# Gynecologic Oncology Handbook

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If you are reading this handbook, you or someone you love has been diagnosed with a gynecologic cancer. With that diagnosis, your life has already changed and the days ahead will bring more changes and challenges.

The doctors, nurses and other experienced health professionals at the University of Michigan Comprehensive Cancer Center created this handbook to help explain the different treatment options available to you, how to care for yourself during treatment and how and when to contact your health care team.

Your health care team is available to help answer questions about this material and to help you decide which treatment options are right for you and give you the best chances of controlling your cancer.

As you read through this handbook, you may feel overwhelmed. If so, you’re not alone – most patients and family members feel that way as they are introduced to the new concepts, tools, techniques and resources involved in cancer treatment. Contact us as you make your treatment decisions. Important numbers are listed in the front section of this handbook.
**Important Phone Numbers**

**Monday through Friday from 8:00 am – 5:00 pm, call (734) 647-8906.**
**For calls after 5:00 pm on weekdays and on weekends, call (734) 477-6437.**

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<tr>
<th>Service</th>
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<tr>
<td>Billing</td>
<td>(855) 855-0863</td>
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<td>Fertility Counseling Program</td>
<td>(734) 763-4323</td>
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<td>Center for Reproductive Health</td>
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<tr>
<td>Gyn/Onc Clinic Appointments, Nurses, Refills,</td>
<td>(734) 647-8906</td>
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<td>Biopsy or Test Results</td>
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<td>Gyn/Onc Fax</td>
<td>(734) 936-9269</td>
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<td>Home Med</td>
<td>(800) 862-2731</td>
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<td>Infusion Appointments</td>
<td>(734) 647-8908</td>
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<td>(Use only for same day appointments, if you</td>
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<td>will be late or need to cancel.)</td>
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<tr>
<td>Medical Records</td>
<td>(734) 936-5490</td>
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<td>Nutrition Clinic Appointments</td>
<td>(877) 907-0859</td>
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<td>Patient Financial Counseling</td>
<td>(734) 232-2621</td>
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<td>or</td>
<td>(877) 326-9155</td>
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<td>Patient Customer Service</td>
<td>(734) 615-0863</td>
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<td>or</td>
<td>(855) 855-0863</td>
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<td>Patient Education Resource Center</td>
<td>(734) 647-8626</td>
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<td>Practical Assistance Center</td>
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<td>PsychOncology Clinic Appointments</td>
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<td>Radiation Oncology Department</td>
<td>(734) 936-4320</td>
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<td>Symptom Management Program</td>
<td>(877) 907-0859</td>
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<tr>
<td>University of Michigan Home Care Retail Store</td>
<td>(734) 647-3364</td>
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When to Call Your Doctor or Nurse

Everyone is different and may have slightly different complications following treatment. In order to help you, we need you to be aware of what is **abnormal or unusual** for you. Be alert for anything that is different, and report it to your health care team.

**Call your doctor or nurse if:**
- You are feeling confused, dizzy, overly tired or weak.
- You notice yellowing of your eyes or skin.
- You have redness, pain or sores in your mouth.
- Your heartbeat feels unusual or irregular.
- You have not been able to eat or drink in the past 24 hours.
- You have been nauseated or vomiting for more than 24 hours.
- You have not had a bowel movement for 2-3 days.
- You have diarrhea (loose, watery stool) for more than 24 hours.
- You have blood in your urine or in your stools (either bright red or black bowel movements). Please note that iron supplements may turn your stools very dark in color.
- You have any vaginal bleeding or discharge that is unusual for you.
- You have a nose bleed that does not stop after 20 minutes.
- You have pain that is not controlled by your current medication.
- You notice any changes in your intravenous (IV) catheter or surgical drains (if any), including a change in the appearance of the line, redness, drainage, swelling or pain.
- You have an oral temperature of 100.5 degrees Fahrenheit (38.1 degrees C) or higher. **Do Not** take Tylenol or aspirin until you speak with your doctor or nurse.
• You have signs and symptoms of an infection. These include shaking and/or chills, a burning feeling when urinating, a cough, sore throat, a general feeling of tiredness or “flu-like” symptoms, redness or swelling

Call (734) 647-8906 to speak with your nurse if you have any other concerns or questions not listed above.

