

## **Thymoma - Overview** [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 05/2014

**ON THIS PAGE:** You will find some basic information about this disease and the parts of the body it may affect. This is the first page of Cancer.Net's Guide to Thymoma. To see other pages, use the menu on the side of your screen. Think of that menu as a roadmap to this full guide.

Thymoma is a type of cancer that begins in the thymus. Located under the breastbone, also called the sternum, the thymus is a small organ that is part of the lymph system and helps white blood cells develop.

### **About the lymph system**

The lymph system is made up of thin tubes that branch out to all parts of the body. The lymph system carries lymph, a colorless fluid containing a type of white blood cell called lymphocytes. Lymphocytes fight germs in the body. B-lymphocytes, or B cells, make antibodies to fight bacteria, and T-lymphocytes, or T cells, destroy viruses and foreign cells and trigger the B cells to make antibodies. The thymus is involved in the development of T-lymphocytes.

As part of the lymph system, groups of tiny, bean-shaped organs called lymph nodes are located throughout the body at different sites. Lymph nodes are found in clusters in the abdomen, groin, pelvis, underarms, and neck. In addition to the thymus, other parts of the lymph system include the spleen, which makes lymphocytes and filters blood, and the tonsils, located in the throat.

### **About thymoma**

Cancer begins when normal cells change and grow uncontrollably, forming a mass called a tumor. A tumor can be cancerous or benign. A cancerous tumor is malignant, meaning it can spread to other parts of the body. A benign tumor means the tumor will not spread.

The thymus contains two main types of cells: epithelial cells and lymphocytes. Thymic epithelial cells are the cells that line the thymus, and this is where thymoma and thymic carcinoma start. If lymphocytes become cancerous, they can develop into lymphoma; learn more about [Hodgkin lymphoma](#) [3] and [non-Hodgkin lymphoma](#) [4]. Rarely, another type of tumor called a [carcinoid tumor](#) [5] can develop in the thymus

Thymoma is generally a slow-growing tumor that does not usually spread outside of the thymus. Occasionally, it can spread to the lining of the lung, called the pleura. Less often, it can spread to other parts of the body.

Thymic carcinoma (see [Stages \[6\]](#)) can also be located only in the thymus, but it is more likely to spread to the lining of the lung and other parts of the body. Thymic carcinoma can also be more difficult to treat.

About 30% of people with thymoma also have a condition called myasthenia gravis. Myasthenia gravis is an autoimmune disorder caused by antibodies or T-cells that attack molecules, cells, or tissues of the person producing them. The main symptom of myasthenia gravis is fluctuating weakness in various muscles. It may affect any muscle that is under voluntary control, such as those that control eye movements, chewing, swallowing, coughing, and facial expression. Muscles that control breathing and movements of the arms and legs may also be affected in more severe cases. Myasthenia gravis may appear before thymoma is diagnosed or it may develop during or after treatment.

In addition to myasthenia gravis, people with thymoma may also have other syndromes, called paraneoplastic syndromes. Paraneoplastic syndromes include severe low red blood cell count or anemia, called pure red cell aplasia, or low levels of antibodies known as immunoglobulins in the blood, called hypogammaglobulinemia.

*To continue reading this guide, use the menu on the side of your screen to select another section.*

---

**Links:**

[1] <http://www.cancer.net/cancer-types/thymoma/overview>

[2] <http://www.cancer.net/about-us>

[3] <http://www.cancer.net/node/19178>

[4] <http://www.cancer.net/node/19207>

[5] <http://www.cancer.net/node/18645>

[6] <http://www.cancer.net/node/19678>