



Understanding My KRAS-Variant Test Results

If you have been tested for the KRAS-variant, understanding what your results mean *for you* is the first step in protecting your health. Below is a list of factors that should be considered, based on one's test result and medical history. The following information is based on the latest research on the KRAS-variant and is intended for educational purposes; this information is not a substitute for seeking appropriate medical follow-up care from your healthcare provider. (For more information check out our [publications page](#).)

I have the KRAS-variant but I've never had cancer.

- Knowing you have the KRAS-variant puts you in the best position to protect your health. While studies suggest that having the KRAS-variant means you are at an increased risk of developing certain types of cancers in the future, knowing you are positive allows you to take preventive actions to avoid these cancers, or find the most effective treatments if you do develop any of them.
- You and your doctor have the opportunity to manage screening and prevention for cancers associated with this variant. This may mean working with your doctor to get screened more frequently and at higher levels. Women who are postmenopausal or who do not plan to have children may opt to have outpatient surgery to remove their chance of developing ovarian cancer.
- If you smoke, it's especially important to consider strategies for stopping, as smoking further elevates your risk for multiple cancer types, especially lung cancer.
- If you are planning to get a hysterectomy, you may want to talk to your doctor about also getting an oophorectomy, which means removing your fallopian tubes and ovaries, and will remove all risk of ovarian cancer.

I have the KRAS-variant and have been diagnosed with breast cancer.

- Your positive test result may be the genetic explanation of your cancer.
- Many women live in fear of passing "genetic cancer risk" on to their children. Knowing whether or not a family member's cancer was due to known inherited factors can help to alleviate this anxiety, as children have a 50% chance of NOT inheriting the marker and are thus then not at increased risk. If your children are tested and are positive, this information will allow them to take steps to protect themselves.
- Knowing you have the variant allows you to protect yourself from other second cancers related to the KRAS-variant, particularly ovarian cancer. This may mean working with your doctor to get screened more frequently and at higher levels.
- If you smoke, it's especially important to consider strategies for stopping, as smoking further elevates your risk for multiple cancer types, especially lung cancer.
- Certain types of chemotherapy are less effective for individuals with the KRAS-variant. It is important for your doctor to know about your test result as it could impact your treatment if you are to need it in the future.

I have the KRAS-variant and have been diagnosed with ovarian cancer.

- Your positive test result may be the genetic explanation of your cancer.
- Many women live in fear of passing "genetic cancer risk" on to their children. Knowing whether or not a family member's cancer was due to known inherited factors can help to alleviate this anxiety, as children have a 50% chance of NOT inheriting the marker and are thus then not at increased risk. If your children are tested and are positive, this information will allow them to take steps to protect themselves.
- Knowing you have the variant allows you to protect yourself from other second cancers related to the KRAS-variant, particularly breast cancer. This may mean working with your doctor to get screened more frequently and at higher levels.
- If you smoke, it's especially important to consider strategies for stopping, as smoking further elevates your risk for multiple cancer types, especially lung cancer.
- Individuals with the KRAS-variant often respond differently to certain forms of chemotherapy, particularly platinum chemotherapy, the most common treatment for ovarian cancer. It is important for your doctor to know about your test result as it could eventually impact your therapy sequencing and intensity of chemotherapy, which is currently being studied.

I don't have the KRAS-variant and I've have never been diagnosed with cancer.

- If you have a family history of breast or ovarian cancer (your family is a HBOC family) and you are also negative for BRCA, your test suggests that you might not have inherited a genetic risk for breast and ovarian cancer.
- If you do not have other known cancer-causing mutations, your test result indicates you are at a lower risk of developing ovarian, breast or lung cancer than the general population.

I don't have the KRAS-variant but I've been diagnosed with breast or ovarian cancer.

- A negative test result does not mean that there is no genetic explanation for your cancer. It only indicates that it was not the KRAS-variant.