Simple billing, no surprises

Within the United States

INSURANCE

You won't need to contact your insurance company to find out if testing is covered or to obtain reimbursement; Invitae will work directly with them to coordinate coverage and payment. Typically patients pay no more than $100 out of pocket for one of our tests. If you receive a bill for more than $100, please call us to discuss payment options. For testing related to a personal or family history of breast, ovarian, colorectal, or uterine cancer (also referred to as HBOC and Lynch syndrome), Invitae offers an out-of-pocket cost estimator, accessible at www.invitae.com/patient-billing.

PATIENT PAY

You have the option to pay $250 for your hereditary cancer genetic testing. This option requires upfront payment before test results are released. In addition, your clinician must place the order online and provide your e-mail address so we can send you a link to pay online using a credit card.

MEDICARE & FINANCIAL ASSISTANCE

Invitae accepts Medicare and Medicaid. We may also be able to offer testing at limited or no expense to those who qualify for need-based assistance.

For further information, please contact Client Services at clientservices@invitae.com or 800-436-3037.

Outside the United States

COVERED TESTING

In some countries, genetic testing may be covered by your healthcare system or a third-party insurer. Please discuss with your healthcare provider.

PATIENT PAY

When covered testing is not available through your healthcare system or a third-party insurer, you have the option to pay $250 USD for your genetic testing. This option requires upfront payment before test results are released. In addition, your clinician must place the order online and provide your e-mail address so we can send you a link to pay online using a credit card.

For further information about testing outside the US, please contact Global Support at globalsupport@invitae.com or for a list of local contact numbers outside of the US, please visit www.invitae.com/contact.

About us

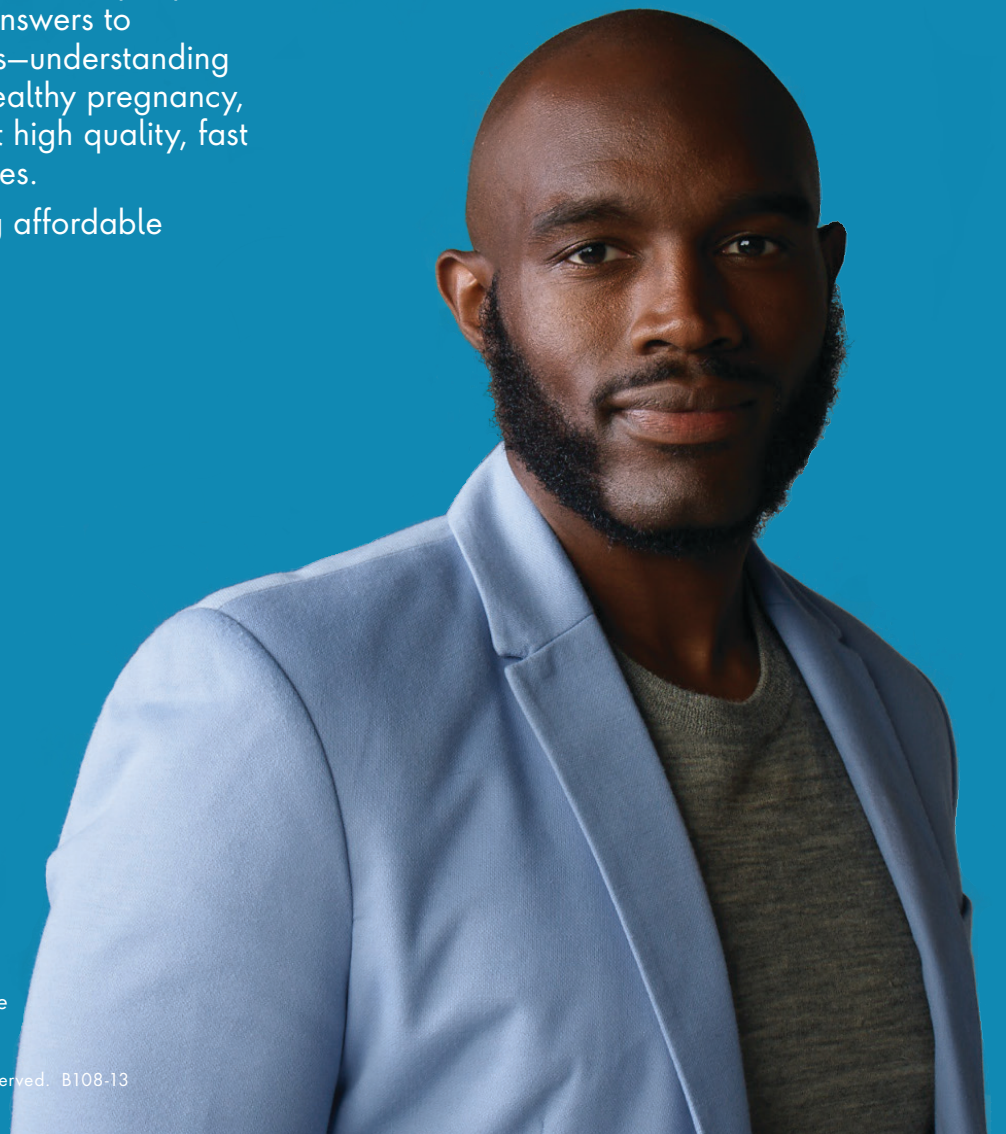
Invitae is a genetics company whose mission is to bring comprehensive genetic information into mainstream medicine to improve healthcare for billions of people. Invitae testing provides answers to essential health questions—understanding disease risk, guiding a healthy pregnancy, or finding a diagnosis—at high quality, fast turnaround, and low prices.

