Ambry Genetics®

Understanding Your *MSH3* Carrier Genetic Test Result

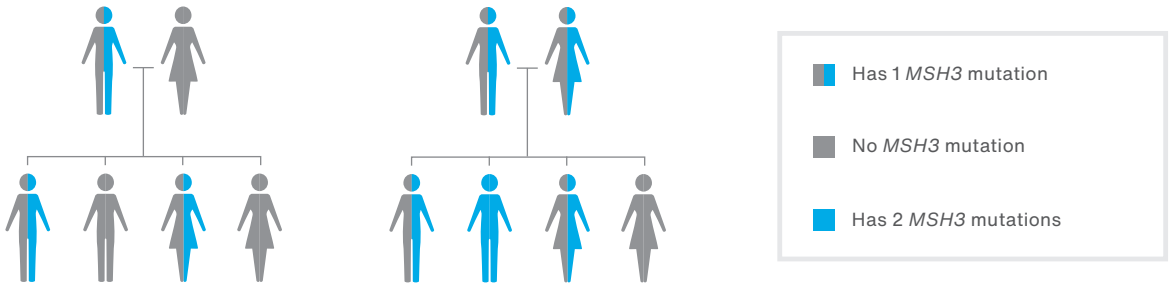
INFORMATION FOR PATIENTS WITH ONE **PATHOGENIC MUTATION** OR **VARIANT, LIKELY PATHOGENIC**

5 Things To Know

1	*MSH3* mutation	Your testing shows that you have one pathogenic mutation or variant that is likely pathogenic in the *MSH3* gene.
2	Carrier	People with **one** *MSH3* mutation are carriers. People with **two** *MSH3* mutations have an increased chance to develop colorectal polyps and colorectal cancer. Your result shows you do not have this increased risk.
3	Cancer risks	There is insufficient evidence to suggest an increased cancer risk above that of the general population for people with only one pathogenic *MSH3* mutation.
4	What you can do	It is important to discuss risk management options with your doctor, and decide on a plan that best manages your cancer risks. Risk management decisions are very personal. It is important to discuss 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 *MSH3* mutation that was found in you, as well as other *MSH3* mutations. It is recommended that you share this information with your family members so they can learn more and discuss with their healthcare providers.

MSH3 Mutations in the Family

There is a 50/50 random chance to pass on the *MSH3* mutation to your sons and daughters. If your partner happens to carry one *MSH3* mutation, there is also a 25% chance that you will both pass on the *MSH3* mutation to your child (who will have an increased risk for colorectal cancer), and a 25% chance that neither mutation would be passed on to your child. The images below show that both men and women can carry and pass on these mutations.



Please discuss this information with your healthcare provider. The cancer genetics field is continuously evolving, so updates related to your *MSH3* 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.

Reach Out	RESOURCES	Ambry's Hereditary Cancer Site for Families patients.ambrygen.com/cancer Genetic Information Nondiscrimination Act (GINA) ginahelp.org National Society of Genetic Counselors nsgc.org Canadian Society of Genetic Counsellors cagc-accg.ca

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