Oncology

Hormone Receptor-Positive Breast Cancer

About 80% of all breast can cers are “ER-positive.” That means the cancer cells grow in response to the hormone estrogen. About 65% of these are also “PR-positive.” They grow in response to another hormone, progesterone.

If your breast cancer has a significant number of receptors for either estrogen or progesterone, it’s considered hormone-receptor positive.

Tumors that are ER/PR-positive are much more likely to respond to hormone therapy than tumors that are ER/PR-negative.

You may have hormone therapy after surgery, chemotherapy, and radiation are finished. These treatments can help prevent a return of the disease by blocking the effects of estrogen. They do this in one of several ways.

- The medication tamoxifen (Nolvadex) helps stop cancer from coming back by blocking hormone receptors, preventing hormones from binding to them. It’s sometimes taken for up to 5 years after initial treatment for breast cancer.
- A class of medicines called aromatase inhibitors actually stops estrogen production. These include anastrozole (Arimidex), exemestane (Aromasin), and letrozole (Femara). They’re only used in women who’ve already gone through menopause. Fulvestrant (Faslodex) is a medication that blocks and damages estrogen receptors that is sometimes used in the treatment of metastatic breast cancer. Toremifene (Fareston) is a drug that blocks estrogen receptors that can also be given to certain women with metastatic breast cancer.
- CDK 4/6 inhibitors abemaciclib (Verzenio), palbociclib (Ibrance) and ribociclib (Kisqali) are sometimes used with aromatase inhibitors or the hormone therapy fulvestrant (Faslodex).

12.

HER2-Positive Breast Cancer

In about 20% of breast cancers, the cells make too much of a protein known as HER2. These cancers tend to be aggressive and fast-growing. For women with HER2-positive breast cancers, the targeted drug trastuzumab (Herceptin) has been shown to dramatically reduce the risk of the cancer coming back. It‘s standard treatment to give this medication along with chemotherapy after surgery to people with breast cancer that’s spread to other areas. It can also be used for early-stage breast cancer. But there is a small but real risk of heart damage and possible lung damage. There are several other targeted therapies sometimes used in the treatment of HER2-positive breast cancer. These include:

- Abemaciclib (Verzenio) , -Ado-trastuzumab emtansine (Kadcyla), -Fam-trastuzumab deruxtecan-nxki (Enhertu) , -Lapatinib (Tykerb), -Margetuximab (Margenza), -Neratinib (Nerlynx), -Pertuzumab (Perjeta) , -Tucatinib (Tukysa)

13.

Triple-Negative Breast Cancer

Some breast cancers -- between 10% and 20% -- are known as “triple negative” because they don’t have estrogen and progesterone receptors and don’t overexpress the HER2 protein. Many breast cancers associated with the gene BRCA1 are triple negative. They are often treated with surgery, chemotherapy, and radiation.

- Olaparib (Lynparza) and talazoparib (Talzenna) are targeted therapy medicines that can be used to treat women with a BRCA mutation who have metastatic HER2-negative breast cancer. These drugs block a protein called PARP.
- Atezolizumab (Tecentriq) is an immunotherapy drug used in combination with the chemotherapy nab-paclitaxel (Abraxane) to block a protein called PD-L1 in certain breast cancers that are triple negative.

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