

Thymoma - Diagnosis

This section has been reviewed and approved by the [Cancer.Net Editorial Board \[1\]](#), June / 2013

Diagnosis

ON THIS PAGE: You will find a list of the common tests, procedures, and scans that doctors can use to find out what's wrong and identify the cause of the problem. To see other pages in this guide, use the colored boxes on the right side of your screen, or click ?Next? at the bottom.

Doctors use many tests to diagnose cancer and find out if it has metastasized (spread). Some tests may also determine which treatments may be the most effective. For most types of cancer, a biopsy is the only way to make a definitive diagnosis of cancer. If a biopsy is not possible, the doctor may suggest other tests that will help make a diagnosis. Imaging tests may be used to find out whether the cancer has spread. This list describes options for diagnosing this type of cancer, and not all tests listed will be used for every person. Your doctor may consider these factors when choosing a diagnostic test:

- Age and medical condition
- Type of cancer suspected
- Signs and symptoms
- Previous test results

In addition to a physical examination, the following tests may be used to diagnose thymoma or thymic carcinoma.

Biopsy [2]. A biopsy is the removal of a small amount of tissue for examination under a microscope. Other tests can suggest that cancer is present, but only a biopsy can make a definite diagnosis. The sample removed during the biopsy is analyzed by a pathologist (a doctor who specializes in interpreting laboratory tests and evaluating cells, tissues, and organs to diagnose disease).

The type of biopsy performed will depend on the location of the cancer. A needle biopsy is the use of a thin needle that is inserted into the tumor to remove a piece of tissue. Depending on the location of the tumor, surgery may be needed to get enough tissue to make a diagnosis. Also known as the Chamberlain procedure, this type of surgery is performed by making a two-inch incision (cut) next to the breastbone and removing a sample of the tumor.

Computed tomography (CT or CAT) scan [3]. A CT scan creates a three-dimensional picture of the inside of the body with an x-ray machine. A computer then combines these images into a detailed, cross-sectional view that shows any abnormalities or tumors. A CT scan can also be used to measure the tumor's size. A CT scan of the chest is the most common test used to look for and evaluate thymoma. A contrast medium (a special dye) is injected into a patient's vein or given orally (by mouth) to provide better detail. Magnetic resonance imaging and positron emission tomography (see below) may provide more information but are not always needed.

Magnetic resonance imaging (MRI) [4]. An MRI uses magnetic fields, not x-rays, to produce detailed images of the body. A contrast medium may be injected into a patient's vein or given orally to create a clearer picture.

Positron emission tomography (PET) scan [5]. A PET scan is a way to create pictures of organs and tissues inside the body. A small amount of a radioactive substance is injected into a patient's body. This substance is absorbed mainly by organs and tissues that use the most energy. Because cancer tends to use energy actively, it absorbs more of the radioactive substance. A scanner then detects this substance to produce images of the inside of the body.

After these diagnostic tests are done, your doctor will review all of the results with you. If the diagnosis is cancer, these results also help the doctor describe the cancer; this is called staging.

Choose ?Next? (below, right) to continue reading this guide to learn about the different stages for this type of cancer. Or, use the colored boxes located on the right side of your screen to visit any section.

Links:

- [1] <http://www.cancer.net/about-us>
- [2] <http://www.cancer.net/node/24406>
- [3] <http://www.cancer.net/node/24486>
- [4] <http://www.cancer.net/node/24578>
- [5] <http://www.cancer.net/node/24648>