

Breast Cancer - Overview [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 02/2016

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 Breast Cancer. To see other pages, use the menu on the side of your screen. Think of that menu as a roadmap to this full guide.

In the United States, breast cancer is the most common cancer in women (excluding skin cancer). Men can also develop breast cancer, but [breast cancer in men](#) [3] is rare, accounting for less than 1% of all breast cancers.

About the breast

The breast is made up of different tissue, ranging from very fatty tissue to very dense tissue. Within this tissue is a network of lobes, which are made up of tiny, tube-like structures called lobules that contain milk glands. Tiny ducts connect the glands, lobules, and lobes, carrying the milk from the lobes to the nipple, located in the middle of the areola, which is the darker area that surrounds the nipple. Blood and lymph vessels also run throughout the breast; blood nourishes the cells, and the lymph system drains bodily waste products. The lymph vessels connect to lymph nodes, the tiny, bean-shaped organs that help fight infection.

About breast cancer

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

Breast cancer spreads when the cancer grows into other parts of the body or when breast cancer cells move to other parts of the body through the blood vessels and/or lymph vessels. This is called metastasis. Breast cancer most commonly spreads to the regional lymph nodes. The regional lymph nodes are located under the arm, in the neck, under the chest bone, or just above the collarbone. When the cancer spreads further through the body, it most commonly spreads to the bones, lungs, and liver. Less often, breast cancer may spread to the brain. If cancer comes back after initial treatment, it can recur locally, meaning in the breast and/or regional lymph nodes. It can also recur elsewhere in the body, called distant metastases.

Types of breast cancer

Most breast cancers start in the ducts or lobules. The two most common are called ductal carcinoma or lobular carcinoma:

- **Ductal carcinoma.** These cancers start in the cells lining the milk ducts and make up the majority of breast cancers.
 - Ductal carcinoma in situ (DCIS). This is a pre-cancer that is located only within the duct.
 - Invasive or infiltrating ductal carcinoma. This is invasive cancer that has spread outside of the duct.

- **Lobular carcinoma.** This is cancer that starts in the lobules.
 - Lobular carcinoma in situ (LCIS). LCIS is located only in the lobules. LCIS is not considered a cancer. However, having LCIS in one breast may be a risk factor for developing invasive breast cancer in the future in either breast (see the [Risk Factors \[4\]](#) section for more information.)
 - Invasive or infiltrating lobular carcinoma. This is invasive cancer that has spread outside of the lobule.

Other less common types of breast cancer include:

- Medullary

- Mucinous
- Tubular
- Metaplastic
- Papillary breast cancer
- [Inflammatory breast cancer](#) [5] is a faster-growing type of cancer that accounts for about 1% to 5% of all breast cancers.
- Paget's disease is a type of cancer that begins in the ducts of the nipple. Although it is usually in situ, it can also be an invasive cancer.

Breast cancer subtypes

Breast cancer is not all one disease, even among the same type of breast cancer. Often, the disease is made up of three main subtypes. Special receptors on the outside of the cancer cell help determine the subtype of breast cancer:

- **Hormone receptor positive.** Breast cancers expressing estrogen receptors (ER) and progesterone receptors (PR) are called hormone receptor positive. These cancers may depend on the hormones estrogen and/or progesterone to grow. Hormone receptor positive cancers can occur at any age, but may be more frequent in women who are postmenopausal. About 60% to 75% of all breast cancers have estrogen and/or progesterone receptors.
- **HER2 positive.** About 20% to 25% of breast cancers depend on the gene called *human epidermal growth factor receptor 2* (HER2) to grow. These cancers are called HER2 positive and have excessive numbers of HER2 receptors or copies of the HER2 gene. The HER2 gene makes a protein that is found on the cancer cell and is important for tumor cell growth. This type of cancer may grow more quickly. There are several very effective drugs available for HER2-positive cancer (see [Treatment Options](#) [6]).
- **Triple negative.** If a person's tumor does not express ER, PR, and/or HER2, the tumor is called "triple negative." Triple-negative breast cancers make up about 15% of invasive breast cancers. This type of breast cancer may grow more quickly than hormone receptor-

positive breast cancer. This type of breast cancer may also be more sensitive to chemotherapy (see [Treatment Options](#) [6]).

Metaplastic breast cancer is a type of triple-negative breast cancer. Metaplastic breast cancer describes a cancer that begins in one type of cell, such as those from the glands of the breast, and changes into another type of cell. Most often, metaplastic breast cancer starts in the epithelial cells. Then, it changes into squamous or nonglandular cells. Metaplastic breast cancer may grow and spread more quickly. In addition, it is more likely to have already spread to the lymph nodes by the time it is diagnosed.

Triple-negative breast cancer is the most common type of breast cancer diagnosed in women with mutations in a gene called *BRCA1*. Triple-negative breast cancer also seems to be more common among younger women, particularly younger black women. Women with triple-negative breast cancer should consider having testing for *BRCA* gene mutations. See this guide's [Risk Factors](#) [4] section for more information on *BRCA* gene mutations.

Looking for More of an Overview?

If you would like additional introductory information, explore these related items. Please note these links will take you to other sections on Cancer.Net:

- [ASCO Answers Fact Sheet](#) [7]: Read a one-page fact sheet (available as a PDF) that offers an easy-to-print introduction to this type of cancer.
- [ASCO Answers Guide](#) [8]: This 52-page booklet (available as a PDF) helps newly diagnosed patients better understand their disease and treatment options, as well as keep track of the specifics of their individual cancer care plan.
- [Cancer.Net Patient Education Video](#) [9]: View a short video led by an ASCO expert in this type of cancer that provides basic information and areas of research.
- **Cancer.Net En Español:** Read [about breast cancer in Spanish](#) [10]. Infórmase sobre [cáncer de mama en español](#) [10].

The [next section in this guide is Statistics](#) [11] and it helps explain how many people are diagnosed with this disease and general survival rates. Or, use the menu on the side of your screen to choose another section to continue reading this guide.

Links

- [1] <http://www.cancer.net/cancer-types/breast-cancer/overview>
- [2] <http://www.cancer.net/about-us>
- [3] <http://www.cancer.net/node/31325>
- [4] <http://www.cancer.net/node/18621>
- [5] <http://www.cancer.net/node/31326>
- [6] <http://www.cancer.net/node/18626>
- [7] http://www.cancer.net/sites/cancer.net/files/asco_answers_breast.pdf
- [8] http://www.cancer.net/sites/cancer.net/files/asco_answers_guide_breast.pdf
- [9] <http://www.cancer.net/node/29046>
- [10] <http://www.cancer.net/es/node/31362>
- [11] <http://www.cancer.net/node/18619>