Welcome to MercyOne

We are honored to be part of your care journey. Our goal is to help you feel empowered and well informed about your care. We have developed this guide to help you navigate this journey. The book is yours to keep and is intended to be a quick reference for questions or concerns that you or your family may have throughout your treatment. Please do not hesitate to reach out to a member of your care team if you have any further questions or concerns throughout this time.

Mission, Vision and Values

Our Mission
MercyOne serves with fidelity to the Gospel as a compassionate, healing ministry of Jesus Christ to transform the health of our communities.

Our Vision
MercyOne will set the standard for a personalized and radically convenient system of health services.

Our Values

Integrity. We are faithful to who we say we are.

Commitment to the Poor. We stand with and serve those who are poor, especially the most vulnerable.

Compassion. Solidarity with one another, capacity to enter into another’s joy and sorrow.

Excellence. Preeminent performance, becoming the benchmark, putting forth our personal and professional best.

Justice. We foster right relationships to promote the common good, including sustainability of the earth.

Stewardship. We honor our heritage and hold ourselves accountable for the human, financial and natural resources entrusted to our care.

Reverence. We honor the sacredness and dignity of every person.
CANCER CARE JOURNEY

TABLE OF CONTENTS

Our Promise to You! ................................................................. 1

Accreditation and Accolades ............................................. 1
Services Offered ................................................................. 1
Radiation Oncology ............................................................ 2
Radiation Oncologists ......................................................... 2
Radiation Oncology Nurse Practitioner ......................... 3
Radiation ................................................................. 3
Medical Oncology .............................................................. 4
Treatment ................................................................. 4
Medical Oncologists ......................................................... 5
Medical Oncology Nurse Practitioner ....................... 5
Chemotherapy .............................................................. 6

Support Care Services ....................................................... 7

Oncology Social Worker .................................................... 7
Dietitian ................................................................. 7
Cancer Rehabilitation ...................................................... 7
Cancer Exercise Program ................................................ 8
Palliative Care .............................................................. 9
Clinical Trials .............................................................. 9
Cancer Risk Assessment and Genetic Testing .............. 10
Wigs and Head Coverings .............................................. 11
Look Good…Feel Better™ ................................................. 11
Breast Care Navigator .................................................... 11
Transportation Assistance ............................................. 11
Support Groups ............................................................ 12
Spiritual Care .............................................................. 12
Cancer Conference ......................................................... 13
Cancer Survivorship ....................................................... 13
Cancer Registry ............................................................ 13
Cancer Overview ........................................................... 14
What Causes Cancer ...................................................... 14
Diagnosis ................................................................. 15
Goals of Cancer Treatment ......................................... 15
Types of Cancer Treatment ........................................... 16
Our Promise to You!

A cancer diagnosis comes with uncertainty and fear, we are here to help you navigate your journey every step of the way. Our care team members work closely with medical professionals in surrounding clinics and hospitals to provide collaborative care so you can receive treatment close to home.

Accreditation and Accolades:

MercyOne Waterloo Cancer Center is accredited by the American College of Surgeons Commission on Cancer. Earning accreditation demonstrates MercyOne’s commitment to high-quality patient-centered care and access to a full scope of cancer care services required to diagnose, treat, rehabilitate and support. This commitment to quality care at the local level is based on national standards. By demonstrating adherence to performance measures, our cancer program has been accredited since 1995.

Services Offered:

- Medical Oncology/Hematology
- Radiation Oncology
- Cancer Rehabilitation and Wellness
- Coordinated Patient and Family Education
- Genetic Testing and Counseling
- Counseling and Spiritual Care
- Social Services Support
- Nutritional Guidance and Education
- Transportation Assistance
- Breast Care Navigator
- Certified Oncology Staff/Nurses
- Lab Services
- Clinical Trials
RADIATION ONCOLOGY

MercyOne's radiation oncologists are cancer specialists with expertise in the application of radiation therapy as it is used in the management of cancer. If radiation is recommended to be part of the cancer treatment plan, the patient will initially see a radiation oncologist for a consultation. During this visit, the radiation oncologist will review medical information including any surgery that has been completed for the cancer and any other tests that have been done, such as computed tomography (CT) scans, positron emission tomography (PET) scans and lab tests. The radiation oncologist then determines if radiation is recommended for your disease and discusses the treatment options, potential benefits and risks of treatment.

Radiation therapy can be given in a number of different ways, most of which are available here at MercyOne Waterloo Cancer Center.

