What to Expect…
A Guide to Cancer Infusion Therapy

Faculty and staff of these programs supplied facts for this handbook: Cancer Patient Education, Hematology, Medical Oncology, Oncology Nursing, HomeMed® Nursing, and the Patient and Family Support Services Program.
Dear Patient and Family,

It is our privilege to work with you as you are treated at the University of Michigan Comprehensive Cancer Center. Our mission is to give quality healthcare services to you and your family through a skilled team of oncology providers. Your medical treatment, safety, health and well-being are very important to us. We know that this can be a stressful time in your life and we are committed to giving you and your family the support and services you need.

The Cancer Center has a department called Patient and Family Support Services. The dedicated people in this department are here to help you by giving a variety of resources. Please review the Patient and Family Support Services Handbook you received in your New Patient Toolkit. If you’d like extra copies, please let your oncology team know, and they will get one for you.

We would like to start giving our support by providing you and your family with patient education on chemotherapy. This Guide to Cancer Infusion Therapy may be used in combination with the Chemotherapy and You booklet produced by the National Cancer Institute. Together, these resources give general information about getting chemotherapy. They offer ideas to help you prepare for treatment and describe what to expect. There are also ideas to help you care for yourself during and after treatment. If you would like extra copies of this Guide or other educational materials, please visit the Patient Education Resource Center (PERC) on level B2 of the Cancer Center.

In addition to the resources listed above, you may want to read the Patient Rights and Responsibilities brochure. The information in this brochure may be helpful to you during your treatment. This brochure is widely available throughout the Cancer Center.

Please know that we are ready to answer any questions you may have during your treatment here at the University of Michigan Comprehensive Cancer Center.

Sincerely,

Infusion Staff of the University of Michigan Comprehensive Cancer Center
When and How To Call Your Doctor

For symptom management and non-emergencies: Call 1-734 _______________________.
Monday through Friday 8:00am to 5:00pm.

For Medical Emergencies, call 911

After 5pm, weekends and holidays, call the paging operator at 1-734-936-6267. Ask to speak to the doctor on call:
• Hematology/Oncology or Gynecologic Oncology
• Other:

When should I call the doctor?

• Any symptom that concerns you
• A fever of 100.5° Fahrenheit, or greater
• Bleeding or unusual bruising
• Burning and/or pain when urinating
• Constipation (no bowel movement in 2-3 days)
• Diarrhea (loose, watery stools) four or more watery stools in 24 hours
• Nausea, vomiting or if you cannot keep down any liquids
• Pain not controlled by your current medications
• Redness, pain, sores or a white coating in your mouth
• Shaking and chills
• Unusual cough, sore throat, lung congestion or shortness of breath

Additional Contact Information

Fertility Counseling Program................................................................. 1-734-763-4323
Finance and Billing Services (Cancer Center).................................... 1-734-647-8663
HomeMed.................................................................................................. 1-800-862-2731
Infusion Appointments/Center........................................................... 1-734-647-8908
UMHS Paging Operator.......................................................................... 1-734-936-6267
This number will reach:.......................................................................... 1-877-907-0859
  • Cancer Center Education Clinic
  • Nutrition Clinic Appointments
  • Practical Assistance Center
  • Psych Oncology Clinic Appointments
  • Social Work
  • Symptom Management Program
Parking

Cancer Center Infusion Areas:
For the Cancer Center parking lot - “P1”. BMT patients - “P4”.
Remember to bring your parking ticket to the infusion area with you for validation to receive reduced parking rates.

Infusion at Canton Center:
Enter the parking lot from Saltz Road. Follow the signs to infusion, park near the main entrance to the building. There is no charge for parking at this location.

Infusion at Northville Health Center:
Enter the parking lot from 7 Mile Road. There is no charge for parking at this location.

Places To Eat

Cafeteria is on Level 2 of University Hospital available 24/7.

Subway (inside cafeteria) is available weekdays.

Einstein Bagels is on Level 2 of University Hospital available daily.

Getaway-n-Play Café and Subway are on Level 2 of Children’s & Women’s Hospital are available daily.

Atrium Heart Healthy Café is in the Cardiovascular Center on Level 2. Available weekdays.

Victors Way Café is on Level 2 link between the Cancer Center and University Hospital. Available weekdays.

Vending Machines are on Level B1 and Level 2 of the Cancer Center and on Level 2 University Hospital near Cafeteria.

Canton and Northville Infusion Centers also have vending machines.

Pharmacy Locations

Cancer Center on Level B1
Hours of operation: Monday through Friday, 9:00am to 5:30pm
Phone number: (734) 647-8911

Taubman Center - Level 1 of the Taubman Center building
Hours of operation: Monday - Friday, 9:00am — 6:00pm. Saturday, 9:00am- 4:30pm
Phone number: (734) 936-8260

Reminders:

- There is no outpatient pharmacy in the Canton Infusion location.

- Please have all prescriptions filled prior to your infusion appointment.

- Some medicines prescribed by your doctor may not be available in your community pharmacy.

