



Part I: Colorectal cancer risk assessment tool to identify patients most likely to benefit from [referral to genetics](#)

- | | YES | NO |
|---|--------------------------|--------------------------|
| 1) Do you have a first-degree relative (mother, father, brother, sister, or child) with any of the following conditions diagnosed before age 50? | | |
| Colon or rectal cancer _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| Cancer of the uterus, ovary, stomach, small intestine, urinary tract (kidney, ureter, bladder), bile ducts, pancreas, or brain _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 2) Have you had any of the following conditions diagnosed before age 50? | | |
| Colon or rectal cancer _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| Colon or rectal polyps _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 3) Do you have three or more relatives with a history of colon or rectal cancer?
(this includes parents, brothers, sister, children, grandparents, aunts, uncles, and cousins) _____ | <input type="checkbox"/> | <input type="checkbox"/> |

The cumulative sensitivity of these three questions to identify patients with characteristics suggestive of hereditary colorectal and who should undergo a more extensive risk assessment is 77%. When all 3 questions were answered “yes”, the tool correctly identified 95% of individuals with germline mutations causing Lynch syndrome. **If a patient answers “yes” to all of these questions a referral to genetics should be offered. If a patient answers “yes” to any of these questions, consider further assessment using the criteria in Part II.**

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Part II: Red Flags to identify patients **at high risk** of **Lynch Syndrome** most likely to benefit from [referral to genetics](#)

Personal History LS Red Flags	Family History LS Red Flags
<p>Consider referring your patient if he/she has:</p> <ul style="list-style-type: none"> ➤ Colorectal cancer (CRC) diagnosis at an early age (<50 years). Higher suspicion of LS if diagnosed <35years. ➤ Endometrial cancer diagnosis at an early age (<50 years) ➤ Multiple primary LS-related cancer diagnoses, regardless of age ➤ A CRC diagnosis <u>and</u> one or more 1st degree relatives with a LS-related cancer, with one of the cancers diagnosed <50 years ➤ A CRC diagnosis <u>and</u> two or more 1st or 2nd degree relatives with LS- related cancers regardless of age ➤ A CRC diagnosis <60 years <u>and</u> histological features suspicious for LS* (excess infiltrating lymphocytes, mucinous/signet cell features, Crohn’s-like reaction), particularly when primary tumour is right sided 	<p>Consider referring your patient if he/she:</p> <ul style="list-style-type: none"> ➤ Has a known LS causing mutation in the family ➤ Meets the revised Amsterdam criteria, meaning he/she has at least three relatives with a cancer associated with LS (Box 1). The following criteria should also be present: <ul style="list-style-type: none"> ➤ One must be a first degree relative of the other two; ➤ At least two successive generations must be affected (autosomal dominant inheritance); ➤ At least one relative with LS-related cancer should be diagnosed before age 50; <p><i>Tumour pathology should be verified when possible and other CRC syndromes should be ruled out</i></p>

LS is the abbreviation for Lynch syndrome

BOX 1: LYNCH SYNDROME-RELATED CANCERS					
✓ Colorectal	✓ Endometrial	✓ Kidney	✓ Gastric	✓ Ovarian	✓ Ureter
✓ Small bowel	✓ Hepato-biliary	✓ Pancreatic	✓ Brain	✓ Sebaceous (adenoma or carcinoma)	

For more information on Lynch Syndrome such as screening recommendations see the complete [GEC-KO Messenger](#) at www.geneticseducation.ca