RADIATION ONCOLOGIST

Vandana Jain, MD
RADIATION ONCOLOGY NURSE PRACTITIONER

The nurse practitioner at Waterloo Cancer Center works closely with the radiation oncologists to provide an in-depth history during the initial Radiation Oncology consultation. Her role includes seeing you prior to the radiation oncologist visit, providing education and carrying out specialized visits such as survivorship care plans with patients who have completed treatment.

RADIATION

MercyOne Cancer Center is the only cancer treatment center in the area to offer radiation therapy treatment services.

Radiation treatments are administered through state-of-the-art equipment. The following treatment options are the most advanced and most precise forms of radiation therapy currently available:

- IGRT (Image-Guided Radiotherapy)
- Electronic Brachytherapy (eBx™)
- Other therapies including Radiopharmaceutical Therapy

Our Waterloo Cancer Center houses two modern linear accelerators with multiple, high-energy x-ray and electron radiation beams and digital image guidance capabilities including Cone Beam CT. New generation simulation and treatment planning system incorporate CT with the fusion of other imagery modalities such as PET/CT and MRI to develop precise, individualized patient treatment plans. Using these specialized plans, in combination with advanced treatment techniques and IGRT targeting, the treatments are focused precisely on the tumor site while avoiding healthy tissue.
MEDICAL ONCOLOGY

MercyOne’s medical oncologists are highly skilled practitioners who specialize in both hematology and oncology. They remain up to date on new and breakthrough therapies. Typically, a patient’s journey starts with an in-depth consultation visit with a medical oncologist where an individualized treatment plan is developed.

TREATMENT

Medical oncologists utilize staging information along with the details of your individual situation to help determine the most appropriate choice of treatment and personalize your care. The team holds a weekly tumor board, which is a multidisciplinary round table discussion. They also utilize the National Comprehensive Cancer Network (NCCN) to help guide their decisions. The NCCN is an alliance of leading cancer centers that develop practice guidelines that are recognized as the standard of care for clinical policy in oncology and are the most comprehensive and most frequently updated clinical practice guidelines available in any area of medicine. In addition to standard chemotherapy, our medical oncologists also utilize hormonal therapy, biotherapy and targeted agents, as well as oral chemotherapy in cancer treatment.
MEDICAL ONCOLOGISTS

Mukund Nadipuram, MD

Hussain Naseri, MD

MEDICAL ONCOLOGY NURSE PRACTITIONER

The medical oncology nurse practitioner at Waterloo Cancer Center works closely with the medical oncologists. Her role includes meeting with you before the provider to obtain a detailed history and physical assessment, assist with symptom management, provide education and sees patients in follow-up office visits after completion of treatment.

Kathy Heetland, ARNP
CHEMOTHERAPY

Compassionate care from a highly-trained team of professionals

MercyOne Waterloo Cancer Center is committed to provide a patient-centered, healing environment. That's why we offer options. Private treatment rooms are available and equipped with additional seating for family members.

Chemotherapy is a cancer treatment that uses drugs to kill cancer cells. In contrast to surgery and radiation therapy which are local therapies, chemotherapy is systemic – meaning it works throughout cells in the entire body. It works by stopping or slowing the growth of cancer cells, cells that are growing and dividing quickly.

Chemotherapy is used to cure the cancer through eradication, lessen the chance that it will return, or stop or slow its growth. Chemotherapy effects normal cells too, which can lead to various side effects. Chemotherapy treatment is offered for a variety of malignant and hematological cancers.
Supportive Care Services

Waterloo Cancer Center is comprised of a multidisciplinary medical team who use the most current and comprehensive methods of treatment available to care for individuals living with cancer. In addition to providing state-of-the-art medical treatment, we have several supportive care services available to you. These services are described in more detail in the following paragraphs.

**ONCOLOGY SOCIAL WORKER**

As a strong advocate for cancer patients, our social worker is committed to help you and your family deal with overwhelming emotions and difficult decisions. An oncology social worker can help you:

- Cope with diagnosis, treatment and feelings
- Reduce stress and anxiety
- Find support groups
- Access information regarding transportation, home care and prescription drug coverage
- Apply for programs offering assistance
- Assistance with financial applications and needs
- Understand social security benefits and insurance coverage
- Learn about the hospice programs available in the community

Our social worker can be reached at 319-272-2816.