- We recommend that you consider filling these medications at the the Cancer Center outpatient pharmacy.
How to Contact Your Doctor
Monday through Friday (8:00 am to 5:00 pm):

Call 1-(734) ________________________________

Name of my clinic: __________________________

Team Name: ________________________________

After hours, weekends and holidays:

Call the paging operator at 1-(734)-936-6267

    Ask to speak to the Doctor:

    ▪ Hematology/Oncology on Call
    ▪ Gynecologic /Oncology on Call
    ▪ Other:
## Important Phone Numbers

<table>
<thead>
<tr>
<th>Service</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fertility Counseling Program – Women</td>
<td>1-734-763-4323</td>
</tr>
<tr>
<td>Center for Reproductive Health</td>
<td></td>
</tr>
<tr>
<td>Fertility Counseling Program – Men</td>
<td>1-734-647-8579</td>
</tr>
<tr>
<td>Cancer Center Education Clinic</td>
<td></td>
</tr>
<tr>
<td>Finance and Billing Services (Cancer Center)</td>
<td>1-734-647-8663</td>
</tr>
<tr>
<td>Home Med®</td>
<td>1-800-862-2731</td>
</tr>
<tr>
<td>Infusion Appointments*</td>
<td>1-734-647-8908</td>
</tr>
<tr>
<td>(Use only for same day appointments, if you will be late or need to cancel.)</td>
<td></td>
</tr>
<tr>
<td>Nutrition Clinic Appointments</td>
<td>1-877-907-0859</td>
</tr>
<tr>
<td>Patient Accounts (billing)</td>
<td>1-800-992-9475</td>
</tr>
<tr>
<td>Practical Assistance Center</td>
<td>1-877-907-0859</td>
</tr>
<tr>
<td>PsychOncology Clinic Appointments</td>
<td>1-877-907-0859</td>
</tr>
<tr>
<td>Cancer Center Education Clinic Appointments</td>
<td>1-877-907-0859</td>
</tr>
<tr>
<td>Social Work</td>
<td>1-877-907-0859</td>
</tr>
<tr>
<td>Symptom Management Program</td>
<td>1-877-907-0859</td>
</tr>
<tr>
<td>University of Michigan Health System Paging Operator</td>
<td>1-734-936-6267</td>
</tr>
<tr>
<td>University of Michigan Home Care Retail Store</td>
<td>1-734-647-3364</td>
</tr>
</tbody>
</table>

*Reference “How to Contact Your Doctor” for all other needs.
# Table of Contents

## Preparing: Understanding Chemotherapy and Biotherapy

- What is chemotherapy and biotherapy? ........................................................... 3
- What can I do to get ready for treatment? ......................................................... 4
- Support services and resources ................................................................. 7

## Treatment: Helpful Information for Infusion Therapy

- Parking ........................................................................................................... 9
- University of Michigan blood drawing facilities ............................................. 9
- Clinic appointments ..................................................................................... 10
- Infusion centers .......................................................................................... 10
- Infusion appointment .................................................................................. 11
- Wait times .................................................................................................... 12
- During your treatment .................................................................................. 13

## Continuous Home Infusion Chemotherapy

- What is continuous home infusion therapy? ................................................. 14
- Vesicant chemotherapy agents .................................................................... 15
- Hazardous waste container ........................................................................ 16
Frequently Asked Questions

Can I drive? ................................................................. 17
How long will I be there and what should I expect? ......................... 17
Can I eat before and during treatment? ....................................... 17
Can I smoke? ..................................................................... 19
Should I take my medications before treatment? ......................... 19
What should I wear? ................................................................ 19
What should I bring to my appointment? .................................... 20
Who can I bring into the infusion area? ...................................... 21
Kids & Pets Poster .................................................................. 22
Where can I fill my prescriptions? ........................................... 23

After Treatment: What Should I Expect?

What to expect ........................................................................ 24
When to call the doctor ............................................................ 24
Precautions in the home ............................................................. 25
Laundry .................................................................................. 25
Body waste ............................................................................. 26
Pregnant or breastfeeding .......................................................... 27
Sexual activity and pregnancy ...................................................... 27
Hand washing .......................................................................... 27
Skin care .................................................................................. 28
Managing physical and emotional challenges ............................. 29
Note page .............................................................................. 30
Preparing: What is Chemotherapy and Biotherapy?

Chemotherapy (chemo) is a medication or a combination of medications prescribed to kill cancer cells which may also kill healthy cells. These medications are often called “anti-cancer” drugs.

Chemotherapy treatments may be given in many ways:

- Intravenous (IV): through a catheter tube in the vein, typically placed in the arm. Sometimes, your doctor may recommend having an IV infusion device. The two most common are PICC (peripherally inserted central catheter) lines and Ports. Both of these devices stay in longer than an IV catheter placed in your vein at the time of your infusion visit. Talk to your healthcare team for further information about what’s best for you.
- Orally: taken by mouth as pills, capsules or liquids that you swallow.
- Intracavitary: given directly into a body area.
- Topically: placed on the skin where it is absorbed.
- Intra-arterial (IA): given directly into an artery.

Biotherapy (biological therapy or targeted therapy) is treatment that uses the body’s own immune system to stop or slow the growth of cancer cells. Some biotherapies work by stopping the blood supply to a tumor or by interrupting signals within the cancer cell. Types of biotherapy include monoclonal antibodies, cancer vaccines and growth factors.

- Monoclonal antibodies kill cancer cells. These drugs do not cause harm to healthy cells.
- Cancer vaccines help the body fight to keep cancer from coming back.
- Growth factors help your own body renew and make blood cells.

Your oncology doctor will decide which medication(s) to give you and how they will be given. Information about your treatment will be given to you by your oncology team.

