PUT CANCER TO THE TEST

Learn how genetic testing saves lives through early detection.

Genetics matter: know your family, know your genes.

Share this information with members of your family.

Li-Fraumeni syndrome (LFS) is a genetic condition that significantly increases the risk of developing many types of cancers.

Cancers related to this condition may occur at any age, but there is significant risk of cancer occurring during childhood. It has been reported that **over 40% of children with LFS develop cancer by age 18.**

Nearly 100% of women with LFS will develop cancer in their lifetime due to their markedly increased risk of breast cancer.

LFS affects both men and women throughout the world.

Are you at risk? Do you answer yes to any of these questions?

Have you had:

- breast cancer, soft tissue sarcoma, osteosarcoma, brain tumor, **OR** adrenocortical carcinoma before age 46 **AND** at least one first- or second-degree relative with one of the same tumor types before age 56
- at least 2 tumors that are breast cancer, soft tissue sarcoma, osteosarcoma, brain tumor, **OR** adrenocortical carcinoma , the first of which occurred before age 46
- adrenocortical carcinoma; **OR**
- choroid plexus carcinoma; **OR**
- anaplastic rhabdomyosarcoma; **OR**
- breast cancer before 31 years; **OR**
- osteosarcoma; **OR**
- childhood acute lymphoblastic leukemia (low) hypodiploid; **OR**
- childhood medulloblastoma SHH

If you answered yes to any one of these questions, ask your doctor for a genetic test to determine whether you might have Li-Fraumeni syndrome.

Many cancers are associated with LFS, the most prevalent include:

- Soft tissue sarcoma (such as anaplastic rhabdomyosarcoma)
- Osteosarcoma
- Breast cancer (premenopausal)
- Brain and central nervous system (CNS) tumors (such as glioma, choroid plexus carcinoma, SHH subtype medulloblastoma, neuroblastoma)
- Adrenocortical carcinoma
- Acute leukemia
- Lung adenocarcinoma
- Melanoma
- Gastrointestinal tumors (such as colon, pancreas)
- Kidney
- Thyroid
- Gonadal germ cells (such as ovarian, testicular, and prostate)

What Causes Li-Fraumeni syndrome?

LFS is caused by a variant in your *TP53* tumor suppressor gene, which controls abnormal cell growth and prevents cancers from developing. Everyone has two copies of *TP53* in each of their body's cells. For those with LFS, one of the two *TP53* genes does not function properly or it may be missing altogether.

Most people with LFS inherited the variant from a parent, but about 20% of cases are de novo. They arise in those who do not have an affected parent or a family history of cancer. Each child of a parent with LFS has a 50% chance of inheriting the syndrome. For this reason, those who have had cancer at a young age or those with a family history of cancer should ask their doctor or a genetic counselor for a genetic test.

If you are pregnant or considering becoming pregnant, you should discuss the reproductive implications of LFS with your doctor or genetic counselor.

Join us at Li-Fraumeni Syndrome Association (LFSA) to learn more and help spread the word about life-saving benefits of genetic testing and cancer screening.

LFSA provides information, advocacy, and support services for individuals and families with Li-Fraumeni syndrome and those who want to learn whether their family may be affected. LFSA supports a consortium of researchers, medical providers, and caregivers to advance research and promote optimal care for the LFS community.

LFSA is also a supportive community of Li-Fraumeni syndrome families. We are the building blocks of a future without LFS. We bring together those who share this lifesaving goal.

LI-FRAUMENI SYNDROME
LFSA
ASSOCIATION
Devoted to a world without inherited cancer

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