**DIETITIAN**

A registered dietitian is an integral member of your care team. The dietitian is available to work with patients who are losing weight or struggling with side effects of chemotherapy and/or radiation. Nutritional support is an important part of the cancer journey. Our dietitian is available to answer questions, manage nutritious diet plans and counsel patients.

**CANCER REHABILITATION**

Cancer affects every aspect of your life - physically, mentally and emotionally. That’s why we offer a cancer rehabilitation and wellness program customized for each patient based on their individual needs. You may encounter challenges that may require physical, occupational, speech and psychological therapies. Some challenges may include:

- Chronic and acute pain
- Impaired mobility
• Deconditioning
• Decreased ability to perform activities of daily living
• Lymphedema
• Energy management and conservation techniques
• Safety and cognitive concerns
• Nutritional advice
• Bladder and bowel dysfunction
• Dysphagia
• Psychosocial difficulties
• Vocational training needs
• Post amputation care
• Prosthetics and orthotics fitting

We offer outpatient services for the treatment and preventive care for patients diagnosed with lymphedema, edema, or venous insufficiency. Lymphedema involves the swelling of a body part (arms, legs, trunk, or face) due to trauma of the lymphatic system. The trauma can include cancer (with lymph node removal), radiation, or any kind of surgery or condition in which the lymphatic vessels and/or lymph nodes have been compromised.

The length of treatment for each patient is dependent on the severity of the lymphedema/edema. Follow-up treatment and assessment is incorporated into the care plan as needed, based on the provider's referral. Throughout the treatment process patients and their family members, friends and caregivers will learn to take an active, committed role in managing lymphedema on a long-term basis. Cancer rehabilitation services require a provider's referral and are covered by all major insurances and Medicare.

CANCER EXERCISE PROGRAM

Live your life, not your cancer! The mission of Survive and Thrive Cancer Exercise Program is to improve quality of life during and after cancer treatment through individualized exercise programming.

Benefits of exercise during and after cancer treatment include:
• Decreased reoccurrence of cancer
• Improved mobility
• Improved balance
• Increased strength and endurance
• Reduced fatigue
• Decreased nausea
• Improved self-esteem and self confidence
• Lowered risk of heart disease and diabetes
• Reduced depression
• Increased circulation for healing
• Decreased pain
• Supported community network

All cancer exercise services performed at MercyOne Kimball Ridge Center are free of charge up to six months after a cancer diagnosis and do not require a physician referral. Survive and Thrive is facilitated by a certified cancer specialist who can help individuals through the physical challenges of cancer treatment and recovery. The program is customized to each cancer survivor’s specific needs. The program is suited for recently diagnosed patients to help increase fitness, battle fatigue, and decrease side effects related to treatment; survivors living with cancer as a chronic disease that want help to manage symptoms; and individuals who are cured or in remission who need to boost their immune system and regain strength. To register for "Survive and Thrive," call 319-272-1755.

PALLIATIVE CARE

Maintaining or obtaining your best quality of life is always our goal and palliative care providers are available to help you achieve this goal. These providers are specially trained to help you manage any side effects affecting your quality of life. Your radiation or medical oncologist may refer you to palliative care to help him/her manage your care. Many often think that palliative care is only for patients at the end of life, but that is a common misconception. Palliative care can be used in all disease stages to help you have the best quality of life possible.

LINK Program through Cedar Valley Hospice

Cedar Valley Hospice–Multiple counties

Hospice of patient’s choice

CLINICAL TRIALS

At MercyOne, we recognize the importance of ongoing research in the fight against cancer. We proudly participate in a wide variety of national and regional research studies in order to offer you the benefits of the most up-to-date treatments. The decision to participate in a clinical trial is always up to you. You can be assured that we will provide high-quality treatment and exceptional, personalized care whether a clinical trial is chosen or not. Cooperative treatment and support services are also available for patients enrolled in studies at other tertiary centers.
CANCER RISK ASSESSMENT AND GENETIC TESTING

Genetic counseling and testing is available at MercyOne. Your provider may recommend testing given the variety of genes linked to hereditary cancers, a multigene cancer panel may be the easiest way to identify a potential genetic risk. Approximately five to ten percent of cancers have been linked to an inherited gene. The genetic counselor helps coordinate payment and insurance coverage for testing. The cost of testing is typically covered by health insurance if certain criteria are met.

Who should consider a genetic risk assessment?