This Guide will focus on information to support you through treatments given intravenously (IV) in the infusion areas. The National Cancer Institute (NCI) www.cancer.gov provides information for those undergoing treatment in the booklet entitled, Chemotherapy and You.
• Use the *Chemotherapy and You* booklet as you have questions about your treatment. Many sections will be helpful at other times as you move through treatment.

• Please review the section *Questions and Answers about Chemotherapy*. This section answers common questions about chemotherapy.

**What Can I Do to Get Ready for Treatment?**

The Infusion Staff at University of Michigan Comprehensive Cancer Center provides these tips to help you prepare:

**Step 1: Learn about the chemotherapy your doctor has prescribed for you**

It is very helpful to review information and know your resources before treatment starts. Materials to review may include: options for clinical trials, informed consents, drug information sheets, nutrition information and much more. While it is great to have so many resources available, we understand that it may seem overwhelming. Many people feel that choosing a caregiver who can partner with you as a support person and information gatherer is useful. It is also helpful to think about your questions and write them down before your visit with your oncology team. There is a section at the end of this guide to keep track of the questions you have and the answers you get.

To help with your learning needs, a nurse from the Cancer Center Education Clinic will talk with you. The nurse will talk with you about your treatment, give information and answer any questions you may have.

**Step 2: Get a thermometer for use at home**

It’s important for you to check your temperature on a routine basis. Buy an oral (mouth) thermometer. Check to make sure it works and that you can read it.
Step 3: Take precautions against pregnancy

It is very important that you or your partner do not get pregnant during chemotherapy treatment. Use two forms of birth control to avoid pregnancy while you or your partner is being treated. Continue using birth control for at least six months after your last treatment. If there is any chance that pregnancy has occurred during your course of treatment, call your oncology team right away.

Fertility program

Some men and women who get chemotherapy become infertile, which means they will face challenges when trying to conceive a child. If you plan to have children in the future, talk to your doctor before your treatment starts. The University of Michigan Health System’s Center for Reproductive Medicine offers fertility preservation interventions for male and female patients with cancer. You will need to have a referral from your oncologist to go to this clinic. Talk with your oncology team if you have any questions.

Step 4: Schedule a dental checkup before treatment starts; if time allows

Your mouth can be a source of infection during some types of chemotherapy treatment. For this reason, it is helpful to have a checkup and complete any needed dental work before you start treatment. If it is not possible to see your dentist before chemotherapy, talk with your oncology team. If you have had a checkup with your dentist in the last six months, and you do not have any new problems, you do not need to see your dentist again before starting treatment.

Some treatments may cause mouth and or throat changes. Your healthcare team will talk to you about which chemotherapy drugs are likely to affect your mouth or throat. If your healthcare team suggests mouth rinses, follow the instructions for mouth rinses that are described in the Mouth and Throat Changes section of Chemotherapy and You booklet unless instructed differently by your healthcare team.
Step 5: Take care of You

It is important to focus on your own needs during this time. See tips below for self-care and stress management.

✓ It’s OK to accept help from others

Allow someone to help with routine activities like doing laundry or going to the grocery store. Learning to accept help from others can be hard, but may be necessary so that you can get the rest you need.

✓ Reduce stress

Stress can come from a variety of causes. If extra support is needed, speak with your oncology team and they will help you by making referrals for services.

Step 6: Plan ahead

Stock up on items you may need at home after treatment such as: dressing supplies, medications, food and beverages. Ask your oncology team which medications you should bring with you to your appointments. Make a list of your medications with dose and frequency and bring it with you to your appointments. If medications are added, change this list before each appointment.

Hair loss is common with many cancer treatments. Ask your oncology team if the medications prescribed for you will cause hair loss.

If hair loss is expected, some people choose to buy a wig. It is a good idea to have your natural hair matched with a wig before hair loss occurs. Information about where to get a wig is available at the Patient Education Resource Center (PERC) on level B2 of the Cancer Center. You can call the PERC at 734-647-8626 for more information.
Some people chose to cut or shave their hair before hair loss occurs. This may lower some of the emotional distress of losing hair slowly or in clumps.

**Step 7: Be flexible with your appointments**

Your oncology team will review the schedule for your chemotherapy. Schedules may change for a number of reasons. We ask that you be as flexible as possible with treatment days and times. Unexpected events about your treatment and/or the treatments of other patients can often cause delays.

You may have less stress if you do not make other commitments on the day of your infusion appointment.

**Step 8: Determine if your health insurance covers chemotherapy treatment costs**

It is important to talk to your health insurance plan about what costs are covered before you start treatment. The *Chemotherapy and You* booklet offers questions to ask your health insurance plan in the *Questions and Answers About Chemotherapy* section. Staff of the University of Michigan Cancer Center Billing and Customer Service Offices are available to talk if you have questions about chemotherapy costs and billing. You may call them at (734) 647-8663. Information about financial assistance and counseling at the University of Michigan Cancer Center can also be found in the *Patient & Family Support Services Handbook* provided in your *New Patient Toolkit*, at the Patient Education Resource Center (PERC), or online at [www.mcancer.org](http://www.mcancer.org).

**Support services and resources:**

Support services and resources developed to help you through treatment and recovery are available at the University of Michigan Cancer Center. Some of these include:

- Chemotherapy information, along with management of side effects.
- Complementary and creative therapies.
- Financial assistance programs.
- Hair loss resources, community groups and websites for hair loss products.
- Managing feelings and the PsychOncology Clinic.
- Nutrition Services.
- Nutrition Counseling Clinic.
- Physical Therapy (PT) and/or Occupational Therapy (OT) resources, to help cope with effects of cancer and treatment.
- Symptom Management and Supportive Care.

