Immunohistochemistry (IHC) testing is done on all surgically removed colorectal (colon and rectal) cancers at Huntsman Cancer Institute. IHC testing helps find out if you may have a hereditary condition called Lynch syndrome. This factsheet provides information about IHC testing and what the results could mean for you and your family.

What Is IHC Testing?
IHC testing looks for four proteins in your tumor. These proteins help your body’s cells work properly. About 80% of IHC tests are normal, which means that all four proteins are present in the cancer cells. IHC tests are abnormal about 20% of the time. In these cases, one or more of the proteins are missing.

Why Is IHC Testing Important?
Most colorectal cancers occur due to chance. However, 5 to 10% of colorectal cancers occur because of an inherited cancer risk. It is important to identify people with an inherited cancer risk because they and their families can greatly benefit from increased cancer screening and prevention.

The most common cause of hereditary colorectal cancer is called Lynch syndrome. IHC testing can help identify people with this condition. This test cannot confirm a diagnosis, but having an abnormal IHC test result may mean that a person has Lynch syndrome, and further testing is recommended to know for sure.

What Is Lynch Syndrome?
Lynch syndrome is a genetic condition that runs in families. This means that close family members may also have it. A person with Lynch syndrome has a high risk of developing more than one cancer in his or her lifetime. Lynch syndrome also raises a person’s risk of developing cancer at a younger age.

Families with Lynch syndrome have a higher risk of developing several types of cancer, including colon, rectal, endometrial, ovarian, stomach, and urinary tract cancers. Frequent cancer screening is recommended for people with Lynch syndrome in order to detect cancer as early as possible, when it can be treated most effectively. Screening may also help find precancerous changes, and if they are treated, cancer can even be prevented.

How Will I Receive My Results?
If your results show you are not at high risk for Lynch syndrome:
You will receive a letter informing you of this result. Any person with a close relative (parent, sibling, or child) with colon cancer does have a higher-than-average risk for developing colon cancer even without Lynch syndrome. We encourage your family members to tell their doctors of your colon cancer diagnosis and to discuss appropriate screening recommendations.

IHC testing does not give information about all forms of hereditary colon cancer. If your personal or family history raises concerns for an inherited cancer risk, your doctor may refer you to a genetic counselor.

If your results show you are at high risk for Lynch syndrome:
The Family Cancer Assessment Clinic will call you to schedule a visit. It is very important that you attend this appointment. A genetic counselor and doctor will discuss further testing options to find out if you have Lynch syndrome and can answer any questions you may have.

If you have questions about IHC testing or wish to schedule an appointment with the Family Cancer Assessment Clinic, please call 801-587-9555.