

Metastatic breast cancer (MBC) is also called stage IV or advanced breast cancer. It is cancer that has spread beyond the breast to other parts of the body, most often the bones, lungs, liver or brain. Although MBC has spread to another part of the body, it's still breast cancer and is treated as breast cancer.

While MBC can't be cured today, it can be treated. The goal of treatment is to extend life and maintain a good quality of life.

HER2-positive metastatic breast cancer

About 10-20 percent of breast cancers are HER2-positive. This means the tumor cells have high amounts of a protein called HER2. HER2 is important for cell growth and survival.

Tumors from the site of metastasis are biopsied and tested for HER2 status and other tumor characteristics. If you were treated for breast cancer in the past, the HER2 status of the metastasis may be different from the HER2 status of your original tumor.

HER2-targeted therapies for metastatic breast cancer

HER2-positive breast cancers can be treated with HER2-targeted therapies. These therapies attach to the HER2 protein and slow or stop tumor growth, leading to cancer cell death throughout the body.

Some HER2-targeted therapies are specially made antibodies. Some are HER2 antibody drug conjugates. They are a combination of an antibody drug and a chemotherapy drug. Others are tyrosine-kinase inhibitors.

Your doctor will talk with you about the HER2-targeted therapy that will be included in your treatment plan. Sometimes, more than one HER2-targeted therapy is given at the same time.



HER2-low metastatic breast cancer

HER2-low metastatic breast cancers have low, but detectable levels of the HER2 protein. HER2-low metastatic breast cancers can be treated with the HER2-therapy drug trastuzumab deruxtecan (Enhertu).

[HER2-targeted therapy drugs for MBC](#) are in the table on the next page.

Biosimilars

Biosimilars are drugs that are “highly similar” to other biologic drugs already approved by the U.S. Food & Drug Administration (FDA). Trastuzumab (Herceptin) is the only breast cancer drug with FDA-approved biosimilars for breast cancer treatment. Your doctor can tell you whether a biosimilar may be part of your breast cancer treatment plan.

Metastatic Breast Cancer: HER2-TARGETED THERAPIES

Questions for my doctor.

What are my treatment options for my HER2-positive MBC?

What are the side effects of this treatment?

How can side effects such as diarrhea, constipation, headache and skin changes be managed?

Is there a clinical trial I could join?

How can I learn more?

Resources

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

Related online resources:

- [Clinical Trials](#)
- [Metastatic Breast Cancer: Bone Protection](#)
- [Metastatic Breast Cancer: Quality of Life](#)
- [Metastatic Breast Cancer: Treatment Overview](#)
- [Metastatic Breast Cancer: What is it?](#)
- [Questions to Ask Your Doctor: Bone Protection](#)
- [Questions to Ask Your Doctor: Metastatic Breast Cancer](#)

Drug name	Brand name and (how given)	When treatment is used	Some possible side effects
HER2-antibody drugs			
Trastuzumab (tras-TOO-zoo-mab)	Herceptin (IV drug) Herceptin Hylecta (injection under the skin)	Treatment of HER2-positive MBC.	Heart problems,* headache, fever and chills
Pertuzumab (per-TOO-zoo-mab)	Perjeta (IV drug) Phesgo (injection under the skin with pertuzumab and trastuzumab)	Treatment of HER2-positive MBC. Always given with trastuzumab.	Heart problems (because it contains trastuzumab),* diarrhea, nausea, fatigue and rash
Margetuximab (MAR-jeh-TUK-sih-mab)	Margenza (IV drug)	For HER2-positive MBC that has already been treated with 2 or more HER2-targeted therapies (at least 1 in the metastatic setting).	Heart problems,* fatigue, headache, fever and chills
HER2-antibody drug conjugates (antibody drug plus a chemotherapy)			
Ado-trastuzumab emtansine (TDM1) (A-doh-tras-TOO-zoo-mab em-TAN-seen)	Kadcyla (IV drug)	For HER2-positive MBC that has progressed on trastuzumab and a taxane-based chemotherapy.	Heart problems (because it contains trastuzumab),* liver problems,** nausea, fatigue, muscle and joint pain and low platelet counts
Fam-trastuzumab deruxtecan (trastuzumab deruxtecan) (fam-tras-TOO-zoo-mab DEH-rux-TEE-kan)	Enhertu (IV drug)	For HER2-positive MBC that has progressed on 2 or more HER2-targeted therapies. Also for HER2-low MBC that has progressed on past chemotherapy for metastatic breast cancer.	Heart problems (because it contains trastuzumab),* lung problems,*** low white blood cell counts, anemia, nausea and fatigue
Tyrosine-kinase inhibitors			
Tucatinib (too-KA-tih-nib)	Tukysa (pill)	Treatment of HER2-positive MBC.	Diarrhea, nausea, vomiting and fatigue
Neratinib (neh-RA-tih-nib)	Nerlynx (pill)	These drugs can pass through the blood-brain barrier and may be used to treat some MBC that has spread to the brain.	In rare cases, these drugs have been linked to liver problems.**
Lapatinib (luh-PA-tih-nib)	Tykerb (pill)		
<p>*Your heart will be checked before and during treatment to help ensure there are no problems. **Your liver will be checked before and during treatment to help ensure there are no problems. ***You will be checked throughout your treatment for signs and symptoms of new or worsening breathing problems.</p>			

Other HER2-targeted therapies for metastatic breast cancer are under study. For more information about HER2-positive metastatic breast cancer, visit komen.org.

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