.6 to 90.9)	88.2 (87.1 to 89.3)	2.2 (1.0 to 4.1)	99.9 (99.7 to 100.0)
		3 tests [g]	3454	547	15.8	13	9	69.2 (38.6 to 90.9)	84.4 (83.1 to 85.6)	1.6 (0.8 to 3.1)	99.9 (99.6 to 100.0)
	30	1st	3454	292	8.5	13	7	53.8 (25.1 to 80.8)	91.7 (90.7 to 92.6)	2.4 (1.0 to 4.9)	99.8 (99.6 to 99.9)
		2nd [b]	3139	202	6.4	5	2	40.0 (5.3 to 85.3)	93.6 (92.7 to 94.4)	1.0 (0.1 to 3.5)	99.9 (99.7 to 100.0)
		3rd [c]	2815	158	5.6	2	1	50.0 (1.3 to 98.7)	94.4 (93.5 to 95.2)	0.6 (0.0 to 3.5)	100.0 (99.8 to 100.0)
		Cumulative test analysis 2 tests [d]	3431	494	14.4	12	9	75.0 (42.8 to 94.5)	85.8 (84.6 to 87.0)	1.8 (0.8 to 3.4)	99.9 (99.7 to 100.0)
		3 tests [e]	3309	652	19.7	11	10	90.9 (58.7 to 99.8)	80.5 (79.1 to 81.9)	1.5 (0.7 to 2.8)	100.0 (99.8 to 100.0)
		Programme analysis 2 tests [f]	3454	494	14.3	13	9	69.2 (38.6 to 90.9)	85.9 (84.7 to 87.1)	1.8 (0.8 to 3.4)	99.9 (99.7 to 100.0)
		3 tests [g]	3454	652	18.9	13	10	76.9 (46.2 to 95.0)	81.3 (80.0 to 82.6)	1.5 (0.7 to 2.8)	99.9 (99.7 to 100.0)
	20	1st	3454	366	10.6	13	8	61.5 (31.6 to 86.1)	89.6 (88.5 to 90.6)	2.2 (0.9 to 4.3)	99.8 (99.6 to 99.9)
		2nd [b]	3067	236	7.7	4	1	25.0 (0.6 to 80.6)	92.3 (91.3 to 93.2)	0.4 (0.0 to 2.3)	99.9 (99.7 to 100.0)

