Your Guide to Chemotherapy and Infusion

Patient Education
When to Call Your Doctor

If you are having any of the following symptoms, call your Center. After business hours and on weekends, call 716-845-2300 (or toll free 1-800-ROSWELL) and our call center staff will assist you.

- **Infection:** Fever of 100.4 °F (38 °C) or higher; chills; sore throat; pain or burning when urinating; or redness or tenderness along a vein, IV site, or at any other wound. **IMPORTANT:** If your white blood cell (WBC) count is very low, you must tell your provider if there is any change in how you feel because you may not get the usual symptoms of infection.

- **Allergic reaction:** Itching or hives, swelling in your face or hands, dizziness, or palpitations. If you have swelling/tingling in your mouth or throat, chest tightness, or trouble breathing, call 911 or go to the nearest emergency room.

- **Dehydration:** Intense thirst, dry skin/mucus membranes, tented skin (pinched skin stays in tent shape after you let go), dark urine, or peeing less than 1 cup a day.

- **Peripheral neuropathy:** Numbness, burning, or tingling in your hands or feet; extreme sensitivity to touch; feeling like you are wearing gloves or socks when you are not; clumsiness; muscle weakness; trouble touching cold items; or existing neuropathy is getting worse.

- **Bleeding or bruising:** Bleeding for more than 15 minutes; black/bloody stools; blood in vomit, urine, or mucus; bleeding from your gums or nose; or superficial bleeding into the skin that looks like a rash of pinpoint red/purple spots (petechiae). If you take “blood thinning” medication like warfarin/Coumadin®, apixaban/Eliquis®, enoxaparin/Lovenox®, or rivaroxaban/Xarelto®, pay extra attention for signs of bleeding or bruising.

- **Vomiting or diarrhea:** More than 4 episodes in 24 hours.

- **Fluid retention:** Swelling (edema) in feet or elsewhere; sudden weight gain (2-3 pounds a day) for 2 days in a row; stretched/shiny skin; pitting skin (press on skin, let go, indent remains).

- **Mouth sores** or any symptom that prevents you from eating and drinking.

- **Constipation:** It’s been more than 2 days since your normally would have a bowel movement.

- **Yellow coloring** to your skin or the whites of your eyes.

- **Eye problems:** Blurred or double vision.

- **Headaches, dizziness, extreme fatigue,** or you are sleeping most of the time.

- **Skin problems:** New or worsening rash; blistering or peeling rash, rash that causes an open wound; or a rash that affects a mucus membrane (mouth, lips, nose, eyes, vagina, etc.).

- **Shortness of breath with little/no activity:** new or persistent cough; coughing up yellow, green, or rusty colored mucus; or a need for increased home oxygen.
How to Contact Us

Medical Concerns and Questions

If you are having symptoms that are not life-threatening:

Between 8:00 a.m. – 4:00 p.m. call:

- Roswell Park Hematology Oncology Norhtowns: **716-634-3340**
- Roswell Park Hematology Oncology Southtowns: **716-674-3104**
- Jamestown Medical Oncology & Hematology: **716-664-1909**

After hours and on weekends: Call **716-845-2300** or toll free **1-800-ROSWELL** (**1-800-767-9355**). The Call Center staff can connect you with a triage nurse. If it is determined you need to be seen, you may be asked to come to the Assessment & Treatment Center (ATC), located in the downtown Roswell Park hospital. The ATC is open 24/7. You need to be referred to the ATC by your Roswell Park doctor or the doctor on call. This is not a walk-in clinic.

Emergency Care

In the case of a life-threatening emergency, call 911 or go to the nearest hospital emergency department. Bring your medical record number (MR#) with you and let the emergency staff know the last time you were treated at Roswell Park. Please let us know if you go to any Emergency Department or are admitted to another hospital. You can call the Roswell Park main number **716-845-2300**.
About Your Treatment

Your doctor has recommended drug therapy and/or blood products as part of your treatment plan. Drug therapy may include chemotherapy, immunotherapy, and/or targeted therapies.

