

Breast Cancer, what it is, how it develops:

Cancer occurs when healthy cells in the breast change and grow out of control, forming a mass called a tumor. Some tumors are not cancerous. A tumor that is cancerous is known as a malignant tumor. Breast cancer occurs in both women and men.

Breast cancer either begins in the lobules, which are the milk-producing glands, or the ducts, the passages that carry milk from the lobules to the nipple. Less commonly, it can begin in the stromal tissues, which include the fatty and fibrous connective tissues of the breast.

It is important to treat the cancer at an early stage. Left untreated, it will continue to grow. In recent years, there's been a number of life-saving advances against breast cancer, bringing new hope and excitement. Instead of only one or two options, today the menu of treatment choices to fight the complex mix of tumor cells in the breast are encouraging.

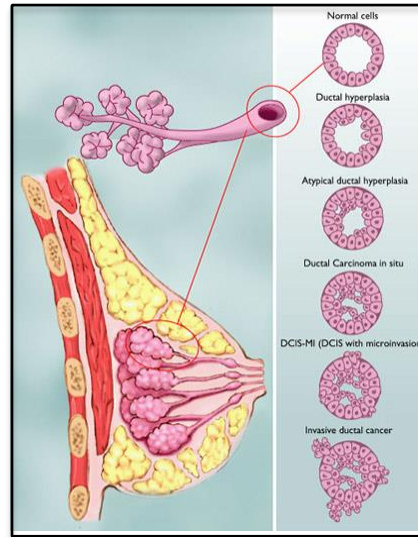


Image from breastcancer.org

Types of breast cancer

Ductal carcinoma

- Ductal carcinoma in situ (DCIS)
 - Invasive or infiltrating ductal carcinoma
- Invasive lobular carcinoma

Less common:

Medullary, Mucinous, Tubular, Metaplastic, Papillary, Inflammatory breast cancer, and Paget's disease.

Three main breast cancer subtypes used to determine treatment plan **Hormone receptor positive.** Breast cancers expressing estrogen receptors (ER) and/or progesterone receptors (PR) are called "hormone receptor positive." This type of cancer may depend on the hormones estrogen and/or progesterone to grow. About 70% to 80% of breast cancers have positive estrogen and/or progesterone receptors. Cancers without these receptors are called "hormone receptor negative."

HER2 positive. About 10% to 20% of breast cancers have an over expression of a gene called human epidermal growth factor receptor 2 (HER2) to grow. These cancers are called "HER2 positive" breast cancers have many copies of the HER2 gene or high levels of the HER2 protein. HER2-positive breast cancers grow more quickly. HER2 positive breast cancer can be hormone receptor positive or hormone receptor negative. Cancers that have no or low levels of the HER2 protein and/or few copies of the HER2 gene are called "HER2 negative."

Triple negative. If a tumor does not express ER, PR, or HER2, the tumor is called "triple negative." Triple-negative breast cancer makes up about 10% to 20% of invasive breast cancers. Experts recommend that all people with triple-negative breast cancer younger than 50 be tested for BRCA gene mutations.

Content adapted from websites below.

Resources for Additional Information:

- Breastcancer.org
- [National Breast Cancer Foundation, Inc.](http://NationalBreastCancerFoundation.Inc)
- [Cancer.Net, Breast Cancer](http://Cancer.Net.BreastCancer)
- [NCCN Guidelines for Patients](http://NCCNGuidelinesforPatients)
- [Living Beyond Breast Cancer](http://LivingBeyondBreastCancer)
- [NCI Breast Cancer](http://NCIBreastCancer)
- [American Cancer Society—Breast Cancer](http://AmericanCancerSociety-BreastCancer) 800-227-2345
- [Susan G. Komen](http://SusanG.Komen)

Recursos en Español:

- [NIH, Cáncer de seno \(mama\)—Versión para pacientes](http://NIH.Cancerde seno (mama)—Versión para pacientes)