

Client Management Resource for individuals with **two** (biallelic) likely pathogenic or pathogenic mutations in *MBD4*

This overview of clinical management guidelines is based on this patient's positive test result for **two** (biallelic) *MBD4* gene mutations. Unless otherwise stated, medical management guidelines used here are limited to those issued by the National Comprehensive Cancer Network (NCCN) 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 decision 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.

| SCREENING/SURGICAL CONSIDERATIONS ¹ | AGE TO START | FREQUENCY |
|--|--------------------------------------|-----------------------------|
| Colorectal Cancer^{*,^} | | |
| High quality colonoscopy | 18-20 years old or date of diagnosis | Every 2-3 years if negative |
| Acute Myeloid Leukemia[^] | | |
| Complete blood count (CBC) | At diagnosis | Individualized |
| Uveal Melanoma^{^^} | | |
| Annual ophthalmologic exam | At diagnosis | Individualized |

* The colorectal polyposis phenotype and colorectal cancer risk for individuals with a heterozygous *MBD4* pathogenic variant is unknown.

[^] For patients with biallelic pathogenic or likely pathogenic variants.

^{^^} For patients with biallelic or heterozygous pathogenic or likely pathogenic variants.

1. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Genetic/Familial High-Risk Assessment: Colorectal. V2.2023. © National Comprehensive Cancer Network, Inc. 2023. All rights reserved. Accessed February 23, 2024. 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 *MBD4* Genetic Test Result

INFORMATION FOR PATIENTS WITH TWO PATHOGENIC MUTATIONS OR VARIANTS, LIKELY PATHOGENIC

5 Things To Know

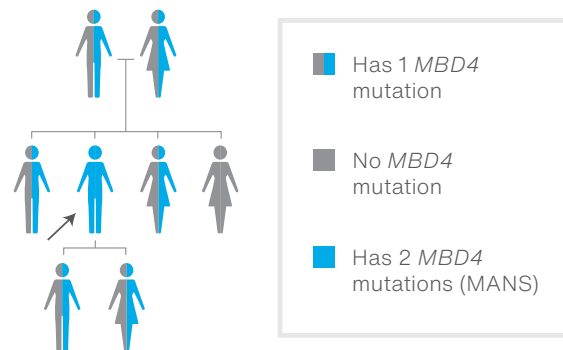
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|---|--|---|
| 1 | Result | Your testing shows that you have two pathogenic mutations or variants that are likely pathogenic in the <i>MBD4</i> gene. |
| 2 | <i>MBD4</i> -associated neoplasia syndrome | People with two <i>MBD4</i> mutations have <i>MBD4</i> -associated neoplasia syndrome (MANS). |
| 3 | Cancer risks and other medical concerns | You have an increased chance to develop gastrointestinal polyps, colorectal cancer, a blood disorder known as myelodysplastic syndrome, and/or a type of blood cancer called acute myelogenous leukemia (AML). |
| 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 doctor and decide on a plan that works for you. |
| 5 | Family | Family members may also be at risk – they can be tested for the <i>MBD4</i> mutations that were 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. |

MBD4 Mutations in the Family

You have two *MBD4* mutations, therefore, any children you have will inherit one of them. Your children are not at risk to have *MBD4*-associated neoplasia syndrome unless your partner also has at least one *MBD4* mutation.

Each of your parents carries at least one *MBD4* mutation. This means your siblings have a 25% chance to have *MBD4*-associated neoplasia syndrome, a 50% chance to inherit one *MBD4* mutation, and a 25% chance to inherit no *MBD4* mutations.

The image to the right shows that everyone can carry and pass on these mutations, regardless of their sex at birth.



RESOURCES

- National Society of Genetic Counselors [nsgc.org](https://www.nsgc.org)
- Canadian Association of Genetic Counsellors [cagc-accg.ca](https://www.cagc-accg.ca)

Please discuss this information with your healthcare provider. The cancer genetics field is continuously evolving, so updates related to your *MBD4* 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.