Our goal in the Gynecologic Oncology (Gyn/Onc) program is to provide you with the best possible care while you are undergoing treatment for your cancer. We’d like to introduce you to your health care team. This allows you to know who will be caring for you while you are being treated at the UMHS Comprehensive Cancer Center. In the back pocket of this handbook you’ll find a list of Gyn/Onc faculty and staff.
Your Health Care Team

Physicians/Doctors

While undergoing cancer treatment here at the University of Michigan, your care will be provided by a team of health professionals trained in gynecologic oncology. Gynecologic oncologists are specialty trained doctors who are experts in cancer surgery, chemotherapy, and radiation implants. Medical oncologists are specialty trained doctors who are experts in chemotherapy. Gynecologists are specialists with expertise in pre-cancers.

University of Michigan is a teaching hospital, which means we provide for the education of students in health care-related fields. Fellows and residents are doctors who are completing specialty training. Medical students are not yet doctors, but soon will be. They are part of the team and will participate in your care under the guidance and supervision of your faculty (“attending”) doctor.

Physician Assistant

A Physician Assistant, also known as a PA, is a licensed provider. PAs assist with patient evaluations on behalf of the attending physicians/doctor and may diagnose and treat patients under the supervision of an attending doctor. Once your treatment has been completed, a PA will often be your provider for many of your surveillance exams in our Cancer Survivor’s Clinic. These careful follow-up exams allow us to monitor for any hint of relapse of the cancer.

Nursing

Nurses are part of your patient care team. They are available to talk about treatment and its side effects and can help answer any questions you may have.
Please bear in mind that the nurse may not know the specifics of your therapy. So, treatment issues may be referred back for discussion with your doctor. A home care coordinator, who is also a nurse, is often involved in helping you and your family set up home care, including nursing visits, home equipment and other needs.

**Clinical Pharmacologist**

A clinical pharmacologist may monitor the medications (oral and IV) you are given and provide you with education on how to take your medication correctly.

**Social Worker**

A social worker is a licensed professional available to you and your family to discuss your needs and concerns. They can assist you with finding housing, financial or insurance concerns, referrals to community agencies as well as assistance in dealing with the emotional aspects of going through treatment. Call (734) 647-8901 for an appointment.

**Registered Dietitian**

A registered dietitian can help you with your nutritional concerns. They will meet with you one-on-one to provide suggestions for maintaining the best nutritional health while you are being treated for cancer. These services are offered to Cancer Center patients for a fee. To set up an appointment, call (877) 907-0859. An inpatient registered dietitian is also available when you are in the hospital.
Preparing for Your First Visit

How can I prepare for my first visit?

When you come for your first visit, you’ll undergo a complete health history and physical examination. This evaluation allows us to get a picture of your current health status and develop your treatment plan. Please make sure your referring doctor has sent copies of your records, biopsy slides, and X-rays to help us. Please bring all medications you are currently taking to your appointment.

Once we have all of your medical information gathered, your attending doctor will prepare a treatment plan and discuss it with you. Depending on your condition, the treatment plan may include:

• Chemotherapy
• Radiation therapy
• Surgery
• Hormone therapy
• Combination of treatments

Surgery may be a part of diagnosis and treatment of your cancer, or for management of complications such as bowel obstruction. On Page 12 of this handbook is a diagram of your internal organs. This diagram may be used by your Gyn/Onc team to indicate the location of your cancer and to show how your treatment plan will affect you. Your doctor may use Page 13 of this handbook to outline your treatment plan.
Treatment Options

What is Chemotherapy?

Chemotherapy (chemo) is a type of treatment that includes a drug or a combination of drugs to treat cancer. Sometimes these medications are called “anti-cancer” drugs. Chemotherapy treatments may be given in many ways:

- **Intravenous (IV):** Through a catheter tube in the vein, normally placed in the arm. Sometimes, your doctor may recommend having an IV infusion device. The two most common are peripherally inserted central catheter (PICC) 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 health care team for more 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 – usually the abdominal area.

The type of chemotherapy you receive will depend on the type of cancer you have as well as the extent of spread (if any) of cancer. Chemotherapy can be used alone or in combination with other types of treatment, such as surgery or radiation.

If chemotherapy is needed, you will receive additional information. There are two handbooks at the Cancer Center on chemotherapy: IV and Oral. These handbooks provide you with information to support you through treatment.

