UT Southwestern Harold C. Simmons Comprehensive Cancer Center | NCI Designated Comprehensive Cancer Center

APC I1307K Mutation

What You Should Know About the *APC* I1307K Mutation

The I1307K mutation identified in the *APC* gene is a well-known mutation and is found in approximately 10% of the Ashkenazi Jewish population. Individuals with *APC* I1307K mutations have an increased chance to develop colorectal cancer.

This specific mutation is **not** associated with Familial Adenomatous Polyposis (FAP), which is caused by other mutations in the *APC* gene.

Cancer Risks Associated with the *APC* I1307K Mutation

Based on some literature, individuals of Ashkenazi Jewish ancestry who have this mutation have a 1.5-1.9 times greater risk of developing colon cancer (~6.3-7.9% lifetime risk) compared to the general population (~4.5% lifetime risk). However, there is other literature that suggests there may be no increased risk in individuals with this mutation.

Risks to Family Members

The *APC* I1307K mutation is inherited in an autosomal dominant fashion. This means that children, brothers, sisters, and parents of individuals with an *APC* I1307K mutation have a 1 in 2 (50%) chance of having the mutation as well. Both males and females can inherit a familial *APC* I1307K mutation and can pass it on to their children.

Managing Cancer Risks

- Colonoscopies starting at age 40, repeating minimally every 5 years
- If an individual has a first-degree relative diagnosed with colorectal cancer, begin colonoscopies at age 40, or 10 years earlier than the diagnosis in the relative (whichever is younger), repeating at least every 5 years

Last updated 01/09/2020

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