

Summary of colorectal cancer screening methods

	gFOBT	iFOBT	Colonoscopy	Colox
What can be detected	Occult blood in stool, even invisible to the naked eye	Occult blood in stool, even invisible to the naked eye	– Polyps – Colorectal Cancer – Other diseases of the intestine	– Polyps – Colorectal Cancer
Sensitivity	33-50 % (Colorectal Cancer) 9-11 % (Advanced polyps)	60-80 % (Colorectal Cancer) 20-72 % (Advanced polyps)	97-100 % The results quality depends on the person performing the exam and the quality of the bowel preparation	78.1 % (Colorectal Cancer) 52.3 % (Advanced polyps)
Specificity	95 %	Significant differences according to the test : 59-97 %	98-100 %	92,2% (Calculated on patients without any colorectal lesions)
Reduced mortality from bowel cancer	Yes	Yes, indirect evidence on the basis of gFOBT; there are no long-term randomized studies	Yes (attested in randomized studies for sigmoidoscopy)	Potentially yes, indirect evidence based on comparison with iFOBT; however, there are no long-term randomized studies
Reduced incidence	No	Insufficient database	Yes (attested in randomized studies for sigmoidoscopy)	Potentially yes, based on polyp detection performance; however, there are no long-term randomized studies
Examen preparation	Some foods or drugs should not be ingested before the test.	No special preparation needed.	Full bowel prep needed (laxative). Some drugs must be stopped before.	No special preparation needed. Some drugs and substances should not be ingested before the blood draw.
Perform the test	Sampling of 3 successive stool samples	Sampling of a stool sample or several stool samples	- Sedation is usually needed during the examination -Rectal examination - Endoscopic examination of intestine -Polyps ablation if necessary	Sampling of 4 mL of a blood sample
Who performs the test ?	Available at doctor's office or pharmacy. The test is performed by the patient and brought back for analysis.	Available at doctor's office or pharmacy. The test is performed by the patient and brought back for analysis.	Gastroenterologist	Available at doctor's office or medical laboratory. The analysis is performed by the laboratory.
Who can do the exam ?	People over 50 years old, without any particular risk and without symptoms.	People over 50 years old, without any particular risk and without symptoms.	People over 50 years old, without any particular risk and without symptoms. People in a risk group: usually before age 50, after discussion.	People over 50 years old, without any particular risk and without symptoms.
Examination interval	Done every two years	Done every two years	Done every ten years, more often if polyps were found, after discussion with the doctor.	Recommended every two years from Company's estimates based on cost-effectiveness modeling.
Advantages	- Non-invasive exam - No direct injuries - Inexpensive method	- Non-invasive exam - No direct injuries - Inexpensive method	Polyps ablation, which avoids their transformation into colorectal cancer.	- Easy and clean sample collection - Non-invasive exam - No direct injuries - Detection of polyps
Drawbacks	- High number of false positives - Some false negatives	- Depending on the test, High number of false positives - Some false negatives	- Invasive exam method - Relatively complex (preparation and implementation) - Risk of complications (severe bleeding / perforations in a case in a thousand)	- High number of false positives - Some false negatives - higher cost than FOBT
Reimbursement by basic health insurance	On prescription every two years for people aged 50 to 69; the exam is subject to deductible and quota.	On prescription every two years for people aged 50 to 69; the exam is subject to deductible and quota.	On prescription every two years for people aged 50 to 69; the exam is subject to deductible and quota.	Currently not reimbursed
Source	Ligue suisse contre le cancer	Ligue suisse contre le cancer	Ligue suisse contre le cancer	Novigenix