A complete list of resources can be found in the *Patient and Family Support Services Handbook* available in each clinic, in your *New Patient Tool Kit*, at the Patient Education Resource Center (PERC) (level B2 of the Cancer Center), and on our website [www.mcancer.org](http://www.mcancer.org).
Treatment: Day of Infusion

What information should I know for the day of infusion?

Parking

Parking choices will depend on where you get treatment. Please look at the *Quick Reference Sheet* included with this guide for information on parking. There is a charge for parking at the main Health System on the Ann Arbor campus. Bring your parking ticket with you to infusion check-in and ask a staff member to stamp your ticket for a reduced rate.

University of Michigan Health System blood drawing facilities

Lab results are usually necessary on the day of or within a day or two before your infusion. Each infusion location has a blood draw area on site. Blood draw appointments are usually scheduled an hour or two before the infusion appointment time.

There are many University of Michigan facilities that offer blood drawing services. Lab results drawn at these facilities will be available to your oncology doctor within 24 hours. Information and directions to these centers can be found at:

- The Patient Education Resource Center (PERC) on Level B2 of the Cancer Center.
- The CancerAnswerline at 1-800-865-1125.
- Factsheet located in the pocket of this guide.

This information is included as a separate handout along with your *Quick Reference Sheet* with this guide.

If you would like to have your blood drawn before the day of your infusion at another UM facility, you may plan this with your healthcare team. Your doctor will need to give you a prescription for the tests needed and the clinic staff will need to know the name and number of the lab you choose.
If you have a port, specially trained phlebotomists will be able to draw blood from your port at the Cancer Center and Northville Health Center. An appointment can be made to have blood drawn from your port in the Canton infusion room. Otherwise, expect your blood to be drawn from your arm when getting labs drawn from blood draw facilities. Also, you can check with your preferred location to see if the blood draw station staff will draw from your port. For more information on blood draw stations, please see the factsheet *University of Michigan Health System/MLabs Blood Drawing Stations.*

**Clinic appointments**

Many times, your oncology doctor will want to see you before you start another cycle of chemotherapy. If you have an appointment with your doctor on the same day as treatment, you should check-in at your clinic after your blood draw appointment and before your infusion appointment. Once your clinic appointment is done, go to your infusion appointment at the time on your appointment schedule and check-in with clerical staff at the desk. As a matter of safety, and to make sure that orders to the infusion staff and pharmacy have been completed, you should not check-in to infusion until you are checked-out of the clinic.

**Infusion centers**

Infusion chemotherapy is given at the University of Michigan Comprehensive Cancer Center, Canton Health Center and Northville Health Center. Each Center varies in its amenities, but all Infusion Centers are fully staffed by caring and trained health professionals. The medications prescribed for you may decide the location where you get your treatment. The clerical staff member who schedules your appointment will tell you the location of your infusion appointment. Maps to the infusion centers will be supplied to you as a handout.

**Staff members in each infusion area have the same level of specialized training.**

**All infusion nurses who give chemotherapy are highly trained and certified, which means they get added training to give chemotherapy safely to patients.**
Your infusion appointment

Please note that your appointment time for infusion is not the time you will start your treatment. You should not expect to be taken to an infusion chair upon your arrival. When you check-in at your appointment time, this signals infusion and pharmacy staff to check your orders and lab results to be sure they are all right before starting to prepare your medications. If you are getting blood products, your arrival signals staff to talk with the blood bank for preparation and release of the needed blood product.

Once you come for your appointment, the infusion and pharmacy staff are checking:

- The orders for your treatment.
- Results of laboratory values.
- Communication from your oncology healthcare team.
- Other information needed to do your treatment.

There are many things that affect your wait time, such as:

- The complexity of your treatment.
- A white blood count (WBC) and absolute neutrophil count (ANC) level which are very low. WBC and ANC levels can take up to 2 hours to process before a result is available. The WBC and ANC must be at acceptable levels before any chemotherapy is given.
- The need for some medications to be thawed or dissolved.
- The process of testing the type of blood you have and donor compatibility may take many hours.

We know that the amount of time spent waiting for your treatment to start can be frustrating. It is always our goal to treat you as safely and quickly as possible.

During your wait, you may ask for a pager from the infusion check-in staff and move around the Cancer Center. You will get a page to return to the infusion center when your medication is ready.
Waiting Times for Chemotherapy Infusion

Wait times for infusion appointments are sometimes long. We understand that this can be stressful. How long you wait to be seated in the infusion area depends on many factors.

When you checked in with our clerical staff, we began a series of checks to ensure the safety and quality of your treatment. Once your doctor or his/her team has written and processed your order, we confirm your lab values or other important information to begin preparing your treatment. Your order is then placed in a “queue or line” in our pharmacy. While you are not physically standing in line waiting for a spot in the infusion room, your order is in line for you and is prioritized within the pharmacy.

Chemotherapy or medications are generally not prepared ahead of time because they are made specifically for you. Because of this, your medication is not likely to be ready when you arrive. Some medications are quickly and easily prepared, while others may take longer. Some of the most serious safety double checks occur during this time period and cannot be rushed.

We understand that it can be very frustrating to have to wait. Please be assured that we are working as fast as we can; taking your safety into account. We encourage you to check with the clerical staff for your estimated wait time after you have been waiting 30 minutes.