Chemotherapy uses drugs to kill cancer cells. When a chemotherapy drug kills cancer cells, it will also kill a smaller number of normal cells within the body. This may result in side effects or toxicity from chemotherapy drugs. In addition to the information below and for more in-depth information, ask your doctor or nurse for details.
Another excellent resource is the *Chemotherapy and You* booklet published by the National Cancer Institute. Chemotherapy affects other organs of the body such as the kidneys, heart, etc. Although severe side effects are uncommon, it is impossible to predict in advance who will experience these side effects and who will not.

- You will be given information about the kind of chemotherapy drugs that you will be taking and what side effects might be expected.
- Talk to your doctor or nurse if you experience any side effects.

**What is Radiation Therapy?**

Radiation Therapy uses X-rays as a local treatment. Radiation therapy may be used alone, or in combination with other types of treatments. If you need radiation therapy, you will receive additional information on how to care for yourself during treatment, too.

You may feel tired during radiation treatment. Treatment may last six weeks or more and the specifics of this treatment will vary according to what type of cancer treatment you require. A common side effect of radiation during treatment is diarrhea. Making changes to your diet can help with diarrhea and there are medications that can help to minimize this problem. Hair loss will occur only in the part of the body exposed to radiation treatments (typically the pubic hair region), unlike the more widespread hair loss associated with some kinds of chemotherapy. For more information, see the section on Side Effects, Page 20 of this handbook.

While it is great to have so many resources available, we understand that it may seem overwhelming. You may want to choose a family member or friend who can partner with you as a support person and information-gatherer. It is also
helpful to think about your questions and write them down before you visit your oncology team.

What if I need surgery?

If surgery is needed, you will need time to heal after surgery. It takes about two weeks for laparoscopy incisions to heal and six weeks for open types of surgery incisions to heal. In general, you can return to light activities and chores once you are discharged from the hospital. Light activities can speed recovery. Climbing stairs is okay, if taken slowly. It is alright to ride in a car. Do not drive unless you have been cleared by your doctor. Do not drive if you are taking narcotic pain medication. Driving is usually safe within two to four weeks after surgery.

Do not lift heavy objects weighing more than five to ten pounds (a gallon of milk weighs 8.6 pounds) for the first six weeks after surgery.

Do not resume having sexual intercourse until you are completely healed. This varies from person to person, but generally healing is complete in six to ten weeks. Talk with your doctor before resuming normal sexual activity. You may be given additional recommendations based on your specific type of surgery.

Feel free to ask as many questions as you need to. Our goal is to help you understand how to care for yourself after treatment.
Evaluation: Before, During and After Treatment

Before, during and after treatment, you may undergo many tests. The tests you receive will depend on your disease, your treatment plan and/or your past history. Some tests may be repeated during the treatment process. This is to monitor for changes that may occur. Some of the tests are:

**Audiology Tests**
Tests your hearing. Some chemotherapy may decrease hearing.

**Biopsy**
Removes a small piece of tissue or skin to see if cancer or precancer is present.

**Blood Tests**
Blood tests such as: CBC, liver and kidney tests tell how well you will be able to tolerate cancer treatment such as surgery or chemotherapy.

**CAT or CT Scan (Computed Axial Tomography)**
An imaging study where multiple X-Rays (cross-sectional images) are taken of a part of the body to produce pictures of internal organs. Injection of a dye is needed in most scans.

**Colposcopy**
Use of a binocular microscope to evaluate the cervix in women with pre-cancer of the cervix.

**ECHO/EKG/MUGA (Echocardiography (Echo); EKG (Electrocardiogram) Multigated acquisition (MUGA))**
These are different tests that determine how your heart is functioning and one or all may be necessary prior to surgery or chemotherapy.
**Pap Test**
A gentle scraping of the cervix or vagina to see if cancer or precancer (dysplasia) may be present.

**PET Scan (Positron Emission Tomography)**
An imaging study in which a special sugar tagged with short acting radiation is injected into the body. The sugar is consumed as fuel more readily by cancer cells, and this shows up as a “hot spot” on the images, allowing the location of cancer cells to be determined.

**Tumor Marker Blood Tests**
A tumor marker is an indicator for the presence of cancer. The marker is a substance made by a cancer cell that can be measured in the blood and may go down in response to treatment.

