

Colorectal Cancer Immunohistochemistry testing (IHC)

What is IHC testing?

When you have surgery, the tumor from your colon or rectum will be closely studied. A tumor is a growth, which may or may not be cancer. The results will be given to your doctor in a pathology report about one week after your surgery. This pathology report helps the doctor to know:

- The size of the tumor
- If the tumor was cancer
- If the cancer has spread

Immunohistochemistry testing (IHC) is an important test for the evaluation of colon and rectal cancers. The test is used to determine if you may have a hereditary form of cancer known as Lynch syndrome. Hereditary cancers are those that run in families. People who have Lynch syndrome have a high chance of having more than one cancer in their lifetime, may have cancer at a younger age (under 60), and/or have a family history of certain cancers (colon, rectal, endometrial, ovarian, and ureter). Their close relatives may have Lynch syndrome and the associated increased risk for cancer.

What does the IHC test evaluate?

IHC tests for four proteins in the tumor. Proteins are vital substances that help keep your body healthy. The proteins evaluated with the IHC test are present in normal cells. The proteins may be absent in abnormal or cancerous cells. The IHC test looks for these proteins in the tumor:

- MLH1
- PMS2
- MSH2
- MSH6

What do the results of IHC mean?

➤ **All four proteins are present in your tumor.**

This result occurs about 80 percent of the time. This result means that you have the most common type of colon or rectal cancer. Your doctors will decide how well you will do based on the stage of your cancer at diagnosis. This also means that you most likely do *not* have Lynch syndrome.

➤ **One or more of the proteins is absent in your tumor.**

This result occurs about 20 percent of the time. This result means that you have the less common type of colon or rectal cancer. Your chance of having a good outcome is better than someone with all four proteins present. This result also means that you may have Lynch syndrome. Your doctor will ask you to schedule an appointment with St. Vincent Cancer Genetics Risk Assessment. Here, you will learn more about your results, share your family history and discuss the possibility of additional testing.

What if my tumor does not have some of the proteins?

➤ **MLH1 and PMS2 are absent.**

This result will occur 15 percent of the time. Most people (4 out of 5) with absent MLH1 and PMS2 do not have Lynch syndrome. If MLH1 and PMS2 are absent, it may be hard difficult to determine if you have Lynch syndrome. Your doctor may recommend that you schedule an appointment with St. Vincent Cancer Genetics Risk Assessment for further evaluation.

➤ **PMS2 alone, MSH2, or MSH6 are absent.** These results will occur only 5 percent of the time. Most people with these results have Lynch syndrome. It is very important that anyone who receives one of these results schedules an appointment with St. Vincent Cancer Genetics Risk Assessment.

Will my insurance cover genetic testing?

➤ **The genetic counseling session** is covered by many insurance companies. Genetic Counseling is billed under the CPT code for genetic counseling (96040). You may want to call your insurance ahead of your visit to determine if this CPT code is covered by your plan, although our office will attempt to determine if a pre-certification is necessary for your visit. Medicare does not cover genetic counseling, although it often covers genetic testing.

➤ We cannot establish preauthorization for **genetic testing** until we assess medical and family history during our initial genetic counseling session, as this information is important to determine coverage. We do recommend that you find out whether or not your deductible has been met, since the out of pocket cost may be higher with an unmet deductible. You also can find out from your insurance company whether or not genetic testing is a covered benefit. As long as there is no exclusion in your policy, testing is usually covered, depending on medical necessity and other criteria set forth by the insurance company.

If you have questions about your IHC results or to make an appointment with St. Vincent Cancer Genetics, please call (317) 338-7475 (RISK).