Things to Consider:

- Wait times can also be driven by the number of patients in the infusion area at one time. You may want to consider coming earlier or later in the day to avoid times when the most patients are receiving treatment.

- You may also want to consider talking with your doctor or his/her team to see if you can come on a day separate from your clinic appointment. While this is not always possible, it would eliminate your wait during order writing and processing. Your lab work can also be done a day ahead of time if this is approved by your doctor.

- You may request a pager at the check in desk. A pager allows you to leave the infusion waiting area. While you would still need to stay within the hospital, you could go get something to eat, visit the gift shop, or see what learning materials are in our Patient Education Resource Center, located on Level B2 in the Cancer Center.

We thank you for giving us this opportunity to partner with you for your care.
There are a few ways you may be able to lessen your wait time. First, you may think about having your blood draw on a day before your treatment. Blood draws may be able to be done a day or two before your infusion. Second, you may ask for an appointment during early morning or evening hours when there are less patients getting treatment. Third, you may ask if you can have your infusion on a different day from your clinic appointment. If you are interested in any of these choices, please talk with your oncology healthcare team to be sure that it is right for you.

**During your treatment**

The infusion areas have recliner chairs, beds and stretchers. Please note that bed space is not guaranteed even if it is ordered by your oncology team on your behalf. The beds and stretchers are given based on the medical needs of the patient or the type of treatment. You may ask for your treatment to happen in a certain infusion area. However, such requests may hold up the start of your treatment.

You will need to wear a wristband during the time you're in the infusion area. Patient identification is a top priority for safety. Throughout your visit, you will be asked to say your full name and birthdate many times. The infusion staff will compare this to your wristband, medical orders and medication(s). You may also be asked to confirm your height and weight before getting treatment. These are quality measures that ensure safe care.

A Medical Assistant (MA) will greet you in the waiting area. At this time, your blood pressure, heart rate, breathing rate and temperature will be measured by the MA.

The infusion nurses may need to access your vein with an intravenous (IV) catheter, port or PICC.
Continuous Home Infusion Chemotherapy

Some patients may get Continuous Home Infusion Chemotherapy. This section of the booklet is specifically for you. You will also get more detailed information about your particular kind of continuous home infusion chemotherapy from HomeMed®.

What is continuous home infusion chemotherapy?

Chemotherapy given slowly over one or more days is called continuous infusion chemotherapy. This type of treatment is given with an infusion device that is attached to your intravenous catheter or port. The device will make sure that the chemotherapy is given at the proper speed and that the right amount is received. A nurse will verify and connect you to the continuous infusion treatment in the infusion area. You will carry the device, hidden in a pouch, wherever you go while the chemotherapy is infusing.

Things that are involved with continuous home infusion chemotherapy include:

- Home Care: Continuous infusion chemotherapy is a home care treatment. The University of Michigan’s HomeMed® Program will follow you while getting continuous infusion treatment. Before treatment, the HomeMed® staff makes sure you have all of the needed supplies and equipment. They will also check your insurance coverage and schedule the infusion disconnection.

- Education: Patients getting a continuous infusion are taught how to care for their infusion and how to manage problems that may result at home. Nurse educators in the Cancer Center Education Clinic will work with you and your family during this process.

As a rule, patients experience less stress if they receive education before the day of treatment. Cancer Center staff will work with you and your healthcare provider to schedule a teaching session with the Cancer Center Education Clinic.
nurse educators before the day of treatment. This session will be additional to any other tests or appointments you may have before the start of treatment.

During the session you will receive a manual. The manual has information specific to your home infusion, the necessary supplies, what to do if a spill occurs and when to call for help. The nurse educators will review all of this information with you so that you feel comfortable and capable.

- Coordination: There are many steps involved in providing chemotherapy with a home infusion. Arrangements must be made with a home care agency, supplies must be delivered and the chemotherapy mixed according to the doctor's orders. Each of these steps can be complicated and involves different agencies and staff to help arrange this for you. These may include UMHS Case Managers and HomeMed® staff.

Special considerations: continuous infusion of vesicant chemotherapy agents

Some commonly used chemotherapy drugs may cause tissue damage if the needle becomes dislodged from your port/catheter, the port/catheter becomes damaged, or if the port/catheter is no longer in your vein. This causes the drug to be infused into your tissue and is called extravasation. Drugs that can cause tissue damage are called vesicants.

Some examples of vesicant drugs are:
- Doxorubicin® (or Adriamycin®)
- Vincristine®

To help avoid tissue damage by extravasation, a nurse will check for blood return in your central venous catheter once a day throughout the infusion cycle of any vesicant drug. This is a short but very important home visit. Signs of a problem with your needle may include one or more of the following:

- A burning feeling at or around your IV site.
- Pain at your IV site.
- Your infusion pump alarm says “occlusion”.
- Redness, swelling or tenderness at or around your IV site.
- Drainage or a wet IV dressing.
If you experience any of the above signs and symptoms, Immediately call HomeMed® or your oncology provider for further instructions. Prompt identification of the symptoms and treatment may cut down on the amount of tissue damage. You should contact HomeMed® for any problems with your home infusion, pump, or supplies. The HomeMed® number is 1-800-862-2731.

**Hazardous waste container – for collecting needles and other chemo equipment**

A hazardous waste container will be given to you by HomeMed® if you receive continuous home infusion chemotherapy. You will receive education on how to handle the materials used for home infusion of chemotherapy. Place all needles, IV tubing, chemotherapy bags, syringes and lancets in this container.