**Ultrasound**
An imaging study that uses sound waves to construct an image of internal organs.

**Urinalysis and Urine Cultures**
Checks for the presence of a urinary tract infection and assesses your kidney function.
**Outpatient Information**

The Gyn/Onc clinic is located on Floor 1 of the Cancer Center.

If you require outpatient chemotherapy, you will most likely be treated in the Infusion Center, located on Floor B1 of the Cancer Center. Some outpatient chemotherapy may be given at other sites in the Cancer Center and medical center, including the Med Inn, or off-site. Your chemotherapy nurse will make sure you know your treatment location.

Depending on your treatment, you may need to stay in the Ann Arbor area for an extended period of time. Please talk to a nurse or social worker regarding your lodging needs.

**Inpatient Information – Gynecologic Oncology Unit**

If you need hospitalization for surgery or some types of chemotherapy, you will most likely be on the Gynecologic Oncology Unit.

**Visiting hours and visitors**

Visiting hours are unrestricted. There are minimal limitations on the number of visitors allowed in a private room. If you are in a semi-private room, you are asked to limit visitors to two at one time. Any visitors who have colds, flu or other illnesses are asked to check-in at the nurse’s station on the unit and probably shouldn’t visit until they are healthy. Young children may visit if they have not been recently exposed to contagious diseases (such as chickenpox, measles, colds or flu) and are healthy.
Hair Loss (Alopecia)

Some chemotherapy drugs cause hair loss ranging from thinning to complete hair loss. Hair loss usually begins about the second or third week after treatment is given. Check with your health care team if hair loss is expected. Hair loss is usually temporary. Re-growth may take three to five months after the chemotherapy is completed.

If you choose to wear wig, we suggest the following:
• Shop for a wig while you still have your natural hair. This will make matching your natural hair color easier.
• Some insurance companies will pay for a wig. Check with your insurance company to see if it is a covered benefit under your plan.
• You will need to get a prescription for a “hair prosthesis.” Please ask your doctor or nurse for a prescription and for additional information.

Covering your head (if you choose not to wear wig or other covering) is important during hot and cold months. There are many scarves, caps and head coverings to choose from. For more information on hair loss, visit the Patient Education Resource Center, Level B2 of the Cancer Center, or call (734) 647-8626.

Diarrhea

Loose or watery stools can occur with some chemotherapy drugs and with radiation therapy. We ask that you track the number of loose or watery stools you have per day. Call your doctor if it lasts for more than 24 hours, or if you are noticing any symptoms of dehydration or rectal bleeding. Signs of dehydration may include: dizziness or feeling lightheaded, especially when
moving to an upright position; dark or concentrated urine; dry mouth or an increase in pulse.

**Mouth Sores**

Mouth sores can occur with chemotherapy. The sores can develop on your tongue, gums or in your throat. It is important that you practice good oral health. Brush your teeth twice a day with a soft bristle toothbrush and floss once a day if your gums are not too sensitive. In addition, you may be told to use a salt and soda rinse.

**To make the salt and soda recipe, mix ½ teaspoon of salt and ½ teaspoon of baking soda in an 8-ounce cup of warm water. Rinse and spit four times a day.**

Call your doctor if your mouth sores stop you from eating, drinking or if you have difficulty swallowing. Prescription oral rinses may be prescribed to help improve your symptoms.

**Nausea and Vomiting**

Some cancer treatments, such as chemotherapy, radiation therapy or surgery may cause nausea and sometimes vomiting. These side effects can begin shortly after treatment. How long these side effects last varies from person to person. You will be given medications to minimize or prevent side effects. Please call your nurse if you cannot keep down any fluids. Once you notify us, we are usually able to modify your anti-nausea medications in order to control the nausea. Do not worry if you do not feel like eating solid foods. Eating smaller more frequent meals can help with nausea.
Low Blood Counts

Your blood is made up of several important cells that are made in the bone marrow. Some of these include white blood cells, platelets and red blood cells. Many chemotherapy drugs affect the bone marrow’s production of these cells because they are fast-growing. There are symptoms that may occur and should be recognized when your blood counts are low. Your blood counts will be monitored during chemotherapy. If we, or you, need to do something different related to your low blood counts, we will call you to let you know the best course of action.

