

What is chemotherapy?

Chemotherapy is the use of anti-cancer drugs to treat cancer. It can be used to treat cancer by stopping the growth of cancer and by killing cancer cells that have spread to other parts of the body. Chemotherapy is given after surgery (called *adjuvant chemotherapy*) or before surgery (known as *neoadjuvant chemotherapy*) to reduce the risk of breast cancer returning.

How is it given?

There are many different chemotherapy drugs used today. Some drugs work better in combination than alone, so your doctor may give you more than one to take. A few anti-cancer drugs are taken by mouth or injected into the muscle or fat tissue below the skin, but most are injected into a vein.

Treatments can be given at home, at the doctor’s office or in the hospital — depending on the type of chemotherapy.

When is it given?

Chemotherapy usually starts within 4 to 12 weeks after surgery. Today it is commonly given on a 21-day or 28-day cycle. Drugs are generally given weekly or once every third week, with a rest period to allow your body to regain strength. Some studies are looking at a shorter schedule — giving chemotherapy more often along with drugs to control side effects. This may prove to be beneficial for some women. The length of the cycle will depend on the type of drugs used. The length of the treatment period will vary, but it typically lasts from 3 to 6 months.

Classes of chemotherapy drugs

Each chemotherapy drug belongs to a class of drugs. Each class has a different effect on cancer cells. That is why different anti-cancer drugs are often used in combination with each other. The major drug classes are described below.

Drug class	How they work	Examples (Brand name)
Alkylators	by damaging genetic material that controls tumor cell growth	cyclophosphamide (Cytosan)
Antimetabolites	by interfering with cancer cell division	methotrexate (Methotrexate), 5-fluorouracil (5-FU)
Antimicrotubule agents	by preventing cancer cell division	paclitaxel (Taxol), docetaxel (Taxotere), vincristine (Oncovin), vinblastine (Velban), vinorelbine (Navelbine)
Antitumor antibiotics	by damaging genetic material of cancer cells and stopping cell reproduction	doxorubicin (Adriamycin)

Points to consider

Many women are afraid of having chemotherapy because of its side effects and the toll it can take on the body. Although chemotherapy does have a dramatic effect on the body, it is often a successful treatment. It reduces the risk of cancer returning after surgery. Doctors know more about chemotherapy than ever before. The doses are more accurate and there are a variety of medications to help minimize side effects.

Expect some changes in your life during chemotherapy. Your daily routine will be affected. You may be able to keep working and doing your normal activities. Or you may be too tired to do all the things you normally do. That's okay. Your co-survivors (friends and family) can help. You will start to feel better once the treatment is over. Until then, your doctor and nurses can give you suggestions on how to manage your daily activities.



Resources

Organizations

Susan G. Komen for the Cure
1-877 GO KOMEN
www.komen.org

American Cancer Society
1-800-ACS-2345
www.cancer.org

Booklet

Chemotherapy and You: A Guide to Self-Help During Cancer Treatment. National Cancer Institute.
<http://www.nci.gov/cancertopics/chemotherapy-and-you>

Book

The Breast Cancer Survivor Manual, 3rd ed. by John Link. 2003 (Henry Holt and Company).

Related fact sheets in this series:

- Chemotherapy — Coping With Side Effects
- Making Treatment Decisions
- Getting the Support You Need
- New Drugs for Breast Cancer Treatment
- Clinical Trials