Personal or family history of:

- Breast cancer diagnosed before age 50
- Ovarian cancer at any age
- Two breast cancers in the same person or same side of the family
- Male breast cancer at any age
- Triple negative breast cancer at any age
- Ashkenazi Jewish ancestry and a personal or family history of and HBOC (Hereditary Breast and Ovarian Cancer) associated cancer
- Three or more HBOC-associated cancers at any age (breast, ovarian, prostate, pancreatic)
- A previously identified HBOC syndrome mutation in your family
- Metastatic prostate cancer
- Metastatic breast cancer (HER2-negative)
- Pancreatic cancer
- Colorectal and endometrial cancers at any age with a certain mutation (MMR)
- Colorectal cancer before age 50
- Endometrial cancer before age 50
- Two or more cancers associated with Lynch Syndrome - endometrial, ovary, stomach, small intestine, hepatobiliary tract, upper urinary tract, brain and skin

Once a referral is made you will receive a packet about genetic counseling and testing. If a patient chooses to proceed with genetic counseling, an appropriate referral is made to a certified genetic counselor.

Learning your risk before a cancer has a chance to develop allows for preventive steps and increased screening, which helps us to find cancers at the earliest stages for treatment or to potentially prevent a cancer from happening.
**WIGS AND HEAD COVERINGS**

Chemotherapy and certain targeted radiation therapy side effects can include hair loss for many cancer patients.

For a list of local hair salons that provide wigs and services please ask cancer center colleagues.

**Look Good…Feel Better™**

"Look Good…Feel Better™ is a national program that is free to cancer patients. It is designed to help women cope with skin, hair and nail changes, caused by cancer therapies. A certified cosmetologist conducts the sessions.

The Look Good…Feel Better™ program is offered to our patients four times a year at the Waterloo Cancer Center, 200 East Ridgeway Avenue, Waterloo, IA 50702. Please call 319-272-2816 to register.

**BREAST CARE NAVIGATOR**

MercyOne Breast Center has a breast care navigator who works with you and your family to help guide you through this journey. As part of your first provider visit, our patient navigator will meet with you and help coordinate further tests and appointments your providers deem necessary for your treatment planning. The patient navigator will work closely with you and your providers to help answer questions you might have about the treatment plan. Often your navigator will connect you with other services to assist in resolving your barriers.

Some of the services the navigator can assist you with include:
- Provides support and coordination to assist you in securing appointments
- Allows you access to the same services offered throughout the health system
- Provides educational resources for breast health, breast cancer and breast care
- Connects you and your family to local resources and support services
- Promotes communication between you and your health care providers
- Enhances quality of life

**Transportation Assistance**

For those who need assistance getting to and from their cancer treatment, MercyOne offers a free transportation service to most of our patients. We want to help make your appointment convenient when driving yourself or finding a ride is not possible. This service also helps relieve some of the expense and inconvenience for you.
- Care-A-Van
  This service is available to any patient living in the metro area needing transportation to and from the Waterloo Cancer Center.
• Cancer Van
  This service is available to radiation patients who live within a 50-mile radius of the Waterloo Cancer Center.

Support Groups

Support groups are available for those who want to be with others to share in the cancer journey. For more information about any of these support groups, please contact the social worker at 319-272-2816.

• Care and Share is a support group for patients and their families/caregivers dealing with any type of cancer. This group meets the first Tuesday of each month at 1:30 p.m. at Waterloo Cancer Center. The group is led by Waterloo Cancer Center’s social worker.

• Look Good...Feel Better™
  A program that teaches cancer patients techniques to help restore their appearance and self-image during treatment. Meets four times a year at Waterloo Cancer Center. For information on how to register for this class contact the social worker at the Waterloo Cancer Center.

• Cancer Support / Survivors Network
  This online support network provides a place to talk with others and learn, too.
  www.csn.cancer.org
  www.cancercare.org
  www.lbhc.org

• Young Cancer Survivors
  Meets the third Tuesday of January, April, June and September.
  Unitarian Universalist Church, 3912 Cedar Heights Drive, Cedar Falls
  Call Gabbi Dewitt at 319-292-2225.

Spiritual Care

What is it that gives you hope and courage as you deal with your diagnosis and treatment? How can you nurture your spirit along with caring for your body?

Spiritual care is a valuable part of the cancer journey. You may already have a strong spiritual support system in family, friends, or religion/faith community.

A MercyOne chaplain is available to help you if you want to develop your inner resources, address spiritual issues related to your health, or develop habits of spiritual self-care.