We strive to make testing affordable and accessible.

This guide applies only to gene and panel testing; for exome testing please see the Invitae exome patient guide.

INVITAE

Understanding hereditary colorectal cancer



The genetics of hereditary colorectal cancer

Colorectal cancer is the third most commonly diagnosed cancer in both men and women. Approximately 5 to 10 percent of patients with colorectal cancer have a pathogenic genetic variant that increases their risk of developing the disease. Hereditary colorectal cancer is generally divided into two types:

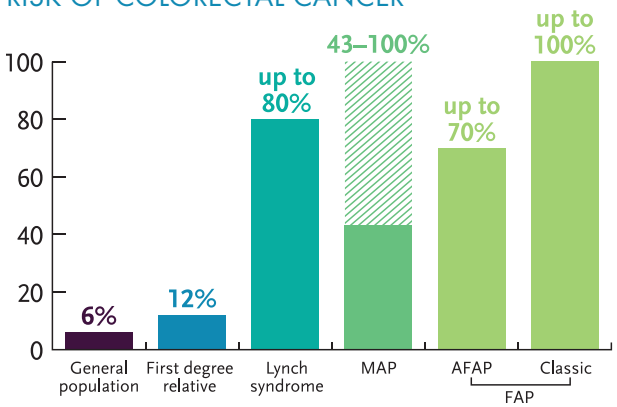
LYNCH SYNDROME

Lynch syndrome (also known as hereditary nonpolyposis colorectal cancer syndrome) is the most common cause of hereditary colorectal cancer. Approximately 1 in 400 people have a genetic variant which can cause Lynch syndrome. These variants can increase a person's lifetime risk of developing colorectal cancer up to 80 percent and can also increase the risk of developing other cancers including uterine, ovarian, stomach, pancreatic, and kidney cancer.

POLYPOSIS SYNDROMES

Polyposis syndromes are characterized by the development of numerous precancerous polyps (small clumps of cells that forms on the lining of the colon). Polyposis syndromes that can be inherited include familial adenomatous polyposis (FAP), which is caused by a variant in the APC gene; attenuated familial adenomatous polyposis (AFAP), which is a subtype of classic FAP; and MUTYH-associated polyposis syndrome (MAP), which is caused by a variant in the MUTYH gene. Genetic variants in genes related to polyposis syndromes can also increase the risk of other cancers including stomach, small bowel, pancreatic, and thyroid cancer.

RISK OF COLORECTAL CANCER



Who should consider genetic testing?

Genetic testing may be appropriate if you have:

☐ Colorectal cancer with any of the following:

- Diagnosis before age 50
- One or more relatives* with a Lynch syndrome cancer** diagnosed prior to age 50
- Two or more relatives* with a Lynch syndrome cancer,** regardless of age

☐ A family history of any of the following:

- A sibling, parent, or child with colorectal or endometrial (uterine) cancer diagnosed before age 50
- Two or more close relatives* with a Lynch syndrome cancer,** at least one before age 50
- Three or more close relatives* with a Lynch syndrome cancer**

☐ A relative who tested positive for a genetic variant related to cancer risk

**Relatives to consider include siblings, children, parents, aunts, uncles, and grandparents.*

***Including: colorectal, endometrial (uterine), gastric (stomach), ovarian, ureter/renal pelvis, biliary tract, small bowel, pancreas, and brain cancer, as well as sebaceous adenomas*

What are the benefits of testing?

If you have an elevated risk of developing cancer based on your genetic test result, you can work with your healthcare provider to create a plan designed to prevent a cancer entirely, or help to identify a cancer at an earlier, more treatable stage.

In addition, genetic testing can help:

- provide an explanation for your personal or family history of cancer
- evaluate your risk of developing future cancers
- make informed medical decisions, including treatment, surveillance, and preventive options
- qualify you for participation in clinical trials or research studies
- identify other at-risk relatives for whom genetic testing is recommended

References: American Cancer Society; PMID: 20301390, 25070057, 23035301, 19620482, 18063416, 19822006, 1673441.

What are the potential results?

POSITIVE

If testing identifies a variant known to increase your cancer risk, consult with your healthcare provider to create a screening and management plan and to identify relatives who may need to be tested.

NEGATIVE

If testing identifies no variants known to increase cancer risk, your future risk depends on your personal medical history and family history of cancer. This does not rule out other genetic conditions; consult with your healthcare provider to discuss surveillance recommendations.

VARIANT OF UNCERTAIN SIGNIFICANCE

In some cases, testing can identify a variant, but it is not known at this time whether the variant increases the risk for cancer. In this case, your cancer surveillance recommendations should be based on your personal and family medical histories.

Genes tested with Invitae hereditary colorectal cancer panels

Invitae has extensive testing options, with results available in just 10–21 days on average.

GENES TESTED:

☐ APC	☐ MLH1	☐ POLD1
☐ AXIN2	☐ MSH2	☐ POLE
☐ BMPR1A	☐ MSH3	☐ PTEN
☐ CDH1	☐ MSH6	☐ SMAD4
☐ CHEK2	☐ MUTYH	☐ STK11
☐ EPCAM	☐ NTHL1	☐ TP53
☐ GREM1	☐ PMS2	

Learn more at
www.invitae.com/individuals.

Reference: National Cancer Institute, The genetics of colorectal cancer. www.cancer.gov/types/colorectal/hp/colorectal-genetics-pdq. Accessed August 11, 2015.