Chemotherapy drugs kill cancer cells by stopping them from growing and multiplying. Often, you will hear it called “chemo” for short. Unfortunately, healthy cells can be affected too – particularly cells that reproduce quickly, such as those that line your hair follicles and your digestive tract. This is what causes many of the side effects commonly associated with chemo. The good news is that these cells usually repair themselves after chemotherapy has ended.

Immunotherapy drugs, also known as biotherapy, are different from chemo. They act on your immune system so your body can fight the cancer.

Targeted therapy drugs work by identifying and attacking specific types of cancer cells with less harm to normal cells.

- Drug therapy may be prescribed to cure or control cancer or to relieve symptoms and make you more comfortable.

- Treatment periods are often alternated with rest periods to allow your body time to get stronger before the next round or “cycle” of drug therapy.

- Side effects will vary greatly from person to person, depending on many factors including the drugs used, the dose, and your general health.

The people who will be caring for you during your drug therapy have prepared this guide to help answer your questions and prepare you for your visits.

Knowing what to expect can help relieve worry and help you feel in control. Please let us know if you have questions. We are here to help with your needs and concerns.

The term “drug therapy” is used in this book because the Chemotherapy Infusion Centers administer all types of cancer drug therapies including chemotherapies, immunotherapies, and targeted therapies.
Pathway of Care

Consult with Your Oncologist
- Your Guide to Chemotherapy and Infusion
- Drug Information Sheets
- Consent Agreement & Signing
- Taking the Lead (Wellness & Side Effects)
- Port Care (if applicable)
- Invitation to the Resource Center

Orientation - Resource Center
- Chemo Infusion and Support Kit
- Practical Tips
- Support Services – Roswell Park
- Community & National Resources

Personalized Education Visit
- Your Individual Treatment Plan
- Review Drug Information Sheets
- Treatment Calendar
- Handling Oral Chemotherapy
- Who and When to Call
- Roswell Medically Integrated Dispensary Information

Active Treatment – First Day  Drug Therapy Begins:________________
- Discharge Instructions
- Review Your Question about Drug Therapy
Roswell Park Care Network’s Medically Integrated Dispensary

Convenient and Quick Prescriptions
Hours: Monday – Friday, 8 a.m. – 4 p.m.
Closed Saturdays and Sundays

Patients who receive specialty medications from their doctor’s office are more likely to maintain their medication schedule and have better results.

✓ Medications are available sooner with personalized care.
✓ Staffed by trained professionals familiar with cancer care.
✓ Technicians and pharmacists have direct line of communication with your doctors.
✓ Service is available for Roswell Park Care Network facilities: Northtowns, Southtowns, Jamestown, and Roswell Park Dermatology in Depew.

Phone: 716-634-3340 Ext 6719

Have questions? Ask your care team for more information.
Consultation with Your Oncologist

Your doctor will discuss your treatment plan for drug therapy with you. You will have a medical exam and assessment done to evaluate you and determine if you are medically ready to receive this therapy.

You will receive the book “Taking the Lead” that will provide tips on how you can prepare for your drug therapy, strengthen your immune system, and minimize the side effects of your drug therapy.

You will also receive an invitation to visit our Resource Center for a personalized orientation.

Orientation at the Resource Center

Before you begin your treatment, we recommend that you visit the Resource Center for a personal one-on-one drug therapy orientation.

You will receive a complementary Chemotherapy and Infusion Support Kit which contains items and information to help keep you organized and comfortable during your appointments.

The Resource Center offers information, support, and materials designed to educate and guide you through every step of your journey.

Please review the following list of services and topics so that we can tailor your session to your own personal needs. If there is something you would like to talk about that is not on the list, please ask a Resource Center coordinator.

Check Off Your Personal Topics to Cover

- Peer Support
- Clinical Trials
- Chemotherapy
- Making Health Decisions
- Sexuality and Intimacy
- Wig and Hat Program
- Common Concerns for Patients Starting Treatment
- Fertility
- Nutrition
- Survivorship and Supportive Care Center
Your Personalized Education Visit

Your nurse will provide you with drug fact sheets and discuss the information about the medications you will be taking, such as:

- names of your drug therapy and other medications
- how and when these medications will be given and how they work
- what you need to tell your doctors and nurses before you begin treatment
- possible side effects
- suggestions to prevent and/or manage those side effects
- when to call your doctor
- using the Roswell Medically Integrated Dispensary
- other important information you should know about your drug therapy
After receiving lab results and a completed nursing assessment, it will take approximately 30 minutes to mix your drugs for your infusion.