Hazardous waste containers should be made of heavy, puncture-proof plastic, have a lid and be marked “Hazardous Waste” for safety. Store it out of reach of children and pets.

**The University of Michigan cannot take your waste containers for disposal. To find out if there is a needle/sharp collection program in your area, contact the Department of Environmental Quality (DEQ) at 1-800-662-9278 or visit the Medical Waste Regulatory Program’s Website at [www.michigan.gov/deqmedwaste](http://www.michigan.gov/deqmedwaste).**
Frequently Asked Questions

Can I drive?

We suggest that you arrange to have a driver for at least your first chemotherapy treatment. After that, whether or not you can drive depends on the medications you get, your response to them, and your total health. The effects of some medications may make it unsafe for you to drive. If you have a driver, but the driver is not staying with you during treatment, it is best that he/she is easily reached and flexible about the time of pick-up. We will be happy to call your driver 30 minutes before you are finished with your treatment. Please discuss any transportation issues you may have with your oncology team before your first infusion. On the day of treatment, let the infusion nurse know of any unresolved issues before your treatment starts.

How long will I be there and what should I expect?

It is best to plan to spend most of the day at the infusion center for your treatment. The staff can give you approximate lengths of treatment, but there are many unexpected things that can add time to your stay.

You will get treatment designed specifically for you. Treatment times differ between patients. If your treatment is chemotherapy, there are often extra medications given to you to prevent and manage side effects. The nursing staff will check how you are doing before treatment starts, during treatment and before you are released.

The nursing staff and the MA staff will make every effort to make you comfortable and meet your needs during your treatment. Infusion staff will answer questions for you and call your healthcare team as needed.

Can I eat before and during treatment?

Many patients worry about eating before their treatment. Please eat according to your normal schedule. You may find it best to eat a light meal and avoid fried, spicy, or acidic foods before your treatment. Do not skip meals before your treatment unless told to you by your doctor.
Be sure to drink plenty of non-caffeinated fluids the day before and the day of your treatment. Well-hydrated veins are usually easier to access with an IV catheter.

You are welcome to bring a meal or snacks and beverages to your infusion appointment. A refrigerator and microwave are available to use. The infusion room has free snacks and beverages. The snacks available in the infusion area are: juice, coffee, tea, hot chocolate, soda pop, crackers, bagels, bouillon, popsicles and ice cream.

If you want a larger meal, you will need to bring it with you, or have someone buy it for you.

Other food services are available throughout the hospital. The University of Michigan Health System does not approve of sugar-sweetened beverages such as regular soda pop. There is a patient supply of regular soda pop in the infusion area for the management of some symptoms. You and your caregiver are also welcome to bring your own. Regular soda pop cannot be given to anyone other than the person getting treatment. A list of places at the University of Michigan to get food and beverages is included on the *Quick Reference Sheet* with this guide.

People going through chemotherapy are often sensitive to odors. Please do not bring in foods that have strong smells, such as fish, garlic, onions or other spicy foods. Patients and guests should avoid wearing or using scented products in the infusion areas or waiting rooms. Strong smells from things like
nail polish, nail polish remover, hand creams, perfume, body sprays, etc. should not be used or worn in these areas.

**What if I need to leave to smoke?**

The Health System does not allow smoking anywhere in or around Health System buildings. You are not allowed to leave the infusion area to smoke. Please talk with your oncology doctor on how to manage your desire to smoke during your appointment.

If you would like assistance to help you quit smoking or the use of other tobacco products, please call the MHealthy Tobacco Consultation Service 734-998-6222 or visit www.mhealthy.umich.edu/tobacco.

**Once your vein is accessed and/or you have begun your treatment, you may not leave the infusion area.**

**Should I take my medications before my treatment?**

Take your medications as scheduled unless otherwise directed by your oncology team. Bring the medications you normally take during the day. Let your infusion nurse know what you plan to take during your visit. It is a good idea to tell your oncology team about all medications you are taking or plan on taking. This includes prescription drugs, over-the-counter medications, vitamins, minerals, dietary supplements, herbs, etc. Bring your list of current medications with dose and frequency to each appointment.

**What should I wear?**

Wear loose and comfortable clothing. Wear clothes that give easy access to your arms/chest (if you have a port). Dress in layers to account for temperature changes in different areas of the buildings. Wear sensible shoes with rubber soles to avoid accidental slips and falls. Many times, people feel weak or dizzy because of their medical condition or treatment. All patients treated in the Cancer Center are considered at risk for falls, no matter their age.
Wherever you are in the Cancer Center, please ask for help if you are worried you may fall.

**What should I bring to my appointment?**

- A form of identification, such as a driver’s license.
- Your insurance card.
- A list of all medications, herbs and supplements, etc. you are taking at this time.
- All doses of medication that are scheduled around your appointment time and for the rest of the day.
- Pain medication if you are taking any.
- A driver, especially for your first treatment.
- Assistive devices such as canes or walkers that you use at home.
- Your education folder.
- A filled out *Family and Friends* form. You can get a copy of this from your nurse or oncology team.
- A Living Will or DNR, if you have one.
- A change of clothes. If chemotherapy accidentally gets on your clothes, you will need to take them off. Also, some patients are getting IV fluids or medications that may result in unexpected incontinence.
- Something for you to do. Good things to bring are: portable electronic devices such as computer tablets and smart phones, books, magazines, letter writing materials, etc. Please bring headphones to use with your electronic devices.

