

The Hormone Connection/ Biomarker Education

Because breast cancer can be hormone driven – and the hormones driving the tumor’s growth may change over time, it is important to know your tumor’s hormone receptor (HR) status and, based on recommendations from your doctor, consider re-biopsying your tumor periodically to ensure the HR status has not changed. The human epidermal growth factor receptor 2 (HER2) is another characteristic that is used to determine the type of MBC. Testing your tumor’s HR status and levels of HER2 expression is known as biomarker testing.

If your tumor’s HR status has changed, it is important to speak to your doctor about what this means for your MBC journey and how these changes may impact your current course of treatment.

Understanding Metastatic Breast Cancer (MBC) and the Hormone Connection

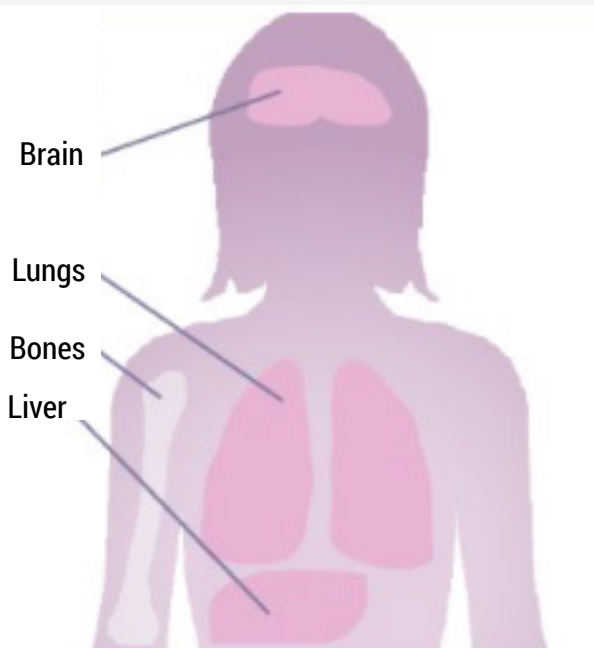
Possible MBC types:

- Luminal A or HR+/HER2-(HR-positive/HER2-negative)
- Luminal B or HR+/HER2+(HR-positive/HER2-positive)
- Triple negative or HR-/HER2-(HR/HER2-negative)
- HER2-positive

70% of Metastases are in the bone

MBC Classifications That Impact Tumor Growth:

- Hormone Receptor Status
- Levels of HER2 Expression



1 What is MBC?

MBC is when breast cancer cells have spread to other parts of the body outside the breast and is most commonly found in the lungs, liver, bones and brain.

2 How can hormones influence MBC?

Breast cancer can be hormone driven and the progression can be directly related to the types of HR (estrogen or progesterone) present.

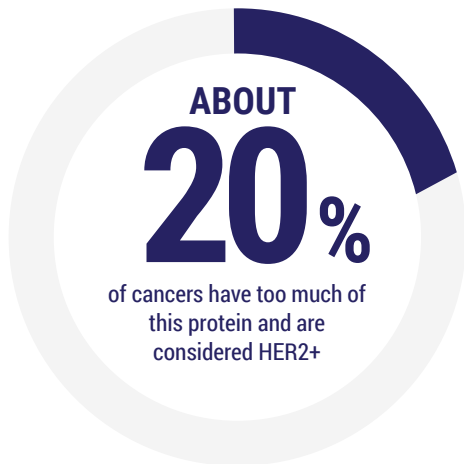
75% of breast cancers are hormone receptor positive

Meaning their growth is fueled by female hormones – EITHER estrogen or progesterone.

3 What is HER2 and triple negative?

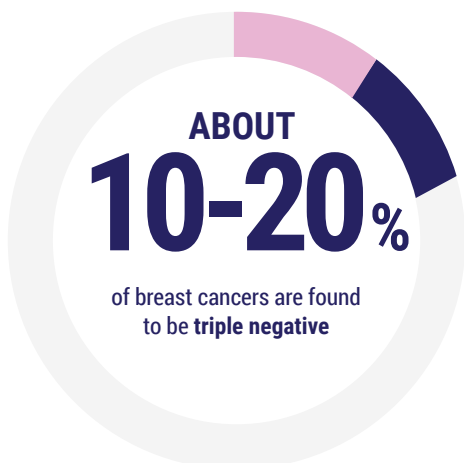
HER2 (Human Epidermal Growth Factor Receptor 2)

is a **PROTEIN** that acts as a receptor on the surface of a cancer cell. When HER2 proteins are too high it can stimulate cancer growth.



TRIPLE NEGATIVE MBC occurs when

the tumor tests negative for estrogen and progesterone receptors and HER2 protein. In this case, cancer growth is not supported by hormones nor by the presence of too many HER2 proteins.



4 Why is it important to know my tumor's hormone receptor status and levels of HER2 expression?

Knowing Your Tumor's Hormone Receptor Status and Levels of HER2 Expression

is critical to working with your doctor to inform your treatment options



HER2 expression may help shape the view in breast cancer, and it is recommended that all patients with invasive breast cancer be tested for HER2 levels of expression to help guide treatment decisions.

It may be important to re-biopsy the tumor periodically **because it could change over time**

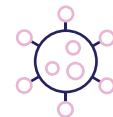
5 What can I do with this information?

Talk to your medical team to determine what your tumor's HR status means for your MBC treatment journey

Possible metastatic breast cancer treatment options to discuss with your medical team:



Targeted Therapy



Immunotherapy



Chemotherapy



Local Treatment
surgery, radiation



Hormone Therapy

You may also discuss your eligibility for ongoing clinical trials with your doctor.