



Lynch syndrome is a common (1/279) autosomal dominant hereditary cancer predisposition syndrome. LS is associated with an increased lifetime risk for colorectal and endometrial cancers, in addition to cancers of the ovary, stomach, small bowel, pancreas, biliary tract, urothelial tissue and renal pelvis, brain (i.e. glioblastoma), and skin (i.e. sebaceous adenoma or carcinoma, keratoacanthomas). Cancer screening and risk reduction recommendations are affected by genetic test results.

Colorectal cancer (CRC) cancer screening recommendations

Gene	CRC screening recommendations
MLH1	Colonoscopy starting at age 20–25 years. If the youngest CRC diagnosis is younger than 25 years, begin screening by colonoscopy 2–5 years prior to the earliest CRC. Repeat every 1–2 years.
MSH2/ EPCAM	
MSH6	Colonoscopy starting at age 30–35 y. If the youngest CRC diagnosis is younger than 30 years, begin screening 2–5 years prior to the earliest CRC diagnosis. Repeat every 1–3 years.
PMS2	

### OC risk reduction recommendations

Risk reduction bilateral oophorectomy (RRBSO) may reduce the incidence of ovarian cancer. The timing of a RRBSO should be tailored to each patient, taking into account factors such as completion of childbearing, existing medical conditions, family history, and the specific LS gene involved.

**OC Cancer risk reduction** 

Gene	recommendations	
MLH1	RRBSO may be considered starting at age 40.	
MSH2/ EPCAM		
MSH6	Opportunistic salpingectomy may be considered starting at age 40, with delayed bilateral oophorectomy starting at age 50.	
PMS2	BSO may be considered starting at age 50.	
Urothelial (renal pelvis, ureter, and/or bladder)		

## Urothelial (renal pelvis, ureter, and/or bladder cancer screening

There are no clear evidence-based screening recommendations for urothelial cancers in those with LS.

For those with a family history of urothelial cancer, consider annual urinalysis for cytology starting at age 30–35.

Individuals with P/LP variants in MSH2/EPCAM appear to be at a higher lifetime risk than those with other LS-associated gene variants

### CRC risk reduction recommendations

The Canadian consensus statement recommends considering the use of daily aspirin, at a minimum dose of 81mg, to reduce the risk of colorectal cancer in those with LS. Dosage and duration are still being studied, and these should be determined on an individual basis. Discussions about the benefits contraindications of aspirin are important.

# Endometrial cancer (EC) and Ovarian cancer (OC) screening recommendations

Screening is generally not recommended as there is little evidence to support it reduces morbidity and mortality in those with LS. People with LS can be educated about the signs and symptoms of EC and OC and be encouraged to promptly seek medical attention if present.

### EC risk reduction recommendations

The timing of a total hysterectomy can be tailored to each patient, taking into account factors such as completion of childbearing, existing medical conditions, family history, and the specific LS gene involved.

involved.		
Gene	EC Cancer risk reduction recommendations	
MLH1		
MSH2/ EPCAM	Hysterectomy may be considered starting at age 40.	
MSH6		
PMS2	Hysterectomy may be considered starting at age 50.	
Upper gastrointestinal (GI) cancer screening		

Gene	Upper GI screening recommendations
MLH1	Consider upper endoscopy (esophagogastroduodenoscopy) starting at age 30–40 and repeat every 2–4 years. Consider earlier based on family history.
MSH2/ EPCAM	
MSH6	

PMS2

### Additional screening recommendations

Screening for other cancers (e.g. pancreas, breast) would be based on personal and family history.



