

Breast cancer is not one disease. In fact, treatment for breast cancer has become more personalized based on several factors. One important factor is information about the cancer cells themselves.

Some breast cancers need your body's natural hormones – estrogen and progesterone – to grow. These cancer cells have estrogen receptors (ER) or progesterone receptors (PR) that catch the hormones that move through your body. These receptors promote cancer growth.

Cancer cells without these receptors are called **hormone receptor-negative** breast cancers. These include estrogen receptor-negative or progesterone receptor-negative breast cancers. Another factor that helps guide treatment is whether the cancer cells have HER2 proteins, and if so, how much.

When breast cancer cells are removed during a biopsy or surgery, they are tested for these hormone receptors and the HER2 protein. On your pathology report, you may see the terms:

- Estrogen receptor-negative (ER-) or estrogen receptor-positive (ER+)
- Progesterone receptor-negative (PR-) or progesterone receptor-positive (PR+)
- HER2-negative, HER2-low (for metastatic breast cancer) or HER2-positive

HER2 status of the tumor

HER2 is important for cell growth and survival. Tumors are tested for the HER2 protein. If the tumors have HER2 proteins, HER2-targeted therapies may be given. If the tumors have no HER2 proteins, no HER2-targeted therapy will be given. Learn more about [hormone receptor status](#) and [HER2 status](#) on [komen.org](#)



Treatment for early breast cancer

Today, treatment decisions are in large part based on tumor characteristics like hormone receptors (estrogen and progesterone) and HER2 proteins.

Triple negative breast cancer (TNBC) gets its name because it lacks the three receptors – estrogen (ER), progesterone (PR) and HER2. Because TNBC lacks all three receptors, it does not respond to hormone or HER2-targeted treatments. Instead, treatment includes some combination of surgery, radiation and/or chemotherapy. TNBC tend to be more common among Black women (especially before menopause) compared to women of other races and ethnicities.

For tumors that are ER and PR-negative but HER2-positive, treatment includes some combination of surgery, radiation and/or chemotherapy plus HER2-targeted therapies. Your doctor will discuss your treatment options with you.

HORMONE RECEPTOR-NEGATIVE BREAST CANCER

Resources

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1-877 GO KOMEN
(1-877-465-6636)
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Related online resources:

- [Breast Cancer Prognosis for Early Breast Cancer](#)
- [Hormone Receptor-Positive Breast Cancer](#)
- [HER2-Targeted Therapies for Early Breast Cancer](#)
- [What is Breast Cancer?](#)

Risk of recurrence

The risk of recurrence (returning) for those with ER-negative tumors depends on factors such as the breast cancer stage and previous treatments. This risk decreases over time.

Treatment for metastatic breast cancer (MBC)

MBC, also known as stage 4 breast cancer, may be treated with single drugs or a combination of drugs. Treatment focuses on extending life and maintaining quality of life.

Some drugs used specifically to treat MBC include:

- [Chemotherapy](#)
- [HER2-targeted therapies](#) (HER2 antibody therapies, HER2 antibody-drug conjugates, Tyrosine-kinase inhibitors) for HER2-positive breast cancer.
- [HER2-antibody-drug conjugate, trastuzumab deruxetecan \(Enhertu\)](#), for HER2-low MBC.
- [PARP inhibitors](#) for people with a BRCA gene mutation.

MBC is an area of active research. In the future, some of these drugs may be used to treat breast cancer at earlier stages. If you have breast cancer, consider joining a clinical trial. Clinical trials offer the chance to try new treatments and possibly benefit from them.

Questions to Ask Your Doctor:

- Will you go over my pathology report so I can understand it?
- What treatment are you recommending for me, and why?
- How will this treatment be given?
- What are common side effects of treatment? How can they be managed? What side effects should I report to you?
- Are there any clinical trials available for someone with ER-negative breast cancer? If so, what do you recommend for me?

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