

# **BREAST CANCER PROGNOSIS**

# Questions to ask your doctor

- Has the cancer spread beyond the breast to the lymph nodes?
- What is the size of the tumor?
- What is the tumor grade?
- What are the hormone receptor and HER2 status?
- What tests will be done on my tumor to help me make treatment decisions?
- Are there clinical trials I can join for my type of breast cancer?

### What is prognosis?

Prognosis is the expected or probable outcome or course of a disease. For breast cancer, it's based on how well other people with a similar type and stage of breast cancer have done with the same treatment. Each person is different. Your doctor can give you some information about your prognosis, but they can't say for sure how long you will live.



### What does my pathology report show?

If you have breast cancer, your pathology report describes your diagnosis. Either your surgeon or oncologist will go over the report with you. They can answer your questions. Ask for a copy of your report for your records.

Some of the most important findings on your pathology report(s) that help determine prognosis are:

- Whether the tumor is non-invasive or invasive
- Lymph node status
- Tumor size
- Tumor grade
- Characteristics of the tumor (such as hormone receptor and HER2 status. You may also hear these called tumor biomarkers.)

#### Non-invasive versus invasive

#### Non-invasive cancer

Ductal carcinoma in situ (DCIS) is a non-invasive breast cancer (cancer has not spread into nearby breast tissue). It's also called stage 0. In situ [in SY-too] means "in place." The abnormal cells are contained within the milk ducts (the canals that carry breast milk to the nipple during breastfeeding).

Although DCIS is non-invasive, without treatment, the abnormal cells may become invasive breast cancer over time. With treatment, the prognosis for DCIS is very good.

#### Invasive cancer

Invasive breast cancer has spread from the milk ducts or lobules (the sacs in the breast that produce milk) into nearby breast tissue. Cancer cells may have also spread to the lymph nodes or other parts of the body. The prognosis of invasive breast cancer depends on the stage and other factors.

# Lymph node status

Lymph nodes are small clumps of immune cells that act as filters for our lymphatic system.

This fact sheet is intended to be a brief overview. For more information, visit komen.org or call the Komen Patient Care Center's Breast Care Helpline at 1-877 GO KOMEN (1-877-465-6636) Monday through Thursday, 9 a.m. to 7 p.m. ET and Friday, 9 a.m. to 6 p.m. ET or email at helpline@komen.org. Se habla español.



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#### Resources

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1-877 GO KOMEN (1-877-465-6636)

komen.org

National Comprehensive Cancer Network (NCCN)

1-888-909-6226

nccn.org

# Related online resources:

- Breast Biopsy
- Metastatic Breast Cancer: What is it?
- Questions to Ask Your Doctor: Tumor Profiling
- The Role of Genetic, Genomic and Tumor Profiling Tests
- Treatment Overview for Early Breast Cancer
- · What is Breast Cancer?

If breast cancer spreads, the lymph nodes in the underarm are the first place it's likely to go. So, it's important to know if any lymph nodes contain cancer because it can affect stage and your treatment options.

#### **Tumor size**

After the tumor is removed, the pathologist will measure it. In most cases, the smaller the tumor, the better the prognosis tends to be.

### **Tumor grade**

Tumor grade is a measure of how similar tumor cells are to normal cells under a microscope. The more abnormal the cells appear, the higher the tumor grade. In general, the lower the tumor grade, the better the prognosis tends to be. Grade 1 has the best prognosis.

# Characteristics of the tumor Hormone receptor status

Some breast cancers need your body's natural hormones estrogen (ER) and progesterone (PR) to grow and divide. Breast cancer cells are tested for hormone receptors. These hormone receptors fuel cancer growth by attaching to estrogen and progesterone. If the tumor has a lot of these receptors, it's called ER- or PR-positive breast cancer. These breast cancers are treated with hormone therapy, which improves survival.

### **HER2 status**

Breast cancer cells are tested for a protein called HER2. HER2 is important for cell growth and survival. Some breast cancers have a lot of HER2 protein on the surface of their cells. These tumors are HER2-positive. They are treated with HER2-targeted therapy which improves survival for people with these cancers.

Tumors with little or no HER2 protein on the cell surface are not treated with HER2targeted therapy.

These are just a few factors that affect prognosis and treatment.

Find out more at komen.org/diagnosis.

## **Tumor profiling**

Tumor profiling tests give information about the genes in cancer cells. Tumor profiling is used to help make treatment decisions in some people with ER-positive breast cancers. It can help decide whether or not chemotherapy is needed in addition to hormone therapy. It can also help understand the chance of metastasis (when the cancer spreads).

You may also hear the terms genomic testing and molecular profiling.

### **Breast cancer stage**

Breast cancer stage is the most important factor for prognosis. Stage is not always listed in pathology reports. It comes from the results of the biopsy of the tumor tissue, any biopsies of the lymph nodes and other tests. So, you may have more than one pathology report. Your medical team combines all the information and determines the breast cancer stage. It helps plan your treatment.

Doctors use a scale to describe breast cancer stages: 0 to 4. The earlier the stage, the better the prognosis tends to be. Stages 0, 1 and 2 have a better prognosis than stages 3 and 4.

Find out more about pathology reports at komen.org/breast-cancer/diagnosis/pathology-reports/.

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