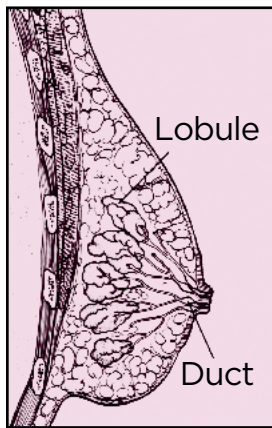
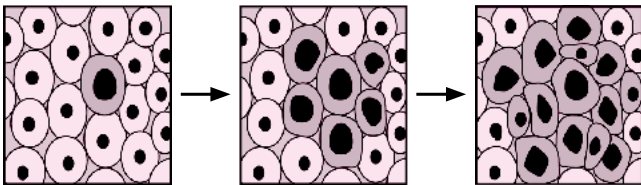


Every day, cells in your body divide, grow and die in an orderly manner. Cancer occurs when cells in the breast tissue grow and divide quickly, without normal control. When there is more cell growth than death, a tumor can form.

The light circles in the pictures below show normal breast cells. The grey circles are breast cancer.



Differences in breast cancer

Breast cancer can start in the ducts or lobules. Ducts are canals that carry milk from the lobules to the nipple during breastfeeding. Lobules are sacs that produce milk. Breast cancer is often referred to as one disease, but there are many types. All breast cancers start in the breast, but they can:

- Vary in location (ducts or lobules)
- Be non-invasive or invasive (meaning they can spread)
- Have a different appearance (such as inflammatory breast cancer described later)
- Look different under a microscope (see more below)

These differences can affect treatment options and prognosis (chances for survival).

Non-invasive breast cancer

Ductal carcinoma in situ (DCIS) is a non-invasive breast cancer. In situ means “in place.” With DCIS the abnormal cells are contained in the ducts. They have not spread to nearby breast tissue or beyond.

Invasive breast cancer

Invasive breast cancer is cancer that has spread from the first site (the ducts or lobules) into nearby breast tissue. The cancer may have also spread to the lymph nodes and other parts of the body.

Invasive ductal carcinoma is the most common type of breast cancer. It may also be called infiltrating ductal carcinoma.

Invasive lobular carcinoma is the second most common invasive breast cancer.

There are other less common invasive breast cancers, such as tubular, mucinous (colloid) and invasive papillary carcinomas.

Special breast cancers include (in alphabetical order):

Inflammatory breast cancer (IBC): This is an aggressive breast cancer. Signs of IBC 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.

Metaplastic breast cancer: This accounts for fewer than 1% of all invasive breast cancers. Compared to more common types of breast cancer, metaplastic tumors tend to be larger and have a higher tumor grade.

Paget disease of the breast (Paget disease of the nipple): This is a rare carcinoma in situ in the skin of the nipple or in the skin around the nipple. It’s usually found with an underlying breast cancer.

Metastatic Breast Cancer

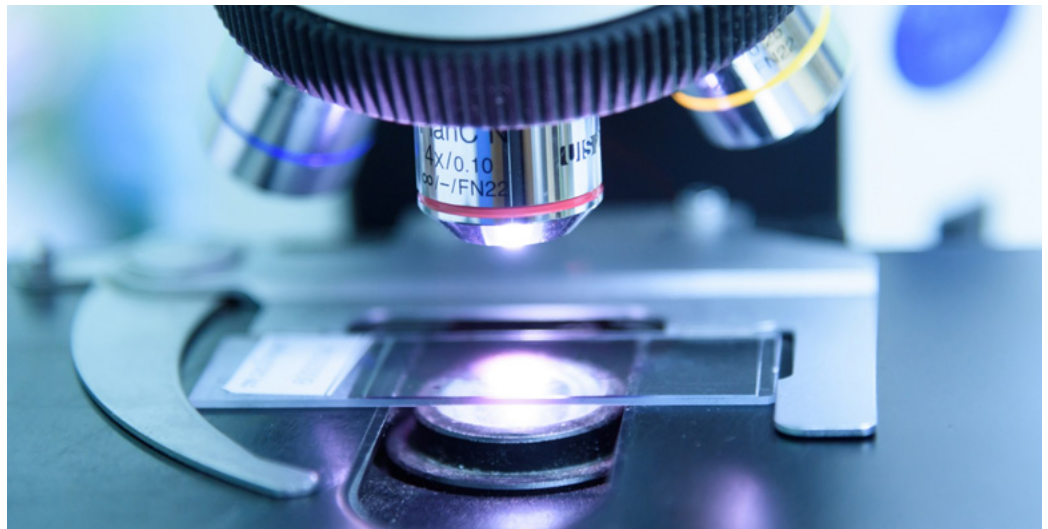
Metastatic breast cancer (MBC) is the most advanced stage of invasive breast cancer (stage IV). MBC has spread to other parts of the body. The most common sites for MBC are the bones, lungs, liver and brain. Even though new tumors are growing in other parts of the body, it’s still breast cancer and treated as breast cancer.

Resources

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

Related educational resources:

- [Breast Cancer Prognosis](#)
- [Ductal Carcinoma in Situ](#)
- [Hormone Receptor-Negative Breast Cancer](#)
- [Hormone Receptor-Positive Breast Cancer](#)
- [Metastatic Breast Cancer: What is It?](#)
- [Questions to Ask Your Doctor When Breast Cancer is Diagnosed](#)
- [Support after a Breast Cancer Diagnosis](#)
- [Triple Negative Breast Cancer](#)



Tumor characteristics

Hormone receptor status

Some breast cancer cells need the hormones estrogen and/or progesterone to grow. These cancer cells have special proteins, called **hormone receptors**. When hormones attach to hormone receptors, the cancer cells with these receptors grow. All breast cancers are tested for hormone receptors.

- Hormone receptor-positive tumors are estrogen receptor-positive and progesterone receptor-positive breast cancer. They have a lot of hormone receptors.
- Hormone receptor-negative tumors are called estrogen receptor-negative and progesterone receptor-negative breast cancer. They have few or no hormone receptors.

Most breast cancers are hormone receptor-positive. They can be treated with hormone therapy such as **tamoxifen** or an **aromatase inhibitor**.

HER2 status

HER2 is a protein on the surface of some cancer cells that causes them to grow. All breast cancers are tested for HER2 protein. HER2-positive breast cancers have a lot of HER2 protein. About 10% to 20% of newly diagnosed breast cancers are HER2-positive.

HER2-positive breast cancers can be treated with **HER2-targeted therapy drugs** such as trastuzumab (Herceptin).

Triple negative breast cancer

Triple negative breast cancer (TNBC) is estrogen and progesterone receptor-negative and HER2-negative. So TNBC can't be treated with hormone therapy or most HER2-targeted therapies. While TNBC is aggressive, it can be **treated**.

This content provided by Susan G. Komen® is designed for educational purposes only and is not exhaustive. Please consult with your personal physician.