Please see the information below on important signs and symptoms:

White Blood Cells

Purpose: Your white blood cells (WBC’s) help protect your body by fighting bacteria and other germs that cause infection. Neutrophils, and granulocytes are names for the portion of the total WBC that fight infection.

Normal values:
Total WBC: (4,000-10,000/mm3)
Neutrophils: (1,400-7,500/mm3)

Symptoms of infection:
• Fever of 100.5° F or greater, or shaking and/or chills.
• Cough, sore throat.
• Sweating not related to exercise.
• Urinary frequency, urgency, burning or odor.
• Diarrhea.
• Fatigue or “flu-like” symptoms.
• Redness or swelling at the site of a surgical incision.

Report any of these symptoms to your doctor or nurse as soon as possible.

Precautions: White blood cells are the cells most affected during chemotherapy which puts you at risk of getting an infection. Please use good judgment to try to avoid infection, such as:
• Avoid physical contact with people who are sick with the flu or a cold.
• Practice good personal hygiene, especially frequent hand washing.
• Do not share drinking glasses.
• Carry out mouth care as directed.

Platelets

Purpose: Platelets help your blood clot so that bleeding is prevented.

Platelet normal value:
(100,000-450,000/mm3)

Symptoms of bleeding related to low platelets:
• Nose bleed that does not stop after 20 minutes.
• Easy bruising.
• Prolonged bleeding from a cut.
• Black or bloody stools.
• Pink, red or brown urine.
• Pin-point sized red or purple spots on your skin (called petechiae).
SIDE EFFECTS FROM TREATMENT

- Bleeding from the gums that does not stop.
- Bleeding in the whites of the eyes.
- Bloody spit.
- Severe headache that comes on quickly and does not go away.
- Excessive or abnormal vaginal bleeding.

Report any of these symptoms to your doctor or nurse as soon as possible.

Precautions:
- Avoid injury.
- Apply pressure if you are bleeding.
- Do not use sharp objects such as needles, razors, or knives when your platelet count is low.
- Do not take aspirin or any aspirin-containing products while on chemotherapy unless instructed by your doctor. (Look at the ingredients of over-the-counter medications. Many contain aspirin or aspirin-like products).
- Avoid constipation because straining can cause injury.

Red Blood Cells

Purpose: Red blood cells carry oxygen to all of the organs in your body. Hematocrit and Hemoglobin are the blood tests that measure the ability of your red blood cells to carry oxygen. Anemia is the term used to describe low numbers of red cells.

Normal values:
Hemoglobin (Hgb): 12.0-16.0g/dl
Hematocrit (Hct): 35.0-48.0g/dl

**Symptoms of low values or anemia:**

**Mild anemia:**
- Shortness of breath on exertion.
- Weakness and/or fatigue.

**Symptoms of severe anemia:**
- Shortness of breath that interferes with normal daily activities, such as walking short distances.
- Palpitations of the heart.
- Profound weakness and/or fatigue.
- Pale color of the skin.
- Dizziness.
- Headache or ringing in the ears.

**Management of anemia:**
- Take frequent rest periods.
- Eat a high carbohydrate, high protein, well-balanced diet.
- Take an iron supplement, as recommended by your doctor.
- Avoid taxing activities if you are tired.
- You may be asked to have blood counts drawn in your hometown or to come to the clinic to be evaluated.
- At times, you may require a red blood cell transfusion.
- Notify your doctor or nurse regarding these symptoms.

Report any of these symptoms to your doctor or nurse as soon as possible.
Frequently Asked Questions

Q: Will my hair fall out and if so, when does that occur?
A: The degree of hair loss (alopecia) varies from person to person and also depends on which chemotherapy drugs are prescribed. Hair loss caused by chemotherapy may become apparent over two to three weeks. After stopping chemotherapy, initial regrowth may be seen in four to six weeks. If you are treated with radiation therapy, you will probably lose pubic hair, but you will not lose the hair on your head. Hair loss caused by radiation is usually permanent.

Q: If my blood counts drop from chemotherapy, what will be done?
A: Depending on your symptoms, you may receive medications to increase your white or red blood cells. Other medications such as antibiotics may also be prescribed. Occasionally, a blood transfusion may be necessary. If blood counts are very low, future chemotherapy doses may need to be reduced.

