

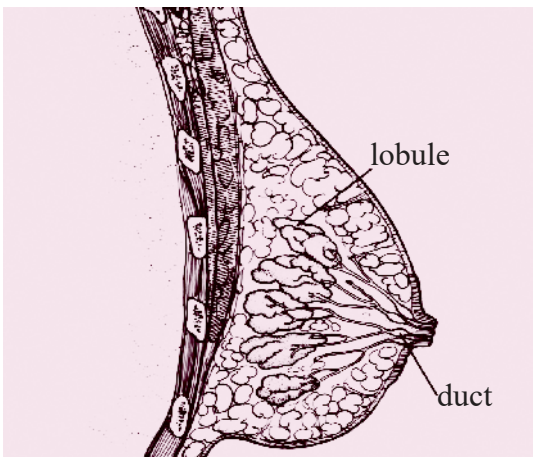
There are many kinds of breast cancer. All breast cancers start in the breast, so they are alike in some ways but differ in others.

A pathologist studies the tissue removed during a biopsy to learn many things about the breast cancer that affect prognosis (chances of survival) and treatment. A few of these are described below.

Non-invasive and invasive breast cancer

Breast cancers can be non-invasive or invasive.

Ductal carcinoma in situ (DCIS) is a non-invasive breast cancer (also called stage 0). With DCIS, the abnormal cells are contained in the milk ducts of the breast (the tubes that carry breast milk to the nipple) and have not spread into the surrounding breast tissue.



Invasive breast cancer has spread from the original site (either the milk ducts or the lobules (the sacs that produce breast milk)) into the surrounding breast tissue. It may also have spread to the lymph nodes.

Types of invasive breast cancer

- Invasive ductal carcinoma, also called infiltrating ductal carcinoma, is the most common invasive breast cancer (about 50-75 percent of all breast cancers). It starts in the milk ducts of the breast.
- Invasive lobular carcinoma is the second most common invasive breast cancer (about 5-15 percent of all breast cancers). It starts in the lobules of the breast.

Tubular, mucinous (colloid) and papillary carcinomas and carcinomas with medullary features are less common invasive breast cancers.

Hormone receptor status

All invasive breast cancers and DCIS are tested for hormone (estrogen and progesterone) receptors.

Hormone receptor-positive (estrogen and progesterone receptor-positive) tumors have many hormone receptors. These breast cancers can be treated with hormone therapy such as tamoxifen and aromatase inhibitors.

Most invasive breast cancers are hormone receptor-positive.

HER2 status

All invasive breast cancers are tested for HER2 protein.

HER2-positive breast cancers have a lot of HER2 protein. These breast cancers can be treated with anti-HER2 targeted therapy drugs such as trastuzumab (Herceptin).

About 10-15 percent of newly diagnosed breast cancers are HER2-positive.

Special forms of invasive breast cancer

Inflammatory breast cancer (IBC) is a rare, aggressive breast cancer. About 1-5 percent of all breast cancers are IBC.

The main signs include swelling and redness of the breast, dimpling or puckering of the skin of the breast and pulling in of the nipple. These signs tend to occur quickly, over weeks or months. See your doctor if you have any of the following:

- Swelling or enlargement of the breast
- A lump (less common with IBC than with other breast cancers)
- Redness of the breast (may also be a pinkish or purplish tone)
- Dimpling or puckering of the skin of the breast
- Pulling in of the nipple
- Breast pain

Some signs of IBC can be mistaken for a breast infection. It is often diagnosed after symptoms do not improve with antibiotics. If you have these signs and they last longer than a week on antibiotics, tell your doctor. Don't be afraid to get a second opinion.

Paget disease of the breast is a rare cancer in the skin of the nipple or in the skin around the nipple. About 1-3 percent of breast cancers are Paget disease of the breast. It's usually found with DCIS or invasive breast cancer.

Signs include itching, burning, redness or scaling of the skin on the nipple or areola; a bloody or yellowish discharge from the nipple; and, a flattened nipple. See your doctor if you have any of these signs.



Resources

Susan G. Komen®
1-877 GO KOMEN (1-877-465-6636)
www.komen.org

IBC Research Foundation
1-877-STOP-IBC (1-877-786-7422)
www.ibcresearch.org

Inflammatory Breast Cancer Clinic
1-877-MDA-6789 (1-877-632-6789)
www.mdanderson.org

Related fact sheets in this series:

- Breast Cancer Prognosis
- Ductal Carcinoma in Situ
- Metastatic Breast Cancer

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