Warm blankets will be given to you if you need one. Please do not bring heating pads. They can cause burns and are not allowed.
The Cancer Center offers many activities for patients and families. These include:

- Free access to wireless internet.

- iPads and laptops. These devices are offered to patients and families for loan while in the Cancer Center, Monday-Friday. You may check-out these devices at the Patient Education Resource Center (PERC) at no cost. The (PERC) staff will ask you to leave your driver’s license while the device is being used.

- Televisions are in most infusion areas. To cut sound and distractions in the infusion areas, we ask that you wear the headphones we will give you. Please keep them and bring them back to your next appointments.

For your comfort and peace of mind, we suggest that you pack an overnight bag and leave it in your car. That way, if you need to be admitted to the hospital, you’ll be ready.

**Who can I bring into the infusion area?**

For safety reasons, you can bring in only one family member or friend. Children under the age of 14 are not allowed in the infusion area due to the health risks linked to potential chemotherapy exposure. The infusion area is also not safe for animals. If a service dog is needed by you or a visitor, please ask your oncology staff for extra information before the infusion appointment.

You will receive a **Family and Friends** form. This form allows the infusion staff to discuss certain aspects of your treatment with people you name on the form. It does not allow friends or family to access your medical record or receive printed results on your behalf. A copy of this form is available from your oncology team.
Many of our patients have weakened immune systems and are very vulnerable to germs.

Infusion staff cannot provide child care and need your full attention during your treatment.

Spills of infusion drugs can occur. These drugs can be harmful to those not meant to have contact with them, particularly children.

For the safety and comfort of all, children under 14 and pets are not allowed in our infusion treatment area.

We all love kids and pets, but the infusion treatment area is not the place for them.

Please discuss any concerns you may have with your health care team before the day of your infusion.

Thank you for keeping your kids and pets safely at home.
Where can I fill my prescriptions?

Outpatient pharmacies are available in these locations:

- Cancer Center on level B1, (Refer to the Quick Reference Sheet).
- Taubman Center Ambulatory Pharmacy is found on level 1 of the Taubman Center building, (Refer to the Quick Reference Sheet).
- There is no outpatient pharmacy in the Canton Infusion location or Northville Health Center. Please have all prescriptions filled before your infusion appointment and bring them with you.
- Please note that some medications prescribed by your doctor may not be available at your community pharmacy. We suggest that you consider filling these medications at the Cancer Center outpatient pharmacy.
After Treatment: What Should I Expect?

You will be able to go home once your infusion is done. When you first discuss your treatment plan, your oncology team will review what is normal to experience after treatment. The *Chemotherapy and You* booklet is a great resource during and after chemotherapy.

It is normal to be worried about the possible side effects from your treatment. It is important to discuss your concerns with your oncology team. Remember, not all patients get side effects. The severity and type of side effects that may happen will depend on the treatment you are getting.

Even though certain treatments have expected side effects, please call your oncology team and let them know what side effects you’re experiencing. Your oncology team will review side effects linked to your treatment plan. They will also give you suggested ways to manage them.

The *Side Effects and Ways to Manage Them* section of *Chemotherapy and You* gives more information about side effects, how to prevent them and ways to manage them. Your oncology team will continue to give information to you as you progress through your treatments. Remember, each chemotherapy treatment is different, and every patient experience is unique.

**When should I call my healthcare team?**

- Any symptom that concerns you.
- A fever of 100.5° Fahrenheit, or greater.
- Bleeding or unusual bruising.
- Burning and/or pain when urinating.
- Constipation (no bowel movement in 2-3 days).
- Diarrhea (loose, watery stools) four or more watery stools in 24 hours.
- Nausea, vomiting or if you cannot keep down any liquids.
- Pain not controlled by your current medications.
- Redness, pain, sores or a white coating in your mouth.
- Shaking and chills.
- Unusual cough, sore throat, lung congestion or shortness of breath.

You may also get additional instructions about when to call your healthcare team.
What precautions do I need to take in my home?

You will need to take precautions in your home after chemotherapy. These precautions will protect you and those around you from coming in contact with chemotherapy byproducts. Chemotherapy may be present in urine, vomit, blood, stool, sweat, mucus, tears and sexual fluids. Most chemotherapy medications will be out of your body in less than 48 hours.

We have outlined general precautions that you should follow during your infusion and for two days (48 hours) after you complete your chemotherapy.

In general, these precautions help avoid all body fluids that may have trace amounts of chemotherapy. Your oncology provider may have different guidelines for you to follow. You should talk to your oncology provider if you have questions about chemotherapy precautions. You can buy needed materials such as gowns and Nitrile® gloves at the Home Care Services Retail Store in the Taubman Center located on the first floor in Reception F, or from a medical supply company.

Laundry

These are the precautions you or your caregivers need to take when doing laundry contaminated with chemotherapy:

- Use Nitrile® gloves to handle laundry soiled with chemotherapy, vomit or stool to keep it from touching your skin.
- If linens or clothing become soiled, do not wash them with other household clothes, towels, etc.
- Use hot water, soap and bleach. Run them through the washer twice.
- If you cannot wash your linens or clothing right away, double-bag them in plastic garbage bags and keep them separate from other household laundry.
- After your clothing or linens have been washed, throw away the plastic bags in your regular trash as soon as possible.
• Wear a gown when there is a chance for splashing of, or exposure to body wastes.

