

Clinician Management Resource for *PMS2* (Lynch syndrome)

This overview of clinical management guidelines is based on this patient's positive test result for a pathogenic or likely pathogenic variant in the *PMS2* gene. Unless otherwise stated, medical management guidelines used here are limited to those issued by the National Comprehensive Cancer Network® (NCCN®)¹ in the U.S. Please consult the referenced guideline for complete details and further information.

Clinical correlation with the patient's past medical history, treatments, surgeries and family history may lead to changes in clinical management decisions; therefore, other management recommendations may be considered. Genetic testing results and medical society guidelines help inform medical management decisions but do not constitute formal recommendations. Discussions of medical management decisions and individualized treatment plans should be made in consultation between each patient and his or her healthcare provider, and may change over time.

SCREENING/SURGICAL CONSIDERATIONS ¹	AGE TO START	FREQUENCY
Colorectal Cancer		
Colonoscopy	30-35 years old (or 2-5 years prior to the earliest colorectal cancer in the family, if it is diagnosed before 30 years)	Every 1-3 years [^]
Consider daily aspirin to reduce future risk of colorectal cancer, including a discussion of risks and benefits. Patients with <i>PMS2</i> -associated Lynch syndrome may be less likely to experience significant benefit.	Individualized	N/A
Endometrial (Uterine) Cancer		
Encourage prompt response to symptoms (e.g. abnormal uterine bleeding, postmenopausal bleeding).	Individualized	Individualized
Consider screening via endometrial biopsy. Routine endometrial cancer screening does not have proven benefit.	30-35 years old	Every 1-2 years
Consider the option of risk-reducing hysterectomy.	Hysterectomy with bilateral salpingo-oophorectomy: starting at 50 years old	N/A
Transvaginal ultrasound may be considered in post menopausal patients. ^{^^}	Individualized	Individualized
Consider risk-reduction agents, including oral contraceptive pills and progestin intrauterine systems.	Individualized	Individualized
Other Cancer Types		
Data are insufficient to provide cancer risk estimates or cancer surveillance/ risk reduction recommendations beyond those for colorectal cancer and endometrial cancer. Surveillance regimens for cancers other than colorectal cancers or endometrial cancers should be individualized based on personal and family cancer history and clinical judgement.	Individualized	N/A
Reproductive Options		
For patients of reproductive age, counsel about options for prenatal diagnosis and assisted reproduction, including pre-implantation genetic testing.	Individualized	N/A
If both parents are carriers of a pathogenic/likely pathogenic variant in <i>PMS2</i> , counsel for risk of a rare autosomal recessive condition called constitutional mismatch repair deficiency (CMMRD).	Individualized	N/A

SCREENING/SURGICAL CONSIDERATIONS ¹	AGE TO START	FREQUENCY
Risk to Relatives		
Advise patients to tell their relatives about possible inherited cancer risk, options for risk assessment, and management. Recommend genetic counseling and consideration of genetic testing for at-risk relatives.	Individualized	N/A

^A Individuals who may benefit from a shorter screening interval (ie, 1-year vs 2-year) include those with risk factors such as a history of colorectal cancer or adenoma, male sex, and age over 40 years.

^{AA} Transvaginal ultrasound is not highly sensitive or specific for endometrial cancer screening.

1. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Genetic/Familial High-Risk Assessment: Colorectal, Endometrial, and Gastric. v1.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. Accessed June 16, 2025. To view the most recent and complete version of the guideline, go online to NCCN.org. NCCN makes no warranties of any kind whatsoever regarding their content, use or application and disclaims any responsibility for their application or use in any way.

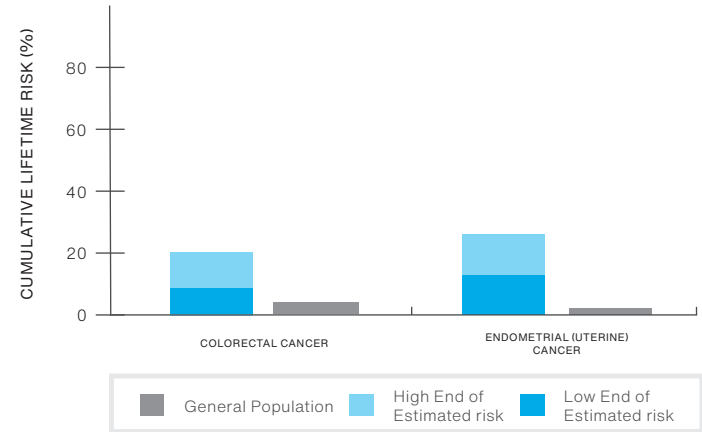
Understanding Your Positive *PMS2* Genetic Test Result

INFORMATION FOR PATIENTS WITH A PATHOGENIC OR LIKELY PATHOGENIC VARIANT

6 Things To Know

1	Result	Your testing shows that you have a pathogenic or likely pathogenic variant in the <i>PMS2</i> gene.
2	Lynch syndrome	People with pathogenic or likely pathogenic <i>PMS2</i> variants have Lynch syndrome, previously known as hereditary non-polyposis colorectal cancer (HNPCC).
3	Cancer risks	You have an increased chance to develop colorectal, endometrial/uterine, stomach, ovarian, small bowel, and other types of cancer.
4	What you can do	Risk management decisions are very personal. There are options to detect cancer early or lower the risk to develop cancer. It is important to discuss these options with your healthcare provider and decide on a plan that works for you.
5	Other Medical Concerns	Individuals with pathogenic or likely pathogenic <i>PMS2</i> variants may have an increased risk to have a child with constitutional mismatch repair deficiency (CMMRD), but only if their partner also carries a pathogenic or likely pathogenic variant in the <i>PMS2</i> gene. CMMRD is a multisystem disorder characterized by specific physical features and an increased risk for hematologic malignancies, brain tumors, and early-onset Lynch syndrome-associated cancers.
6	Family	Family members may also be at risk – they can be tested for the pathogenic or likely pathogenic <i>PMS2</i> variant that was identified in you. It is recommended that you share this information with family members so they can learn more and discuss this with their healthcare providers.

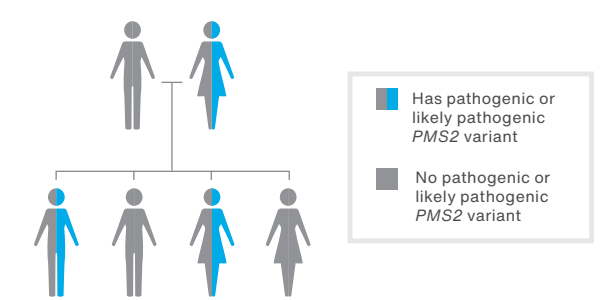
PMS2 Lifetime Cancer Risks*



* Because risk estimates vary in different studies, only approximate risks are given. Cancer risks will differ based on individual and family history.

PMS2 in the Family

There is a 50/50 random chance to pass on the pathogenic or likely pathogenic *PMS2* variant to each of your children.



RESOURCES

- AliveAndKickn (Patient Advocacy Group) aliveandkickn.org
- Lynch Syndrome International lynchcancers.com
- National Society of Genetic Counselors nsgc.org
- Canadian Association of Genetic Counsellors cagc-accg.ca

Please discuss this information with your healthcare provider. The cancer genetics field is continuously evolving, so updates related to your *PMS2* result, medical recommendations, and/or potential treatments may be available over time. This information is not meant to replace a discussion with a healthcare provider, and should not be considered or interpreted as medical advice.