To arrange a meeting with a chaplain, call 319-272-7377.
CANCER CONFERENCE

Cancer conferences are held once a week at MercyOne Waterloo Medical Center. A provider moderates the conferences which are attended by medical oncologists, radiation oncologists, surgical oncology, radiology and pathology providers, as well as other health care professionals. The weekly cancer conferences provide a major avenue to develop effective multidisciplinary approaches to cancer care at Waterloo Medical Center and Waterloo Cancer Center. The cancer conference honors the best medical traditions for sharing meaningful information to colleagues about challenging cases, and for stimulating discussion on best practice management for an individual's specific care needs.

CANCER SURVIVORSHIP

It is estimated by the year 2022 there will be 18 million cancer survivors living in the United States. Cancer survivors have some unique needs as they transition to a “new normal” after diagnosis and treatment. The Commission on Cancer created guidelines encouraging the creation of comprehensive care summaries for this population. These comprehensive care summaries, or Survivorship Care Plans, clearly set out a follow-up plan for further care while giving a summary of all treatment received. They also explain possible short-term and long-term effects from treatment, signs and symptoms of recurrence, risk of secondary malignancy, promotion of wellness, as well as resources throughout the community.

CANCER REGISTRY

The cancer registry is committed to collecting and providing information to enhance and improve cancer patient care at Waterloo Cancer Center. The registry maintains a complete database for all cancers diagnosed and/or treated at MercyOne. Data collection is a shared service with the State Health Registry of Iowa (SHRI) and Waterloo Medical Center. The SHRI assists with data collection, provides quality management, continuing education, and follow-up care of cancer patients.
Cancer Overview

A cancer diagnosis comes as a shock to most patients and has the potential to change your life. It is a time of uncertainty for patients and their families. We are committed to helping you through this incredibly difficult chapter in your life. We acknowledge that you may be overwhelmed by the amount of information you are receiving which is why we wanted to provide some basic information about cancer, in order for you to better understand what is happening.

Cancer. It is not just one disease, it is actually the name given to a collection of related diseases. All cancers have one thing in common – cells that are dividing without stopping and spread into surrounding tissues.

Normal cells grow and divide to form new cells as the body needs them and when they grow old or become damaged, they die and new cells take their place. This process is altered when you have cancer, those old or damaged cells survive when they should die. The extra cells often accumulate to form growths called tumors. Tumors can be benign (not cancer-do not spread or invade other tissues) or malignant (cancerous-can spread or invade other tissues). When cancer spreads it is called metastasis. For example, when lung cancer spreads to the bones, it is still referred to as metastatic lung cancer because that is the site of origin that the cancer spread from. It is important to know where the cancer originated because knowing the type of cancer it is helps determine the treatment. Not all types of cancers are tumors, some can originate in the blood or other tissue.

The National Cancer Institute (NCI) breaks cancer down into the following main categories of cancer:

- Carcinoma: begins in the skin or tissues that line or cover internal organs
- Sarcoma: begins in bone, cartilage, fat, muscle, blood vessels or other connective or supportive tissue
- Leukemia: starts in blood-forming tissue, such as the bone marrow and causes abnormal blood cells to be produced
- Lymphoma and myeloma: begin in the cells of the immune system
- Central nervous system cancers: begin in the tissues of the brain and spinal cord

WHAT CAUSES CANCER

It seems like every other day you can encounter a headline about something that causes cancer;. These stories can induce a lot of fear and uncertainty. It is hard to know if the information out there has any truth to it.

Social media posts, blogs and chain emails are often examples of inaccurate data that has been misconstrued. When looking at these articles or “news,” it is important to think about the validity of the data.
What do we know about what causes cancer? We know that determining whether something truly raises cancer risk is not easy. Often the certainty of risk cannot be completely determined and thus agents are sometimes classified as probably carcinogenic (cancer-causing). There is not a comprehensive list of the agents that can cause cancer, but there are resources that can give you some concrete information. Agencies that have lists available: The International Agency for Research on Cancer (IARC), National Toxicology Program (NTP), Environmental Protection Agency (EPA), and the CDC’s National Institute for Occupational Safety and Health (NIOSH). Some of the more common agents that are proven carcinogenic are tobacco (smoking, second hand smoke and smokeless), tanning beds, radon, asbestos, and many others.