Group	Age	Analysis	Test	N	n	%			Sensitivity % (CI)	Specificity % (CI)	PPV (CI)	NPV (CI)
			3rd c	2714	197	7.3	2	1	50.0 (1.3 to 98.7)	92.8 (91.7 to 93.7)	0.5 (0.0 to 2.8)	100.0 (99.8 to 100.0)
		Cumulative	2 tests d	3433	602	17.5	12	9	75.0 (42.8 to 94.5)	82.7 (81.4 to 83.9)	1.5 (0.7 to 2.8)	99.9 (99.7 to 100.0)
		test analysis	3 tests e	3316	799	24.1	11	10	90.9 (58.7 to 99.8)	76.1 (74.6 to 77.6)	1.3 (0.6 to 2.3)	100.0 (99.8 to 100.0)
		Programme	2 tests f	3454	602	17.4	13	9	69.2 (38.6 to 90.9)	82.8 (81.5 to 84.0)	1.5 (0.7 to 2.8)	99.9 (99.6 to 100.0)
		analysis	3 tests g	3454	799	23.1	13	10	76.9 (46.2 to 95.0)	77.1 (75.6 to 78.5)	1.3 (0.6 to 2.3)	99.9 (99.7 to 100.0)
	10		1st	3454	536	15.5	13	9	69.2 (38.6 to 90.9)	84.7 (83.4 to 85.9)	1.7 (0.8 to 3.2)	99.9 (99.6 to 100.0)
			2nd b	2898	310	10.7	4	2	50.0 (6.8 to 93.2)	89.4 (88.2 to 90.5)	0.6 (0.1 to 2.3)	99.9 (99.7 to 100.0)
			3rd c	2479	246	9.9	1	0	0.0 (0.0 to 97.5)	90.1 (88.8 to 91.2)	0.0 (0.0 to 1.5)	100.0 (99.8 to 100.0)
		Cumulative	2 tests d	3434	846	24.6	13	11	84.6 (54.6 to 98.1)	75.6 (74.1 to 77.0)	1.3 (0.7 to 2.3)	99.9 (99.7 to 100.0)
		test analysis	3 tests e	3325	1092	32.8	12	11	91.7 (61.5 to 99.8)	67.4 (65.7 to 69.0)	1.0 (0.5 to 1.8)	100.0 (99.8 to 100.0)
		Programme	2 tests f	3454	846	24.5	13	11	84.6 (54.6 to 98.1)	75.7 (74.3 to 77.2)	1.3 (0.7 to 2.3)	99.9 (99.7 to 100.0)
		analysis	3 tests g	3454	1092	31.6	13	11	84.6 (54.6 to 98.1)	68.6 (67.0 to 70.1)	1.0 (0.5 to 1.8)	99.9 (99.7 to 100.0)
Women	40		1st	1745	80	4.6	13	3	23.1 (5.0 to 53.8)	95.6 (94.5 to 96.5)	3.8 (0.8 to 10.6)	99.4 (98.9 to 99.7)
			2nd b	1653	65	3.9	9	4	44.4 (13.7 to 78.8)	96.3 (95.3 to 97.2)	6.2 (1.7 to 15.0)	99.7 (99.3 to 99.9)
			3rd c	1537	49	3.2	4	2	50.0 (6.8 to 93.2)	96.9 (95.9 to 97.7)	4.1 (0.5 to 14.0)	99.9 (99.5 to 100.0)
		Cumulative	2 tests d	1733	145	8.4	12	7	58.3 (27.7 to 84.8)	92.0 (90.6 to 93.2)	4.8 (2.0 to 9.7)	99.7 (99.3 to 99.9)
		test analysis	3 tests e	1682	194	11.5	11	9	81.8 (48.2 to 97.7)	88.9 (87.3 to 90.4)	4.6 (2.1 to 8.6)	99.9 (99.5 to 100.0)
		Programme	2 tests f	1745	145	8.3	13	7	53.8 (25.1 to 80.8)	92.0 (90.7 to 93.3)	4.8 (2.0 to 9.7)	99.6 (99.2 to 99.9)
		analysis	3 tests g	1745	194	11.1	13	9	69.2 (38.6 to 90.9)	89.3 (87.8 to 90.7)	4.6 (2.1 to 8.6)	99.7 (99.3 to 99.9)
	30		1st	1745	94	5.4	13	3	23.1 (5.0 to 53.8)	94.7 (93.6 to 95.7)	3.2 (0.7 to 9.0)	99.4 (98.9 to 99.7)
			2nd b	1639	74	4.5	9	4	44.4 (13.7 to 78.8)	95.7 (94.6 to 96.6)	5.4 (1.5 to 13.3)	99.7 (99.3 to 99.9)
			3rd c	1515	62	4.1	4	2	50.0 (6.8 to 93.2)	96.0 (94.9 to 97.0)	3.2 (0.4 to 11.2)	99.9 (99.5 to 100.0)
		Cumulative	2 tests d	1733	168	9.7	12	7	58.3 (27.7 to 84.8)	90.6 (89.2 to 92.0)	4.2 (1.7 to 8.4)	99.7 (99.3 to 99.9)
		test analysis	3 tests e	1683	230	13.7	11	9	81.8 (48.2 to 97.7)	86.8 (85.1 to 88.4)	3.9 (1.8 to 7.3)	99.9 (99.5 to 100.0)
		Programme	2 tests f	1745	168	9.6	13	7	53.8 (25.1 to 80.8)	90.7 (89.2 to 92.0)	4.2 (1.7 to 8.4)	99.6 (99.2 to 99.9)