Q: Will I be able to maintain the same level of activity? Can I go to work or run errands?
A: Response to chemotherapy, surgery, or radiation varies from person to person. It is normal to feel tired for the first few weeks after surgery. You may also be fatigued while undergoing chemotherapy or radiation treatments. Pay attention to the clues your body gives you and rest as needed. It is a good idea to discuss fatigue with your doctor or nurse. Fatigue can be related to many things, such as low blood counts, normal everyday activity, etc. Your doctor or nurse can help you sort out the cause of your fatigue and how to treat it.

Q: Should my diet be any different before chemotherapy?
A: Some people find that it may be helpful to eat foods that are more easily
tolerated, such as bland foods, soups and tea, while avoiding spicy or fatty foods.

**Q: Can I drive?**
A: It is not a good idea to drive if you are taking narcotic pain medications or medications for nausea. These medications can impair your ability to react quickly in driving situations. Ask your doctor when you can begin driving again.

**Q: Can I work during chemotherapy or radiation therapy?**
A: Depending on the type of job and activities involved, you may be able to work at your regular job. Your employer may be able to make some modifications to your regular job so that you can work during treatment.

**Q: What does it mean to be treated in a research hospital (University Hospital)?**
A: Research hospitals provide care for rare and complex conditions, teach future health care providers, and move research results into practice.

Although we have made great strides in the treatment of cancer, many types of cancer are not yet easily cured. Our goal of being able to cure cancer will depend on continued research that results in new surgical techniques, chemotherapy drugs, and radiation techniques in the years to come. We hope that totally new technologies such as gene therapy and immunotherapy, in addition to better technology for early detection or prevention of cancers, may lessen the impact of cancer on each and every one of us. Breakthroughs such as these begin in the laboratory and eventually progress to clinical trials. A clinical trial is a research study conducted with cancer patients to evaluate a new treatment. If a new treatment is demonstrated to be effective in clinical trials, it is then adopted as standard therapy for cancer patients. Participation in a clinical trial is voluntary. To find out if you may be eligible for participation in a
clinical trial, ask your doctor.

Research is subject to rules and regulations established by the National Institutes of Health and the University of Michigan. These rules are designed to protect the safety of patients and to ensure that research is of the highest quality. A patient enrolled in a clinical trial is not a “guinea pig,” but is instead contributing generously to our ability to understand how to best treat cancer patients.

Research is funded in a number of different ways. Some projects are funded by federal research grants, while others may receive funding from independent agencies such as the American Cancer Society, from companies investing in cancer treatment technologies, and by gifts from individuals in support of research.

Gifts
Gifts from individuals, families and corporations help greatly in the search for a cure for cancer. If you or a family member is interested in contributing financially to cancer research, please discuss this with your doctor.
Next Steps

Emotional concerns during and after treatment

It is normal to feel many different emotions when you are dealing with a serious illness. You may be worried about possible losses of relationships, job changes, and your ability to carry out your daily activities in your personal and professional life. It is common to feel overwhelmed with all the information given. It is not unusual to have concerns related to life and death. Some people find it very helpful to:

• Write down questions that come to mind and prioritize them so you focus on the most important. Record the answers once received.
• Bring a family member or a friend with you to your appointments to help you remember the information.
• Take one step at a time, focusing on one issue at a time. Looking down the road into the future can often seem overwhelming, but broken down into smaller pieces, it can be easier to handle.
• Allow friends and family members to assist you in completing tasks that need to be done. For example, cutting the lawn, doing laundry, shopping for groceries. People often want to help; but don’t know how or what to do.
• Give yourself permission to get what you need. For example, if you do or do not want people visiting, make it clear when and how often. For example, if you are not feeling up to a family get-together, it is okay to limit time spent at an event or to not go.

After treatment is completed, it is common to be uncertain about the future. Many women experience heightened awareness of body sensations and may have fear related to follow-up appointments and exams. Transitioning back into the role of being well is often difficult, and family and friends may have different expectations than you do. It is important to be frank when
communicating your needs to those around you.

Fear of cancer recurrence is also common. Individuals (patients and family members) all cope differently. You may also become uneasy when treatment ends and you are no longer seen by your health care team as often.

Some patients will continue to see their oncology health care team after treatment is done. If you don’t need to continue to see your oncology team, they can assist you as you transition back to your primary care doctor. Talk with your oncology social worker if you have any concerns. They can help find qualified mental health professionals in your community and can assist in finding support groups.

