

Breast Cancer

Understanding Breast Cancer

Breast cancer is diagnosed in different ways. It can be found when something unusual shows up on a screening mammogram. Or, if a lump is felt in the breast, doctors use more tests like ultrasound and a diagnostic mammogram, which takes more detailed pictures. Sometimes, a tiny piece of tissue is taken in a procedure called a biopsy.

Staging Breast Cancer

To figure out the extent of the spread of breast cancer, doctors use a process called "staging." They look at the size and location of the tumor, check if cancer cells are in the lymph nodes, and see if it has spread to other parts of the body. The stage can be from 0 (early stage or DCIS) to 4 (when cancer has left the breast and spread elsewhere). The stage and type of breast cancer help doctors decide the best treatment.

Different Types of Breast Cancer

Doctors look at two main things to figure out the type of breast cancer. One is where it starts – either in the milk-producing tissue (lobules) or the channels (ducts). This helps decide if it's lobular or ductal. The second thing is the receptor status, which means if there are certain proteins on or in the cancer cells. The receptor status leads to four types of breast cancer:

- *Hormone receptor-positive, HER2-negative breast cancer ("hormone positive")*
- *Hormone receptor-positive, HER2-positive breast cancer ("triple positive")*
- *Hormone receptor-negative, HER2-positive breast cancer ("HER2 positive")*
- *Hormone receptor-negative, HER2-negative breast cancer ("triple negative")*

Treating Breast Cancer

For early to moderate stages (0–3), surgery is often used to remove the cancer. Surgery can be a lumpectomy (removing just the cancer) or a mastectomy (removing the whole breast). Sometimes, lymph nodes are assessed as well through select removal of 1–3 nodes at time of surgery. Some people who undergo mastectomy choose to have breast reconstruction with plastic surgery, using implants or other methods.

After surgery, some patients might get chemotherapy to lower the risk of cancer coming back. Radiation therapy may also be used to reduce the risk of it coming back in the same area, particularly after a lumpectomy, but sometimes even after a mastectomy.

Not all patients with breast cancer will need chemotherapy. For example, many patients with hormone-positive, HER2-negative breast cancer will undergo genetic testing of the tumor tissue to determine whether their tumor is high risk (and therefore warranting chemotherapy), or low risk (and can safely abstain from chemotherapy). Most patients with HER2-positive, and triple negative breast cancers will get chemotherapy, however.

If the cancer has hormone receptors, hormonal therapy is an option. It involves taking pills to lower estrogen levels in the body, with treatment lasting 5–10 years.

For HER2-positive breast cancer, targeted therapy may be used alongside chemotherapy.



Remember to discuss your specific diagnosis and treatment options with your doctor.