**DIAGNOSIS**

Sometimes diagnosing cancer can be relatively easy and other times it can be a very complex process. Typically, when cancer is suspected, imaging studies are ordered such as CT scans or an MRI. This can show the presence, location and size of an abnormal mass, often it also pinpoints an area where a biopsy can be performed. A biopsy is key in determining the type of cancer it is. Sometimes further testing will need to be done to determine the extent of your disease such as a bone marrow biopsy or positron emission test (PET). Results from these tests are necessary before any treatment can begin.

**GOALS OF CANCER TREATMENT**

The extent of disease revealed in the diagnosis phase often determines the goal of cancer treatment. There are three main goals of cancer treatment:

- Cure
- Control
- Palliation

When possible, cancer treatments are used with the intent to cure or curative intent. This would mean that the cancer is destroyed – it goes away and does not come back. Often this is would include chemotherapy or chemotherapy combined with other modalities such as surgery or radiation therapy.

When a cure is not possible, the goal is often to get the cancer under control and keep it there. This can help the person with cancer feel better and live longer. The cancer typically does not completely go away but becomes more like a chronic disease such as heart disease or diabetes. Some can live with cancer as a chronic condition for many years and the number of cases such as these are on the rise.

The last goal of treatment is palliation. Improve the symptoms caused by the cancer and increase the quality of life of the patient and help them feel better. People often think that treatment side effects decrease a patient’s quality of life. There are many cases where giving treatment can increase quality of life and make someone feel better. A classic example is a patient with widespread small cell lung cancer who is having a lot of trouble breathing – we would initiate treatment quickly because this type of cancer responds quickly to treatment and can ease the patient’s breathing troubles.
TYPES OF CANCER TREATMENT

There are many types of cancer treatment. The types of treatment that you receive will depend on the type of cancer you have and how advanced it is. Some people with cancer may have only one modality of treatment but often more than one modality of care is utilized. The following are examples of the types of treatment utilized and are discussed below: surgery, radiation therapy, chemotherapy, biotherapy and hormone therapy.

Our providers utilize the guiding principles of the National Comprehensive Cancer Network to assist them in making treatment decisions. The National Comprehensive Cancer Network (NCCN) is a not-for-profit alliance of 27 leading cancer centers that work to create clinical guidelines for the care of cancer patients. There are patient resources available on the website for the NCCN to help patients in understanding their diagnosis as well as treatment options available to them. Please ask your health care provider for more information if you do not understand the information.

Surgery
Many people with cancer are treated with surgery. Surgery typically works best for solid tumors contained in one area. It can be used to remove all or a portion of the primary tumor. Treatment with surgery can sometimes be the only treatment needed, but can also be done before or after another treatment.

Occasionally it is used in a palliative setting to lessen the symptoms the tumor is causing on a patient’s quality of life.

Radiation Therapy
Radiation therapy is a cancer treatment using high doses of radiation to kill cancer cells and shrink tumors. When given in high doses, radiation kills or slows their growth by damaging their DNA. The DNA of the cancer cells is damaged causing cell death. It can take days or weeks of radiation to damage the DNA enough for the cancer cells to die. The effects of the radiation continue even after the radiation therapy is completed. Radiation is a very targeted therapy that treats a specific area and it is more effective for some cancers than others. There are many different types of radiation available. If radiation therapy is indicated, the medical oncologist or other provider will make a referral to the radiation oncologist. The radiation oncologist will discuss the different radiation therapy options available to you, most of which are available at the Waterloo Cancer Center.

Chemotherapy
Chemotherapy is a cancer treatment using drugs to kill cancer cells. In contrast to surgery and radiation therapy, which are local therapies, chemotherapy is systemic – meaning it works throughout cells in the entire body. It works by stopping or slowing the growth of cancer cells, cells that are growing and dividing quickly.
Chemotherapy is used to cure the cancer through eradication, lessen the chance that it will return, or stop or slow its growth. Chemotherapy affects normal cells too, which can lead to various side effects.

**Biotherapy**

Biological therapy involves the use of living organisms, substances derived from living organisms, or a laboratory-produced version of such substances to treat disease. Some biological therapies for cancer stimulate the body’s immune system to act against cancer cells. These types of biological therapy, which are sometimes referred to collectively as “immunotherapy,” do not target cancer cells directly. Other biological therapies, such as antibodies, do target cancer cells directly. Biological therapies that interfere with specific molecules involved in tumor growth and progression are also referred to as targeted therapies. Some types of immunotherapy only target certain cells of the immune system while others affect the immune system in a general way. Some examples of immunotherapy include cytokines, vaccines and some monoclonal antibodies. This is one of fastest growing areas of cancer care. Even though it is systemic (works throughout the whole body), it often takes a more targeted approach to the individual’s cancer. These therapies do not work with every cancer. Special lab tests are often requested by the medical oncologist to determine whether a patient is a candidate for that particular treatment.

