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Use of fecal immunochemical test in symptomatic patients

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Introduction

- FIT is widely used as an effective preselection test in CRC screening ¹
- Advanced neoplasia is more common in FIT positive screenees than in symptomatic patients
- Evidence suggests a role for FIT to prevent unnecessary colonoscopy in symptomatic patients ²
- Performing two FITs resulted in increased sensitivity in the context of FIT-based screening, however with a reduced specificity ³
- Specificity is less important in a symptomatic population that currently all undergo colonoscopy

1. Schreuders et al, Gut 2015

2. D'Souza et al, Gut 2020

3. Van Roon et al, Clin Gastroenterol Hepatol. 2011



Introduction

Aims

To evaluate the sensitivity for CRC of two FITs in symptomatic patients referred for colonoscopy.



Methods

Participants

- Colonoscopy referral for complaints or anaemia
- Two FITs (FOB-Gold) performed before colonoscopy in different stools
- Complaints reported via questionnaire
- Colonoscopies performed in 10 hospitals
- Participant and endoscopist were blinded for FIT result



Methods

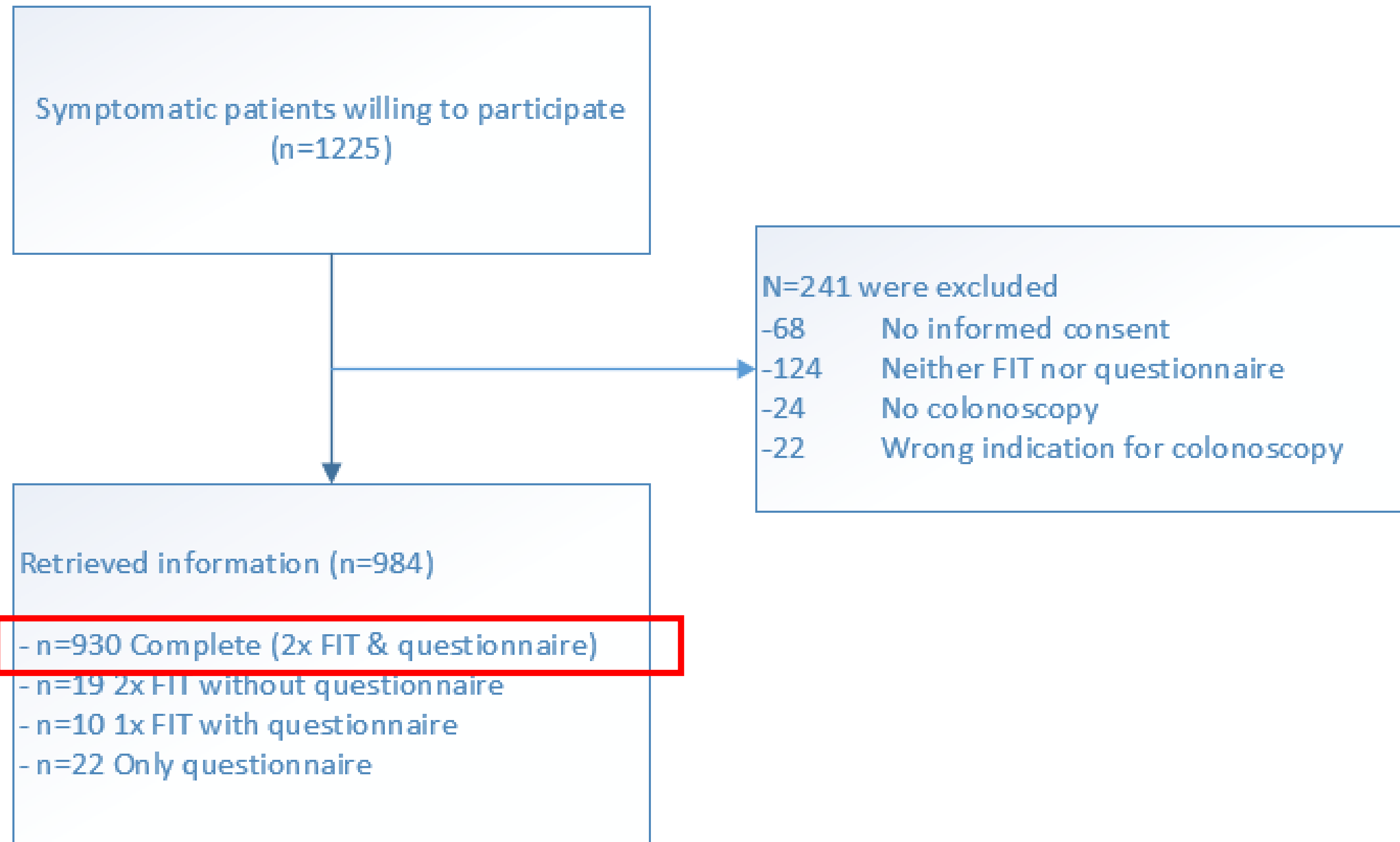
Outcome

- Correlation between two FIT tests
- Sensitivity for CRC (and AN) for participants with negative, discordant and positive test results
- Negative predictive value for CRC (and AN) with 2 FITs