	analysis	**3 tests** [g]	1745	230	13.2	13	9	69.2 (38.6 to 90.9)	87.2 (85.6 to 88.8)	3.9 (1.8 to 7.3)	99.7 (99.3 to 99.9)
20		**1st**	1745	126	7.2	13	4	30.8 (9.1 to 61.4)	93.0 (91.6 to 94.1)	3.2 (0.9 to 7.9)	99.4 (98.9 to 99.7)
		2nd [b]	1610	95	5.9	9	5	55.6 (21.2 to 86.3)	94.4 (93.1 to 95.5)	5.3 (1.7 to 11.9)	99.7 (99.3 to 99.9)
		3rd [c]	1468	70	4.8	3	2	66.7 (9.4 to 99.2)	95.4 (94.2 to 96.4)	2.9 (0.3 to 9.9)	99.9 (99.6 to 100.0)
	Cumulative	**2 tests** [d]	1736	221	12.7	13	9	69.2 (38.6 to 90.9)	87.7 (86.1 to 89.2)	4.1 (1.9 to 7.6)	99.7 (99.3 to 99.9)
	test analysis	**3 tests** [e]	1689	291	17.2	12	11	91.7 (61.5 to 99.8)	83.3 (81.4 to 85.1)	3.8 (1.9 to 6.7)	99.9 (99.6 to 100.0)
	Programme	**2 tests** [f]	1745	221	12.7	13	9	69.2 (38.6 to 90.9)	87.8 (86.1 to 89.3)	4.1 (1.9 to 7.6)	99.7 (99.3 to 99.9)
	analysis	**3 tests** [g]	1745	291	16.7	13	11	84.6 (54.6 to 98.1)	83.8 (82.0 to 85.5)	3.8 (1.9 to 6.7)	99.9 (99.5 to 100.0)
10		**1st**	1745	206	11.8	13	7	53.8 (25.1 to 80.8)	88.5 (86.9 to 90.0)	3.4 (1.4 to 6.9)	99.6 (99.2 to 99.9)
		2nd [b]	1531	131	8.6	6	3	50.0 (11.8 to 88.2)	91.6 (90.1 to 92.9)	2.3 (0.5 to 6.5)	99.8 (99.4 to 100.0)
		3rd [c]	1358	101	7.4	2	1	50.0 (1.3 to 98.7)	92.6 (91.1 to 94.0)	1.0 (0.0 to 5.4)	99.9 (99.6 to 100.0)
	Cumulative	**2 tests** [d]	1737	337	19.4	13	10	76.9 (46.2 to 95.0)	81.0 (79.1 to 82.9)	3.0 (1.4 to 5.4)	99.8 (99.4 to 100.0)
	test analysis	**3 tests** [e]	1695	438	25.8	12	11	91.7 (61.5 to 99.8)	74.6 (72.5 to 76.7)	2.5 (1.3 to 4.4)	99.9 (99.6 to 100.0)
	Programme	**2 tests** [f]	1745	337	19.3	13	10	76.9 (46.2 to 95.0)	81.1 (79.2 to 82.9)	3.0 (1.4 to 5.4)	99.8 (99.4 to 100.0)
	analysis	**3 tests** [g]	1745	438	25.1	13	11	84.6 (54.6 to 98.1)	75.3 (73.2 to 77.4)	2.5 (1.3 to 4.4)	99.8 (99.4 to 100.0)

PPV, positive predictive value; NPV, negative predictive value; CRC, colorectal cancer; FIT, faecal immunochemical test; +ve, positive; CI, confidence interval.

a. Participants were not included as invited to any subsequent tests following a FIT positive test at the specified threshold.

b. The round at which a participant completed their second FIT; for a particular participant this could be round 2 or round 3.

c. The round at which a participant completed their third FIT; equivalent to round 3 in participants who completed FIT at both prior rounds.

d. Includes participants who completed at least two rounds of FIT or who were FIT positive at round 1; participants were classed as positive if FIT was positive at either of the first two rounds at which they completed FIT.

e. Includes participants who completed all three rounds of FIT or who were FIT positive at any round; participants were classed as positive if FIT was positive at any of the three rounds.

f. Includes participants who completed at least one round of FIT; participants were classed as positive if FIT was positive at either of the first two rounds at which they completed FIT.

g. Includes participants who completed at least one round of FIT; participants were classed as positive if FIT was positive at any of the three rounds.