These drugs often stimulate an immune response and the side effects are much different from traditional chemotherapy. Biotherapy/Immunotherapy agents are more likely to cause a hypersensitivity reaction at the time of infusion, which can often be managed in the infusion room with other medications and prolonging the infusion. Patients often have flu-like symptoms that can include fever, chills, weakness, dizziness, occasional nausea and vomiting, muscle/joint pain, fatigue, headache, fluid retention, diarrhea and others. As with all therapies, side effects can be managed very effectively with collaboration of you and your health care providers.

**Hormone Therapy**

Another therapy used to fight cancer is hormone therapy. It often is used in combination with other treatment modalities. It can be used to lessen the chance that cancer will return, stop or slow its growth as well as to ease cancer symptoms. Hormone therapy is divided into two groups: those that block the body’s ability to produce hormones and those that interfere with how hormones behave within the body. Side effects are dependent on the type of hormone involved and how your body responds. It is important to be candid with your providers to help you manage any side effects.

Treatment modality choices are incredibly complex and it is important to be comfortable with your health care provider as well as educate yourself so you know you are getting the best care possible. Again, we would recommend the National Comprehensive Cancer Network (NCCN) as a great resource in understanding how these treatment choices are made. If you have questions about your treatment plan it is important to discuss it with your health care providers.
Complementary and Alternative Therapy

Complementary and Alternative Medicine (CAM) is the general term given to medical products and practices given outside of standard medical care. At times, these two terms are used interchangeably but there is a key difference - complementary medicine is treatment often used alongside standard medical treatments whereas alternative medicine is treatment used INSTEAD of standard treatment.

Some CAM therapies have undergone careful evaluation and have been proven to be safe and effective, while others have been found ineffective and possibly harmful. Just because something is considered natural does not mean it is necessarily safe. Some supplements can be harmful and are not regulated by the federal government. It is important to discuss CAM therapies with your provider to help you determine if they are right for you. Some examples of effective complementary therapies are deep breathing, Yoga, meditation, massage, progressive relaxation and guided imagery. More information can be obtained at the webpage for the National Center for Complementary and Integrative Health.
Cancer Related Websites

National Organizations
American Cancer Society™ – cancer.org
American Society of Therapeutic Radiology and Oncology™ – astro.org
American Society of Clinical Oncology® – asco.org
Cancer Care® – cancercare.org
National Comprehensive Cancer Network™ – nccn.org
Radiological Society of North America® – radiologyinfo.org

Breast Cancer
breastcancer.org
National Lymphedema Network™ – lymphnet.org
Susan G. Komen for the Cure® – komen.org
Breast Cancer - Network of Strength® – networkofstrength.org
Young Survival Coalition® – youngsurvival.org
National Cancer Institute® – cancer.gov
Beyond Pink Team – cedarvalleybreastcancer.org
Living Beyond Breast Cancer – lbbc.org

Survivorship and Support Groups
Association of Cancer Online Resources™ – acor.org
National Coalition for Cancer Survivorship™ – canceradvocacy.org
University of Iowa Hospitals Online Cancer Support Group – vh.org
OncoChat IRC Channel™ – oncochat.org

General Cancer Information – Clinical Information
Chemotherapy basics – www.chemocare.com
Radiation Therapy Basics – www.rtanswers.org
OncoLink® – oncolink.upenn.edu
MD Anderson Cancer Center – mdanderson.org
Cleveland Clinic Foundation – ccf.org
Health Central – healthcentral.com
CenterWatch – centerwatch.com
Health on the Net Foundation – hon.ch
Medicine Online™ – med.com and breastcancertrials.org
Patient Resource™ – patientresource.net

Radiation Specific Information
Radiation Therapy specific website and videos: https://www.rtanswers.org/

These sites may be helpful. Many are nationally recognized organizations and several are world famous cancer teaching hospitals. BEWARE of what you may find on some sites – remember, anyone can publish anything on the Web without restrictions, proof or evidence. Just because you read it on the Internet does not mean it is true. If you have questions on information you find, please talk to your doctor.