

Metastatic Breast Cancer: Know Your Type



Canadian Breast Cancer Network
Réseau canadien du cancer du sein

HR+ and HER2+

With HER2+ breast cancer, the cancer cells make an excess of the HER2 protein, which promotes the growth of cancer cells. This happens in about 20 per cent of breast cancers. HR+ cancer is usually treated with hormone therapies whereas HER2+ breast cancer is treated with medications that specifically target HER2. These medications bear their own risks, which should be discussed with the individual's healthcare team.²

HR+ and HER2-

HR+ is a common type of breast cancer and accounts for about 70 per cent of all cases. HR+ is usually treated with hormone therapy to reduce the tumour growth. Potential risks of treatment should be discussed with the individual's healthcare team.

Knowing as much as possible about metastatic breast cancer, and in particular, the sub-types of metastatic breast cancer, may help individuals when discussing their diagnosis with their healthcare team to better understand their disease and ways to optimize treatment.

Results from tests will determine the **human epidermal growth factor-2** (also known as HER2) and estrogen and/or progesterone hormone receptor (HR) statuses of the breast tumour cells.

HR and HER2 can either be present, or positive (HR+, HER2+), or absent or negative (HR-, HER2-) in the tumour. The status of each can be treated differently.

HR- and HER2+

HR- breast cancers do not respond to hormone therapies, and HER2+ tumours tend to be more aggressive. Therefore, multiple types of treatment, with the exception of hormone therapy, are required to target this type of breast cancer. All treatments may pose risks that should be discussed with the individual's healthcare team.

HR- and HER2-*

With triple negative breast cancer, the tumour is negative for estrogen and progesterone hormone receptors and negative for overexpression of the gene HER2. About 10-20 per cent of all breast cancers are triple negative. Treatment plans include a combination of surgery, radiation therapy and chemotherapy, each of which poses their own risks, which should be discussed with the individual's healthcare team.

*Also referred to as Triple Negative Breast Cancer

If the Breast Cancer is HR- and HER2-*

HR- and HER2- breast cancer is also referred to as Triple Negative Breast Cancer (TNBC), as the tumour is negative for both the hormones estrogen and progesterone receptors, and does not overexpress the gene HER2. About 10-20 per cent of all breast cancers are TNBC.

Anyone can get this type of breast cancer, but research shows that it occurs more often in women under the age of 40 and women of African or Asian ancestry.

TNBC is not treated with hormone or targeted therapies as the tumours are not responsive to these treatments. Instead, it is usually treated with some combination of surgery, radiation therapy, and chemotherapy each of which may pose risks. Research is currently underway to learn how to target other pathways in triple-negative tumours.

“Knowing my subtype was important for my medical team because it helped them to make the right choices at the right time. Since my cancer diagnosis, I have realigned my priorities in life. I spend my days filled with my loving family and doing whatever I can to make a positive difference.”
- Mei-Lin Yee diagnosed with HR- and HER2-

Whenever breast cancer recurs or spreads, the cancer cells may be retested for HER2 and HR status, as these can change from the original cancer in up to 20 to 30 per cent of cases.

**also referred to as Triple Negative Breast Cancer*

The Living Legacy campaign is a collaboration between the Canadian Breast Cancer Network and one of Canada's leading research-based pharmaceutical companies.