Always wash hands with soap and water after any contact with chemotherapy or body wastes even if you wore Nitrile® gloves.

Body waste

Small amounts of chemotherapy are present in your body fluids and body waste. You should wash the area with soap and water if you are exposed to any body fluids or waste. Others in your household may use the same toilet as long as you flush all waste down the toilet twice with the lid down. Consider using a plastic blue pad to cover the inside of the lid during flushes and replace this after each use.

If you use a commode, bedpan, urinal or a basin for vomiting, wear Nitrile® gloves when clearing out the waste. Rinse the container with water and clean it at least once a day with soap and water.

If you do not have control of your bladder or bowels, use a disposable, plastic-backed pad, diaper or sheet to soak up urine and stool. When it becomes soiled, change the protective item right away and wash the skin with soap and water. Diapers, pads, and gloves soiled with body wastes should be placed in a securely fastened plastic bag, then double bagged and placed with your regular trash.

If you have an ostomy, wear Nitrile® gloves when emptying and changing the ostomy appliance for 48 hours.

A disposable gown should be worn if there is any chance of splashing during disposal of body wastes, or exposure while handling soiled linens. If body wastes splash into your eye(s), flush eye(s) right away with water for 10 to 15 minutes and call your oncology provider.
Pregnant and/or breast-feeding caregivers

Pregnant or breast-feeding women should wear Nitrile® gloves and a gown when caring for a person who is getting chemotherapy.

Sexual activity and pregnancy

Do not have sexual activity for 48 hours after getting chemotherapy because body fluids may contain chemotherapy. It is very important that you or your partner do not get pregnant while getting chemotherapy. You should use two forms of birth control to avoid pregnancy during treatment and for at least six months after your last treatment. Call your doctor if pregnancy occurs.

Hand washing

Hand washing is one of the most important things you can do to stop infection. Wash your hands before and after the following:

- Before, during, and after preparing food.
- Before eating food.
- Before and after caring for someone who is sick.
- Before and after treating a cut or wound.
- After using the toilet.
- After changing diapers or cleaning up a child who has used the toilet.
- After blowing your nose, coughing, or sneezing.
- After touching an animal, animal feed or animal waste.
- After handling pets, pet food or pet treats.
- After touching garbage.
### Proper Hand-Washing with Soap and Water

- Wet your hands and wrists under warm or cold running water and apply soap.
- Work lather between fingers, under nails and over palms and backs of hand and wrists.
- Scrub your hands for at least 20 seconds.
- Rinse hands and wrists well under clean running water.
- Dry your hands using a clean paper towel or air dry them.

### Proper Hand-Washing with Hand Sanitizer - Lotions and Gels

**Food and Drug Administration (FDA) recommends a concentration of 60% to 95% ethanol or isopropanol alcohol when choosing a hand sanitizer.**

- Apply the lotion or gel to the palm of one hand (read the label to learn the correct amount).
- Rub your hands together.
- Rub the product over all surfaces of your hands and fingers until your hands are dry.

**Do not use hand sanitizers gels or lotions after using the toilet**

### Skin care

Skin can become irritated from chemotherapy. You should wash the area well with soap and water if your skin comes in contact with chemotherapy or body wastes containing chemotherapy. Call your oncology doctor if there is redness or irritation on the skin that lasts longer than one hour.
Managing Physical and Emotional Challenges

The end of cancer treatment is often a time of mixed emotions. Most likely you are thankful to be finished with the demands of treatment and are ready to put the experience behind you. However, at the same time, you may feel sad and worried that the cancer may return.

Your physical and emotional state at the end of your treatment is unique. Many people who have completed treatment are so focused at getting through the diagnosis of cancer, perhaps surgery, chemotherapy and sometimes radiation, that once the treatment is finished they are just not sure what is next. Those who have gone through cancer treatment describe the first few months as a time of change. It's not so much "getting back to normal" as it is finding out what's normal for you, now. People often say that life has new meaning or that they look at things differently. You can also expect things to keep changing as you move through your recovery.

You can’t change the fact that you have had cancer. What you can change is how you live the rest of your life; making healthy choices and feeling as well as possible, physically and emotionally. These topics and more are discussed in Facing Forward, a booklet written by the National Cancer Institute. This booklet is available to all patients at the University of Michigan Comprehensive Cancer Center. You can find this booklet at the Patient Education Resource Center (PERC) on Level B2 of the Cancer Center, or you may contact the PERC at (734) 647-8626 for more information.

You can talk with your oncology team to discuss your concerns. You may also speak with a Social Worker by calling 1-877-907-0859, if needed.

Disclaimer: This document contains information and/or instructional materials developed by the University of Michigan Health System (UMHS) for the typical patient with your condition. It may include links to online content that was not created by UMHS and for which UMHS does not assume responsibility. It does not replace medical advice from your health care provider because your experience may differ from that of the typical patient. Talk to your healthcare provider if you have any questions about this document, your condition or your treatment plan.

Authors: Lori Dorland, RN, Corinne Hardecki, RN, Brandi Hess, RN, Carol McMahon, RN
Reviewers: Colleen Dauw, RN, Nicole Ehinger, RN, Debra Kovacevich, RN, MPH

Patient Education by University of Michigan Health System is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License.
Document #363 Last Revised: 12/2014
Please use this section of the Guide to write down any questions you may have for your oncology team.

<table>
<thead>
<tr>
<th>Questions</th>
<th>Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>