# Patient Education



Making Cancer History\*

# **Thymoma and Thymic Cancer**

## What is Thymoma and Thymic Cancer?

Thymoma and thymic cancer are diseases in which cancer cells grow on the outside of the thymus. The thymus is part of the lymph system and is located in the upper chest under the breastbone. The thymus makes white blood cells, or lymphocytes, that protect the body from infection.

There are different types of thymus tumors. Thymoma tumor cells look similar to the normal cells of the thymus, grow slowly and rarely spread to other tissue. On the other hand, thymic cancer cells look very different from the normal cells of the thymus, grow more quickly and have usually spread to other parts of the body when the cancer is found. Thymic cancer is more difficult to treat than thymoma.

### Who is at Risk for Thymoma and Thymic Cancer?

People with thymoma often have other diseases as well. These diseases may include myasthenia gravis, polymyositis, lupus erythematosus, rheumatoid arthritis, thyroiditis, Sjogren's syndrome and hypogammaglobulinemia.

### What are the Symptoms of Thymoma and Thymic Cancer?

Sometimes thymoma and thymic cancer do not cause any symptoms. However, symptoms of thymoma and thymic cancer may include:

- A cough that doesn't go away.
- Chest pain.
- Trouble breathing.

### How is Thymoma and Thymic Cancer Diagnosed?

If any of the above symptoms do occur, your doctor will evaluate your medical history and perform a physical exam. Other tests that may be ordered include a chest x-ray, a CT (computerized tomography) scan, an MRI (magnetic resonance imaging) scan and/or PET (positron emission tomography) scan. If thymoma or thymic cancer is thought to be present, a biopsy of the tumor will be performed. The biopsy may be done before or during surgery using a thin needle to remove a sample of cells. This procedure is called a fine-needle aspiration biopsy. This sample of cells will then be examined by a pathologist under a microscope. If the pathologist finds thymoma or thymic cancer, he or she will determine the specific type of cell in the tumor. There may be more than one type of cancer cell in a thymoma.

### What is Staging?

If the diagnosis is thymoma or thymic cancer, your doctor will also need to know the stage (or extent) of the disease. Staging is a way to find how far the cancer has spread and to which parts of the body. Once your doctor knows what stage your cancer is, he or she will then decide if all or part of the tumor can be removed by surgery and if any lymph nodes or other tissue need to be removed as well.

#### How is Thymoma and Thymic Cancer Treated?

There are various types of standard treatment used for thymoma and thymic cancer. These treatments include:

- Surgery.
- Chemotherapy.
- Radiation treatment.
- Hormone therapy.
- Some combination of the above.

In addition, new types of chemotherapy treatments are being tested in clinical trials.

#### Where Can I Get More Information?

The American Cancer Society (ACS) is a voluntary national health organization with local offices around the country. The ACS supports research, provides information about cancer and offers many programs and services to patients and their families. For more information, call 800.227.2345 or visit www.cancer.org.

The Cancer Information Service (CIS) is a program of the National Cancer Institute (NCI). Information specialists answer questions about cancer screening tests, risks, symptoms, diagnosis, treatment and support organizations. For more information, call 800.422.6237 or visit www.cancer.gov.