Please show up on time to your appointment. Arriving late is likely to significantly increase your wait time in the clinic.

We listen to your suggestions and are committed to delivering timely service.
1 Blood Tests - Medical Assistant/Nurse
Sometimes your doctor will need blood test results before they can prescribe your drug therapy. Blood is drawn either the day before or the morning of your infusion. Allow about 1 hour for your doctor to get the results. Your doctor must have these results before they can write the orders for your drug therapy. Talk with your doctor about whether you will need blood tests. Please show up on time. Arriving late to your phlebotomy appointment is likely to increase your wait time.

2 Nursing Assessment
You may have a physical assessment with your doctor before your scheduled chemotherapy appointment. If you do not see your doctor that day, you will have a physical exam with a nurse to make sure you are well enough to begin your drug therapy.

3 Lab Results
Once your blood test results are completed in the lab and the results are within normal ranges, your doctor will write the orders for your drug therapy or blood product(s).

Note: Your white blood cells (WBC) play an important role in how well your immune system is working and, in your ability, to fight off infections. If your WBC count is too low, your infusion may be delayed until your blood count(s) recovers.

4 Pharmacy
Your doctor will enter the orders and the medications are prepared. Your nurses will review the orders, double-check them for your safety, and administer the drug therapy as ordered.

5 Chemotherapy/Infusion Appointment
We want your appointment to go as safely and smoothly as possible and we want you to know what to expect so you can plan accordingly. As we strive to provide the best cancer treatments, nothing is more important to us than your safety and your comfort. Your appointment will include the lab tests and other processes we have described. For example, if you have an 8:00 a.m. appointment, the time it takes for lab test results and preparation of the drug means that your chemotherapy may not begin until about 9:00 a.m. or later. This is important if you need to arrange transportation or other personal matter.

Please arrive at your appointed time. Appointments are scheduled according to the amount of time the staff anticipates each patient will need. If you are early or late, you may experience a long wait time.
Please make a list of all the medications and doses you are currently taking and bring it to all of your appointments.

- If you normally take prescription medications at home (nausea, high blood pressure, diabetes, pain, etc.), please bring them with you to your infusion appointments. Bring enough medication to cover you for 8-10 hours.
- If another doctor prescribes medication while you are in treatment, make sure they know what drug therapy you are receiving and when.
- Tell your Roswell doctor about any prescription or over-the-counter drugs, vitamins, herbs, or supplements you take because they may affect your treatment. Please ask your doctor what you may or may not take during your drug therapy.

While You Wait

What can I expect during my appointment?

- There are recliner chairs in each individual treatment area in the Chemotherapy & Infusion. Light refreshments are available.
- You may bring a snack with you to your treatment. Please avoid foods that have a strong odor as they may cause nausea for the others receiving treatment.
- Dress warmly. The center may feel cool, especially after you have received IV fluids. There are blankets available. Ask your nurse if you would like a blanket.

How long will my drug therapy take?

It can take anywhere from 30 minutes to 10 hours to get your drug therapy, depending on the treatment protocol, dose, and how it is administered. Ask your doctor before your first treatment how long they expect it will take. For the remaining treatments, you can check with the nursing staff.

If you are receiving intravenous (IV) drug therapy, let the nurse know if you have any burning, redness, or swelling at the IV site during your infusion.
How Your Drug Therapy Will be Administered

The way your therapy will be delivered depends on the type of cancer you have, the drugs you are receiving and the duration of your treatments. You may receive your drug therapy through an IV in your arm or hand, a PICC (peripherally inserted central catheter) line or other type of catheter, or a port.

