Memorial Sloan Kettering Cancer Center

PATIENT & CAREGIVER EDUCATION

About the APC I1307K Gene Mutation

This information explains how having the I1307K mutation in the *APC* gene may affect you and your family.

In this resource, the word “family” means people related to you by blood. They’re not related to you through marriage or adoption. We also call these family members your blood relatives.

Your *APC* gene normally helps prevent cancers. I1307K is the name of a specific mutation in the *APC* gene.

What is my cancer risk if I have the *APC* I1307K mutation?

The *APC* I1307K mutation slightly increases your risk of getting polyps (growths of tissue) in your colon and rectum. These polyps can lead to an increased risk for colorectal (colon and rectal) cancer.

The *APC* I1307K mutation is different from other mutations in the *APC* gene. Most mutations in the *APC* gene are rare and cause a condition called Familial Adenomatous Polyposis (FAP). The *APC* I1307K mutation doesn’t cause FAP or increase the risk for polyps or cancer as much as other *APC* gene mutations.

The *APC* I1307K mutation is common. Around 6% to 10% of people with Ashkenazi (Eastern European) Jewish ancestry have this mutation. People of non-Jewish ancestry can also have this mutation.

As we learn more about these mutations, we may learn they increase the

risk for other types of cancers. Your genetic counselor will give you more information about your cancer risk if you have a mutation.

To learn more, read *Frequently Asked Questions About Hereditary Cancers:* www.mskcc.org/genetics/faqs-hereditary-cancer

What can I do about my cancer risk if I have the *APC* I1307K mutation?

If you have the I1307K mutation, your genetic counselor will review your results and your personal and family history of cancer and give you recommendations.

They may recommend you start having cancer screenings at a younger age, have them more often than most people, or get specialized screenings to help find cancer as early as possible.

Some examples of these cancer screenings include having colonoscopies starting at an earlier age and more often than most people.

Your genetic counselor will also talk with you about whether there are any other screening or prevention options that may be right for you.

What does the *APC* I1307K mutation mean for my blood relatives?

If you have a mutation, your biological parents, siblings, and children each have a 50% chance of having the same mutation. Your distant family members may also be at risk for having the same mutation.

Males and females have an equal chance of passing down a mutation in their family. You only need to inherit a mutation from one parent to have an increased risk for cancer.

Your genetic counselor will review your family history and talk with you about whether they recommend genetic testing for your blood relatives.

What happens if I do not have the *APC* I1307K mutation?

If you don’t have the I1307K mutation, your genetic counselor will review your personal and family history and talk with you about the general cancer screening guidelines you should follow.

Contact information

If you have any questions or concerns, talk with a genetic counselor in the Clinical Genetics Service. You can reach them Monday through Friday from 9 a.m. to 5 p.m. at 646-888-4050.

For more resources, visit www.mskcc.org/pe to search our virtual library.

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