

Chemotherapy at Huntington Hospital

What Is Chemotherapy?

Chemotherapy (“chemo”) uses medications to destroy cancer cells in the body, including cells at the original cancer site and any cancer cells that may have spread to another part of the body. In some cases, chemotherapy is given before surgery to shrink the cancer. There are several different chemotherapy medicines used in breast cancer. In many cases, a combination of two or more medicines will be used.

How Does it Work?

Cancer cells tend to grow and divide very quickly with no order or control. Because they're growing so fast, sometimes cancer cells break away from the original tumor and travel to other places in the body. Chemotherapy prevents cancer cells from growing and spreading by destroying the cells or stopping them from dividing.

Who Needs Chemotherapy?

Chemotherapy is used to treat all stages of invasive breast cancer, including cancer that has come back in the breast area and breast cancer that has spread to other parts of the body (metastatic disease). Chemotherapy treatments are tailored specifically for each person's unique situation. When deciding on which chemotherapy medicines would be best for you, you and your doctor will take into account the stage and other characteristics of the cancer, such as hormone-receptor status and HER2 status. Chemotherapy is NOT recommended for non-invasive, in situ cancers such as DCIS.

When is chemotherapy given?

- **After surgery (adjuvant chemotherapy):** Surgery is used to remove all of the cancer that can be seen, but adjuvant therapy is used to kill any cancer cells that may have been left behind but can't be seen. Even in the early stages, cancer cells may break away from the primary breast tumor and spread through the bloodstream. These cells don't cause symptoms, they don't show up on imaging tests, and they can't be felt during a physical exam. But if they are allowed to grow, they can establish new tumors in other places in the body.
- **Before surgery (neoadjuvant chemotherapy):** In most cases, neoadjuvant therapy uses the same medications that are used as adjuvant therapy, only they are given before surgery. In terms of survival, there is no difference between giving chemo before or after surgery. The major benefit of neoadjuvant chemo is that it can shrink large cancers so that they are small enough to be removed with less extensive surgery. The other advantage of neoadjuvant chemo is that doctors can see how the cancer responds to the chemo drugs. If the tumor does not shrink with the first set of drugs, your doctor will know that other chemo drugs are needed.

Many patients are able to work full/part time during chemotherapy, and maintain most of their normal daily activities.

Many of the immediate or acute side effects of chemotherapy will resolve once chemotherapy ends. However, some of the side effects may last longer. See our *Common Chemotherapy Side Effects* resource for more information.