- PICC lines are longer than the IVs that are typically used in your hand or forearm, and they are placed in a bigger vein. The catheter remains in place between treatments. This means nurses do not have to start a new IV for each treatment. Catheters are soft, thin tubes. Blood (for testing) can also be removed through this catheter.
- Intrathecal catheters are placed in the spinal canal to deliver medication into the spinal fluid to treat cancers of the central nervous system.
- Intracavity catheters are placed directly into a cavity (hollow space) such as the chest, belly, or pelvis so the chemo can be delivered to the tumor without entering your bloodstream and being carried to all the tissues and cells of your body.
- A port is a small device placed under the skin. It has a reservoir with a silicone top where needles can be inserted. There is a catheter attached to the port to give medications and fluids. See page (15) for more about ports. You can feel the port under the skin but when properly placed and kept clean, there should be no discomfort. The port is removed when treatment ends.

To prevent the spread of infections, visitors must be over age 16.
After Drug Therapy

Taking Care of Yourself

- Stay well hydrated in the days before and after your infusion. We recommended you drink 2-3 quarts a day, preferably water, unless your doctor told you to restrict fluids. Fluids help your body get rid of the drugs and help prevent dehydration, constipation, and bladder irritation.

- Here are some other tips to help you in the days after your drug therapy:
  - Get a lot of rest and include exercise in your day, when possible.
  - Eat properly to maintain your strength.
  - Keep your health care team informed. Let them know if you are not feeling well or if you are having side effects. There are many options to help relieve pain, nausea, and other symptoms.
  - Keep your mouth clean. Brush your teeth and gums with a very soft brush. Use fluoride toothpaste and alcohol-free mouthwash. Do not use tobacco. Alcohol and tobacco can cause dryness and irritation.
  - Patient education materials can help you manage side effects and find support. They are available in the Patient Education Library on www.roswellpark.org website. If you would like a hard copy, ask your nurse, or stop in at the Resource Center.
Questions & Answers

What is drug therapy?
Drug therapy is the general term for using medications to treat disease.

What are the different kinds of drug therapy?
There are many drugs and combinations of drugs used to fight cancer. When only one drug is given, it is called single agent therapy. If several drugs are given at the same time, it is called combination therapy. Your doctor will work with you to find the best treatment option for you.

Immunotherapy is a treatment to boost or restore the ability of the immune system to fight cancer, infections, and other diseases. Monoclonal antibodies, cancer vaccines, and T-cell therapies are types of immunotherapy.

How do they work?
- **Chemotherapy drugs** kill cancer cells by stopping them from growing and multiplying.
- **Targeted therapy drugs** work by identifying and attacking specific types of cancer cells with less harm to normal cells.
- **Immunotherapy drugs (biotherapy)** work with your immune system to help your body fight cancer.

How are the drugs administered?
Drug therapy can be given in a number of ways. Many medications are too harsh to go through the digestive tract, so they are given intravenously (into a vein/IV) through a catheter (thin tube). One end of the tube is connected to a bag containing your medication and the other end is placed into a vein.

Some medications are available in pill or liquid form that can be taken by mouth, and others can be applied topically, like a cream or lotion.

Drug therapy may be given as an injection. The name of the injection tells you where the chemotherapy will be placed:
- intrathecal or intraventricular: into the fluid that surrounds the spinal cord and brain
- intramuscular: into a muscle
- intra-arterial (IA): into an artery
- subcutaneous: just under the skin
- intrapleural: into the chest cavity
- intraperitoneal (IP): into the abdominal cavity
- intravesical: into the bladder
- intratumoral: into the tumor
How will I feel during the infusion? Will it hurt?

Most people do not find getting drug therapy a painful experience. It can, however, affect people in different ways and those effects can vary widely. Your type and stage of cancer, your previous health, the type and dose of your drug therapy, and other medical conditions can all play a part in how drug therapy affects you.

Please let your health care team know how you are feeling. Tell them if you are having side effects and talk about how to manage them.

How long does drug therapy last?

Drug therapy is administered during a series of treatment sessions. Your Roswell team will determine the number of sessions you need. A complete series of sessions is called a course. Your doctor may or may not be able to tell you when your drug therapy will be complete when you begin your sessions.

Complications can delay treatment. The most common physical cause of delay is a drop in your white blood count (WBC), also called neutropenia, which puts you at a higher risk for infection. Complications, such as a drop in WBCs, RBCs (red blood cells), or platelets need to be fixed before you can have another treatment.

