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- breast cancers, unlike HR+ ones, do not have receptors for the hormones estrogen or progesterone, while HER2+ breast cancers make too much of the HER2 protein which promotes the growth of cancer cells.

HR- breast cancers do not respond to hormonal therapies, and HER2+ tumours tend to be more aggressive. Therefore, those diagnosed with this type are usually treated with multiple types of treatment, including chemotherapy and targeted HER2+ treatments, but not hormone therapies.

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.

66 It's important to know that if you're newly diagnosed with metastatic breast cancer, there's still joy to be found in life. And often that joy is having ordinary days. 99

- Krista Dumas diagnosed with HR- and HER2+

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