

We don't just
treat the cancer.
We manage the risk.



Genetic Risk Evaluation and Testing (GREAT):
A Guide for Physicians and Health Care Professionals

We don't just treat the cancer. We manage the risk.

At Kansas City Cancer Center/The University of Kansas Cancer Center, we are helping shape a new way of thinking about cancer. While it was once considered a fatal illness that can't be cured, cancer is now often treated as a chronic disease that can be effectively managed. It starts with genetic consultation and cancer risk assessment. We are leading the way in Kansas City – with national recognition for work in identifying and proactively managing cancer risks while providing the full scope of patient care.

Statistics tell us the opportunity is GREAT (Genetic Risk Evaluation And Testing)

- Fewer than 3% of patients with hereditary or ovarian cancer are currently being tested for genetic mutations.
- Of the 1200 patients who came to Dr. Larry Geier for consultation and testing during the past two years, 125 had genetic mutations that increased their risk for breast or colon cancer to 80%. The results also revealed their increased risk of multiple other cancers.
- Some people chose preventive surgery, which can reduce the risk of breast and ovarian cancers by more than 95%. For others, the strategy involved increased surveillance (e.g., breast MRI, more frequent colonoscopies, etc.).

Our oncologists sit at the juncture of risk assessment, testing, results analysis and ongoing risk management.



Larry Geier, MD

A shared commitment

The physicians and nurse practitioners at Kansas City Cancer Center/The University of Kansas Cancer Center are actively committed to assessing and managing cancer risks. In fact, our oncologists have worked diligently to attain expertise in cancer genetics, by attending specialty courses and symposia and by documenting and studying the data from hundreds of their own patients. Kansas City Cancer Center/The University of Kansas Cancer Center physicians have been invited to lecture on cancer genetics at national programs, and are often asked to contribute to medical publications and peer review journals.

Once we quantify the risk, we can do something about it

The genetic consultation an oncologist provides is quite different from genetic counseling, which can be a good exercise for identifying risk – but that's where it stops. By contrast, risk identification is where a Kansas City Cancer Center/The University of Kansas Cancer Center oncology consultation starts. We conduct a meticulous risk assessment, including testing (when warranted) and results analysis. We then map a plan to appropriately manage that risk, whether the patient is a mutation carrier or not. Only then can genetic consultation deliver results, through effective long-term risk management and patient care.

The red flags that should trigger a genetic cancer risk consultation

Hereditary Breast/Ovarian Cancer Syndrome

- Breast cancer before age 50 (premenopausal)
- All ovarian cancer patients
- Multiple members of the family with breast or ovarian cancer
- Multiple cancers in the same individual
- Patients with Ashkenazi Jewish ancestry with breast or ovarian cancer at any age
- Male breast cancer at any age

Lynch Syndrome

- Colon or uterine cancer before age 50
- Two Lynch cancers* in the same patient
- Multiple members of the family with Lynch cancers*
- Colon polyps in individual or multiple family members
- Ten or more colorectal polyps

**Lynch cancers include: colorectal, ovarian, gastric, ureter/renal pelvis, biliary tract, small bowel, pancreas and brain*



The benefits are significant

- Genetic consultation provides the opportunity to treat patients more proactively and over the long term.
- Management options may include increased surveillance, preventive medical treatment or even surgery, resulting in the prevention of many cancers that were predisposed to occur.
- With a full assessment of risk factors and family history, we can better understand the underlying cause of a patient's disease. Armed with this information, we're able to more accurately predict their response to treatment, which allows us to create a highly individualized treatment plan.

What your patient can expect

When you send a patient to Kansas City Cancer Center/The University of Kansas Cancer Center, he or she will spend approximately one hour with a medical oncologist. During this initial appointment, the physician will:

- Review the patient's medical history.
- Examine the patient for current signs or symptoms of cancer.
- Assess the patient's personal and family history to provide an estimate of cancer risks and determine whether to conduct genetic testing.
- Discuss the benefits, limitations and personal/family impact of genetic testing.
- Perform testing, if needed, and a post-test consultation within two to three weeks of test date to review results and quantify cancer risks.
- Devise an individualized strategy to manage that risk, based on test results. Options include increased surveillance, preventive medical treatment, lifestyle changes or even surgery.
- Provide patient with recommendations for screening and follow-up.

When you send your patients to us, you will receive:

- A highly detailed, comprehensive report containing the results of our assessment and testing.
- A thorough review of our discussions with your patient, including our recommendations for ongoing screenings and treatment, as appropriate.
- A follow-up report after we meet with your patient to discuss test results.
- Our ongoing partnership in managing the patient's cancer risks.

Your patient's experience

Genetic consultation is as much an art as it is a science. While factual test results are sometimes part of the process, accurate risk assessment is equally dependent on the expert interpretation of a patient's medical history and family tree. It's often a puzzle of clues that, pieced together, provides a full picture of a patient's cancer risk.

Insurance concerns, eliminated

As with any physician consultation, a genetic consultation conducted by an oncologist is covered by most insurance plans. This is not always the case for genetic counseling, which may result in a considerable out-of-pocket expense for the patient. Also, while it is commonly believed that genetic test results may affect a patient's insurability, this is an unfounded concern. In fact, state and federal laws prohibit genetic discrimination for both employment and medical insurance.

For more information about how these laws protect patients, go to the National Human Genome Research Institute at: <http://www.genome.gov/PolicyEthics/LegDatabase/pubMapSearch.cfm>.

Let's partner to manage cancer risk and promote survivorship

At Kansas City Cancer Center/The University of Kansas Cancer Center, we don't just treat the cancer. We manage the risk. More people are living longer with cancer, and genetic consultation is a significant tool for both prevention and treatment. We welcome your referrals, as well as your shared commitment to genetic risk evaluation and testing.

Kansas City Cancer Center/The University of Kansas Cancer Center's GREAT program – Genetic Risk Evaluation And Testing – was created to proactively identify and measure a patient's cancer risk factors. Because once we understand the risk, we can do something about it.



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