What can I do to make my drug therapy as successful as possible?

Preparing yourself is important. We are here to help.

- Let your doctor or nurse know if you are taking any vitamins or herbal supplements or remedies, including garlic tablets.
- Tell your doctor or nurse if there are any changes in your prescription or over-the-counter medications/supplements.
- In general, avoid aspirin products. However, if your primary care doctor has prescribed a daily aspirin, do not stop taking it unless your Roswell Park doctor says it is OK to stop.
- Drink 3-4 quarts/liters every day to help you stay hydrated.
- If you have heartburn, you can try Tums®, Rolaids®, or Mylanta®.
- If you become constipated, you may take over-the-counter stool softeners.
- It is important to shower or bathe and KEEP YOUR SKIN MOIST.
- Talk to your doctor and nurse if you have any unexpected side effects, or if your side effects are severe.

Get plenty of rest, eat a balanced diet, and seek support when you have questions.
About Your Port

A port is a device that allows us to give you medications and fluids and to take blood samples without the discomfort of repeated needlesticks. Ports are called vascular or venous access devices because they provide access to your veins. A port is placed under your skin in a minor outpatient procedure. A common location for a port is just below your right collarbone.

A port has two parts:
• The port reservoir sits in a pocket just under your skin and has a raised silicone center called a septum. The septum is where needles are inserted, so it is made from material that seals itself after each puncture.
• The catheter is a soft, thin tube. It connects to the port reservoir on one end. The other end lies in a large vein near your heart.

Ports are also called chest ports or implanted ports. They may also be called by product brand names such as Port-A-Cath®, Infus-A-Port®, SmartPort®, Mediport®, Microport®, or PowerPort. A port can stay in place permanently, if necessary, or it can be removed when it’s no longer needed. If not used often, your nurse may need to flush your port so it does not get blocked.

How does the port work?
The port can be used to deliver medication by inserting a special needle through the skin into the port. The medication passes through the catheter into a large vein in the chest, where it is quickly diluted in the bloodstream.

How do I care for my port?
• For the first few days after you get your port, you will need to take care of the small incision made during the procedure.
• You will receive written instructions on how to care for your port when it is placed.
• For 1-2 days after you get your port, the area will feel sore, like a bruise. The area will be entirely healed in about 10 days. While you are healing, avoid heavy exertion and contact sports.
• For the first week after you get your port – and anytime the port is accessed – you must keep it clean and dry. Cover the area surrounding your port with a double layer of plastic wrap when showering and tape the edges down. Keep your back to the shower.
• For the first 2 weeks – and anytime the port is accessed – do not submerge the port in water (no pools, baths, or hot tubs).
• Keep the bandage on the incision until it heals.
• If you have sterile tape/Steri-Strips™ over the incision, do not pick it off. It will eventually loosen and fall off on its own.
• Once the incision heals, the port requires no special care. You do not need a bandage, and you can resume your normal activity level when the port is not in use.
• We will give you information that tells you where your port is located on your body and whether it can be used for CT scan injections. Keep this information in a safe area.

How long will I have a port?
Only your doctor can let you know how long your therapy will last. When the port is no longer needed, it can be removed.

What if I suspect a problem?
For the first 1-2 days after getting your port, the area around the incision is usually red and/or sore. Should it last beyond this time, please call your doctor or center.

Call your doctor immediately if you have:
• signs of infection: Fever of 100.4°F (38°C) or higher, chills, pain, or swelling or increasing redness or soreness in the incision area more than 2 days after the port is placed
• shortness of breath or dizziness
• bleeding around the incision or port (after the 2nd day)
• bleeding that soaks through gauze (at any time)
• difficulty flushing the port

Urgent: If you are sick and need immediate attention for non life-threatening symptoms, your doctor can set up an appointment for you with our Assessment and Treatment Center (ATC). The ATC is open 24 hours a day, 7 days a week. You must be referred by a provider; this is not a walk-in clinic.

Emergency: In the case of a life threatening emergency, call 911 and go to the nearest hospital emergency department Bring your Roswell Park medical record number with you let the ER staff know the last time you were treated at Roswell Park.