Results

Flowchart



Results

Population

Characteristics	Number of patients (total n=930)
Age	Mean 59,4 years (SD 13.5 years)
Gender (F)	461 (49.6%)
Complaint	
Abdominal pain	660 (71.0%)
Anemia	101 (10.9%)
Rectal bleeding	340 (36.6%)
Change in bowel habits	364 (39.1%)
Anal pain	225 (24.2%)
Tiredness	377 (40.5%)
Weight loss	109 (11.7%)
Anticoagulation use	158 (17.0%)
Smoking	120 (12.9%)
Most advanced lesion at colonoscopy*	
CRC	33 (3.5%)
AA**	70 (7.5%)
ASP***	27 (2.9%)
Non advanced adenoma	193 (20.8%)
Serrated polyp	19 (2.0%)
No lesion	588 (63.2%)

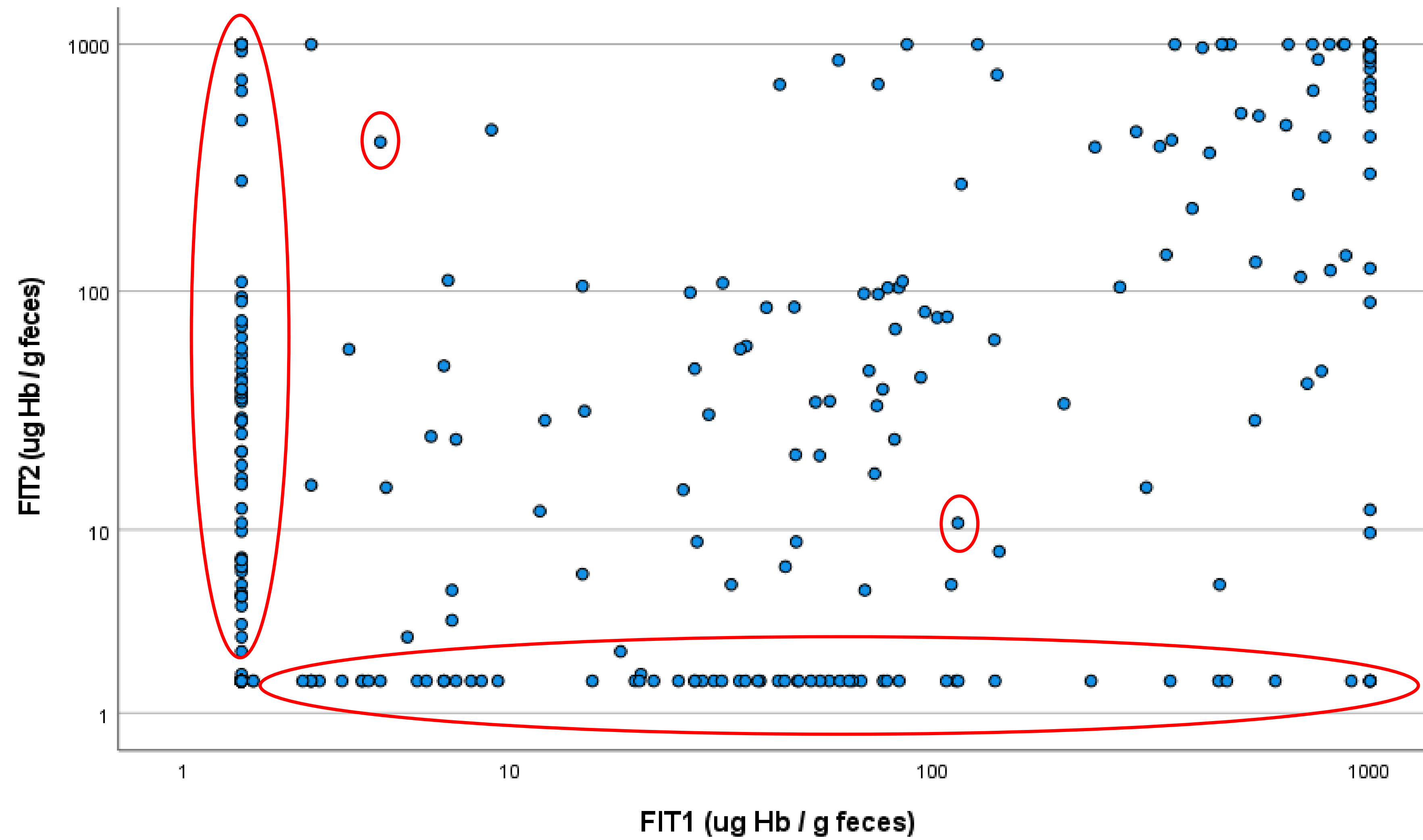
* Pathology based.

** AA was defined as adenoma >10mm and/or high grade dysplasia and/or >25% villous histology

*** ASP was defined as traditional serrated adenoma or sessile serrated lesion with dysplasia or sessile serrated lesion >10mm or hyperplastic polyp >10mm.



Results



Results

FIT

Result	Entire group
Concordant positive	147 (15.8 %)
Discordant result	120 (12.9 %)
Concordant negative	663 (71.3 %)

Negative predictive value CRC = 99.7%

Negative predictive value AA = 95.9%



Conclusion

- Negative predictive value of FIT for CRC is high and can be increased by performing 2 FITs
- Over 70% of colonoscopies can be prevented by using 2 FITs in a symptomatic population
- A significant proportion of advanced neoplasia (mainly advanced adenoma and advanced serrated polyps) is not detected by FIT
- Applicability of FIT in symptomatic patients should be further assessed



Study team

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Statement





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IBD

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 negatieven	9	64,3	64,3	64,3
	discordant	1	7,1	7,1	71,4
	2 positieven	4	28,6	28,6	100,0
	Total	14	100,0	100,0	

