

## Understanding Chemotherapy

### What is chemotherapy?

Chemotherapy is the use of drugs to destroy cancer cells, usually by stopping the cancer cells' ability to grow and spread. Systemic chemotherapy gets into the bloodstream to reach cancer cells throughout the body. Chemotherapy can be given in several ways; the most common method is intravenous (IV) chemotherapy. Chemotherapy is often used after surgery and/or radiation therapy to destroy any remaining cancer cells and lower the risk of recurrence. It may also be used to shrink a tumor before surgery or to treat metastatic or recurrent cancer. If it is not possible to get rid of the cancer, chemotherapy may be used to slow cancer growth or reduce symptoms, which is called palliative chemotherapy.

In addition to chemotherapy, several other types of drugs treat cancer. These include targeted therapy, hormone therapy, and immunotherapy. Often doctors will combine the drugs so they are more effective. The drug or combination of drugs, as well as the dose, depends on several factors, including the type and stage of cancer, the patient's overall health, age, and previous cancer treatments. Find additional information at [www.cancer.net/chemotherapy](http://www.cancer.net/chemotherapy).



### What should I expect during chemotherapy?

Before treatment, you will meet with a medical oncologist who will recommend a specific treatment schedule and explain the risks and benefits. If you choose to receive chemotherapy, you will be asked to give written permission. You will also have tests to help plan treatment. The doctor may also recommend addressing dental health, heart health, and fertility concerns before treatment.

You may receive chemotherapy at the doctor's office, an outpatient clinic, the hospital, or at home. Most chemotherapy is given intermittently (for example, once a week) with time in between doses for recovery. Treatment periods are called cycles (usually 3 or 4 weeks). Several of these cycles complete a course of chemotherapy, which generally lasts 3 months or longer. A treatment session may take minutes, hours, or, in some cases, days. Many people receiving IV chemotherapy have a port implanted under the skin, which is a small device that eliminates the need to find a vein at each treatment session.

### What are the side effects of chemotherapy?

Different drugs cause different side effects. The side effects also vary for each person. They depend on the type of cancer, where it is located, the drugs and dose used, and your general health.

Preventing and controlling side effects is a major focus of your health care team, so talk with them about any side effects you experience. The most common side effect is fatigue (lack of energy). Other side effects may include lower blood counts that raise the risk of infection and bleeding, throat and mouth sores, diarrhea, nausea and vomiting, pain, and constipation. Some drugs may cause nerve damage, appetite loss, hair loss, changes in thinking and memory, changes to sexual health, and fertility issues. Most side effects go away after treatment. However, some long-term side effects may occur months or even years after treatment. These can include permanent damage to some organs; difficulty with thinking, concentrating, and memory; and nervous system changes. Learn more about managing side effects at [www.cancer.net/sideeffects](http://www.cancer.net/sideeffects).

## Questions to ask the doctor

Regular communication is important in making informed decisions about your health care. Consider asking the following questions of your health care team:

- What is the type and stage of my cancer? What does this mean?
- Do I need chemotherapy? If so, which drug or drugs will I receive? How will each one be given?
- What is the goal of chemotherapy? Is it to eliminate the cancer, help me feel better, or both?
- How often will I receive chemotherapy?
- How much time will each treatment take?
- Where will treatment be given?
- Will each treatment be the same? Does the drug or drug dose change throughout the course of treatment?
- What can I do to get ready for this treatment?
- What will I experience when I receive chemotherapy? Will it hurt or cause me discomfort?
- How will this treatment affect my daily life? Will I be able to work, exercise, and perform my usual activities?
- What are the potential side effects of this treatment? What can be done to ease any side effects?
- Will this treatment affect my ability to become pregnant or have children?
- What are the possible long-term effects of this treatment?
- Whom should I call with questions or problems?
- Is there anything else I should be asking?

---

The ideas and opinions expressed here do not necessarily reflect the opinions of the American Society of Clinical Oncology (ASCO) or The Conquer Cancer Foundation. The information in this fact sheet is not intended as medical or legal advice, or as a substitute for consultation with a physician or other licensed health care provider. Patients with health care-related questions should call or see their physician or other health care provider promptly and should not disregard professional medical advice, or delay seeking it, because of information encountered here. The mention of any product, service, or treatment in this fact sheet should not be construed as an ASCO endorsement. ASCO is not responsible for any injury or damage to persons or property arising out of or related to any use of ASCO's patient education materials, or to any errors or omissions.

To order more printed copies, please call 888-273-3508 or visit [www.cancer.net/estore](http://www.cancer.net/estore).



### AMERICAN SOCIETY OF CLINICAL ONCOLOGY

2318 Mill Road, Suite 800, Alexandria, VA 22314 | Toll Free: 888-651-3038 | Phone: 571-483-1300

[www.asco.org](http://www.asco.org) | [www.cancer.net](http://www.cancer.net) | [www.conquercancerfoundation.org](http://www.conquercancerfoundation.org)

© 2016 American Society of Clinical Oncology. For permissions information, contact [permissions@asco.org](mailto:permissions@asco.org).

## TERMS TO KNOW

### Adjuvant treatment:

Treatment given to lower risk of recurrence after surgical removal of cancer

### Fertility:

The ability to become pregnant or father a child

### Intraperitoneal chemotherapy:

Medication given directly into the abdominal cavity

### Intravenous chemotherapy:

Medication given directly into a vein

### Medical oncologist:

A doctor who specializes in treating cancer with medication

### Metastasis:

The spread of cancer from where it began to another part of the body

### Neoadjuvant therapy:

Treatment given to shrink a tumor before surgical removal

### Oncology nurse:

A member of the treatment team who specializes in caring for people with cancer, including giving chemotherapy

### Oral chemotherapy:

Medication swallowed as a pill, capsule, or liquid

### Recurrence:

Cancer that comes back after treatment

### Topical chemotherapy:

Medication rubbed into the skin

MADE AVAILABLE THROUGH