Please let us know if you go to the ER or are admitted to the hospital. Roswell Park’s main number is 716-845-2300.
Your Oral Drug Therapy

How should I handle my medication?
• Wash your hands before and after touching your medication.
• Do not allow anyone not involved in your care to handle your medication. Only you or a designated caregiver should touch it.
• If someone else handles your medication, they should wear gloves.
• Never break, crush, chew, or open your tablets or capsules unless otherwise instructed.

How should this medication be stored?
• At home, store this medication separately, away from your other medicines.
• Store your medication in a place that is away from sources of water, direct sunlight, and excessive heat, cold or humidity. Be sure children and pets cannot reach your pills.
• Read the medication package and any attached paperwork to see if there are other rules about how to store your medication, such as refrigeration.

What should I do if another person or pet swallows or is exposed to my medication?
If the exposure was on the skin, flush the area with water. Then call the Poison Control Center immediately at 1-800-222-1222. Keep calm and look for any signs of distress in the other person or pet.

What should I do with leftover medications if my treatment changes?
• Do not put chemotherapy medications in the garbage (see below) or down the toilet. Keep your oral chemotherapy stored in a safe place until you can return it.
• New York State has Take Back programs for the collection of household drugs. Go to the NY Department of Conservation website [www.dec.ny.gov/chemical/67720.html](http://www.dec.ny.gov/chemical/67720.html) and click on “Find a free collection site near you.”

If there is an urgent need to dispose of your medication and there are no drop off locations near you, follow these instructions:
• Mix whole pills (do not crush or open) in water and add salt, dirt, ashes, or cat litter. Do not hide them in food.
• Place mixture in a bag, box, or plastic tub that you can seal. Secure the container with strong tape.
• Place the sealed container in your trash as close to trash collection day as possible.
Resources & Support

Resource Centers
The Resource Centers offer information, support and materials designed to educate and guide you through every step of your journey.

For more information, please call:

Northtowns: 716-845-1300 X 5053
Southtowns: 716-845-1300 X 5443

Services offered
• Educational cancer information from Roswell Park clinicians and national patient and professional organizations.
• A Wig Boutique that provides one new wig and one head covering per year at no cost to people experiencing hair loss due to cancer treatment.
• Patients may purchase additional wigs and head coverings from the Elevate Salon located at the Main Hospital Location.
• Orientation for patients about to begin drug therapy.
• A wide array of comfort items for patients and caregivers.

CancerConnect
CancerConnect, Roswell Park’s Online Patient Community, is for anyone whose life has been touched by cancer. It’s a place to talk to others who share your experiences and who understand how you feel. Join us at community.roswellpark.org.

Additional Support
Roswell Park is here to help you throughout your cancer journey, especially in managing the stress and side effects of your drug therapy. We have wellness programs, side effect management, psychologists, dietitians, spiritual care, rehabilitation services, fertility, and sexual health information, as well as referrals to community resources in Western New York.

Ask one of your healthcare team members for a copy of our publication “Resources & Support or Patients & Caregivers” or stop in the Resource Center.

To view this book online, go to our patient education library at www.roswellpark.org/ current-patients/patient-education and search for “Resources & Support.”
The Roswell Park Care Network

Barry Street Health Center Medical Oncology and Hematology, Olean, NY
Bradford Regional Medical Center Medical Oncology & Hematology, Bradford, PA
Breast Care of Western New York, Williamsville, NY
Catholic Health of Long Island, Rockville Centre, NY
Ellis Medicine, Schenectady, NY
Jamestown Medical Oncology & Hematology, Jamestown, NY
Oneida Health Cancer Care, Oneida NY
Roswell Park Dermatology, Depew, NY
Roswell Park Hematology Oncology Northtowns, Williamsville, NY
Roswell Park Hematology Oncology of Niagara, Niagara Falls, NY
Roswell Park Hematology Oncology Southtowns, West Seneca, NY
Roswell Park Urology, Niagara Falls, NY
Samaritan Medical Oncology Center Watertown, NY
Southtowns Radiation Oncology, Orchard Park, NY

For a full listing and more information about those practices, visit roswellpark.org/carenetwork