One of the most important things you can do as a patient is to keep the lines of communication open between your oncology team and your primary care doctor. If you have any questions on how best to do this, please ask. We are here to help.

**Sexuality**

Many women are able to continue with normal sexual function despite having undergone cancer therapy. However, sexual function may be affected by several aspects of cancer treatment. These include:

- Healing from surgery.
- Vaginal dryness.
- Hormone effects.
- Changes in self-image.

After surgery, do not resume having intercourse until healing is complete. Although healing for most cancer patients is often complete in six to ten
weeks, you should ask your doctor or physician assistant about this.

There are many treatments that can help with sexual function, such as: vaginal dilators or lubricants, changes in hormone replacement, adjustment of pain medications, or counseling. These may be helpful depending on the type of sexual difficulty experienced. If you have other concerns about sexuality, please talk to your doctor or nurse.

**Support Services and Resources**

There are numerous support services and resources available to help you through treatment and recovery. Some of these include:
- Chemotherapy information, along with management of side effects.
- Complementary Therapies: Art, Music and Guided Imagery.
- Families Facing Cancer Toolkit.
- Grief and Loss.
- Life Images.
- Nutrition Services.
- Patient Education Resource Center (PERC).
- Physical Therapy (PT) and/or Occupational Therapy (OT).
- Practical Assistance Program: Wig Bank, Financial Assistance, etc.
- PsychOnc Clinic.
- Radiation therapy information, along with the management of side effects.
- Social Work.
- Spiritual Care.
- Support Groups.
- Symptom Management and Supportive Care.
- Voices Art Gallery.
For more information on these services, call: (877) 907-0859 or visit: www.mcancer.org

Included in the back pocket of this handbook you'll find additional resources that may help you through treatment and recovery. Many of the materials can be found in the Patient Education Resource Center, located on Level B2 of the Cancer Center. For more information, call (734) 647-8626.
Glossary of Terms

Alopecia – Partial or complete loss of hair. This may result from radiation to the head, or from certain chemotherapy drugs.

Anemia – A condition when there is a decrease in the number of red blood cells or in hemoglobin.

Antiemetics – Drugs given to prevent or minimize nausea and vomiting.

Ascites – An abnormal fluid collection in the abdomen from cancer or other causes.

Biopsy – The surgical removal of a small portion of tissue for diagnosis.

Blood cells – Cells that make up blood are formed in the bone marrow. These include:

- **Red blood cells** – (Erythrocytes; RBC) cells that carry oxygen throughout the body (measured by the hematocrit or HCT).
- **White blood cells** – Cells that help the body defend against foreign substances. Neutrophils are the most important type.
- **Platelets** – Cells necessary to help form a clot and stop bleeding.

Brachytherapy – The use of a radioactive “seed” temporarily implanted directly into a tumor. This allows a very high, localized dose of radiation to be given to a tumor, while limiting significant radiation exposure to other tissues.

Chemotherapy – The treatment of cancer by drugs designed to kill cancer cells or stop them from growing. See the *Chemotherapy and You* booklet.

Clinical trials – The process by which new cancer treatments are tested in humans. Clinical trials are conducted after preliminary testing has shown that a new treatment might be effective. For more information, see the booklet *Taking Part in Cancer Treatment Research Studies* from the National Cancer Institute.

You can also find information on open clinical trials at [www.nci.nih.gov](http://www.nci.nih.gov).

Cone biopsy – The removal of a cone-shaped piece of tissue from around the opening of the cervix.
**Colony Stimulating Factor** - A substance that stimulates the growth of bone marrow cells. Treatment with colony-stimulating factors (CSF) can help the blood-forming tissue recover from the effects of chemotherapy and radiation therapy. These include Granulocytes colony-stimulating factors (G-CSF, Neupogen and Neulasta are the trade names).

**Complete Blood Count** - (CBC) A blood test that determines the number of red blood cells, white blood cells and platelets in the blood.

**Debulking** - A surgical procedure that removes a significant part or most of a tumor. This may make future chemotherapy or radiation more effective.

**Effusion** - A collection of fluid inside a body cavity, such as around the lungs, (pleural), intestines (peritoneal) or heart (pericardial).

**Electrolytes** - Certain chemicals including, sodium, potassium, chloride and bicarbonate, found in the tissues and blood. They are often measured to monitor toxicities, effects of treatment, etc.

**Emesis** - Vomiting.

**Enteral feeding** - Administration of liquid food (nutrients) through a tube inserted into the stomach or intestine.

**Epidural** - The space just outside the spinal cord. Catheters may be inserted into this space to deliver anesthetics or morphine for pain control.

**Estrogen** - The female sex hormone produced by the ovaries. Estrogen controls the development of physical sexual characteristics, menstruation and pregnancy. Synthetic forms are used in oral contraceptives, estrogen replacement therapy, and other various therapies.

**Extravasation** - Leakage into the surrounding tissues of intravenous chemotherapy drugs from the vein being used for the infusion or injection. Extravasation may damage tissues.

**Frozen section** - A procedure done by the pathologist during an operation to give the surgeon an immediate answer as to whether a tissue is benign (noncancerous) or malignant (cancerous)

**Grade of tumor** - A way of describing tumors by their appearance under the
microscope. Low-grade tumors are slow to grow and spread, while high-grade

tumors grow and spread rapidly.

**Guaiac test** – A test to see if there is hidden blood in the stool.

**Hematocrit** – A way of measuring the red blood cell content of the blood. A low

hematocrit is a sign of anemia.

**Hematuria** – Blood in the urine. This may be seen easily by the naked eye (gross

hematuria) or it can be hidden (microscopic hematuria).

**Hemoglobin** – A way of measuring the oxygen carrying ability of the blood.

**Immunosuppression** – The state of having decreased immunity and thus being

less able to fight off infection.

**Intravenous (IV)** – Within or through a vein.

**Ileostomy** – An artificial opening in the skin of the abdomen, leading to the

small bowel. Similar to a colostomy.

**Laparoscopy** – A type of surgery using a very small camera and instruments

that are inserted into the abdomen through small, Band-Aid sized incisions in

order to perform complex surgeries. The small incisions allow faster healing

and cause less pain than conventional surgery.

**Malaise** – The feeling of tiredness, lack of drive.

**Metastasis** – The spread of cancer from one part of the body to another. Cells

that spread are like those of the original cancer. For example: Ovarian cancer

cells may spread (metastasize) to the lymph nodes and cause the growth of a

new tumor. When this happens, the disease is called metastatic ovarian cancer.

It is important to note that the cancer is still considered to be ovarian in origin

because the tumor is made of abnormal ovarian cells.

**Mucositis** – Inflammation and soreness of mucous membranes such as tissue

lining the mouth or throat. This is sometimes a side effect of chemotherapy or

radiation.

**Nadir** – The lowest point at which the blood counts drop after chemotherapy.

**Nephrotoxic** – Medications or drugs that are toxic to the kidneys.

**Neuropathy** – This is a side effect caused by a few chemotherapy drugs, that
causes numbness and/or tingling in the fingers and toes.

**Oophorectomy** – The surgical removal of one or both ovaries.

**Paracentesis** – A procedure in which fluid is taken out of the abdomen by a very thin catheter.

**Petechiae** – Small red spots under the skin caused by a low platelet count.

**Port** – An implanted, reusable IV to administer chemotherapy. Once placed, an IV can be easily connected to the port again and again without having to start a new IV in the arm.

**Protocol** – A formalized outline or plan such as a description of what treatments a patient will receive and exactly when each should be given.

**Residual disease or Residual tumor** – Cancer that remains after surgery or other treatment.

**Robotic surgery** – A type of laparoscopy using very small instruments controlled by the surgeon using robotic arms. This allows complex surgery to be performed through very small incisions. This is called the daVinci system.

**Stage** – Stage refers to the mapping of where cancer may or may not have spread. Determination of the stage is very important for planning the most effective treatment for a cancer by taking into account where the disease is located.

**Stomatitis** – Inflammation and soreness of the mouth. This is sometimes a side effect of chemotherapy or radiation.

**Transfusions** – The infusion of any blood cell product. Example: red blood cells, platelets.
Notes:

Please use this section of the handbook to write down any questions you may have for your oncology team.
Disclaimer: This document contains information and/or instructional materials developed by Michigan Medicine for the typical patient with your condition. It may include links to online content that was not created by Michigan Medicine and for which Michigan Medicine 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 health care provider if you have any questions about this document, your condition or your treatment plan.

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