Welcome

Welcome to the University of Colorado Cancer Center’s Gastrointestinal Cancer Program at the University of Colorado Hospital. We strive to provide patient-focused, personalized, multi-disciplinary care for colorectal cancers. Our specialized providers in Medical Oncology, Surgical Oncology, Radiation Oncology, Pathology, Molecular Pathology, Radiology, Interventional Radiology, Nuclear Medicine, Gastroenterology (both Hepatology and Interventional Endoscopy), Nutrition, and Integrative Medicine work together to achieve the best outcomes for our patients. Thank you for taking the time to discuss your treatment options with us.

The Gastrointestinal (GI) Cancer Program

The GI Cancer Program is dedicated to providing highly specialized care to patients with GI cancers. This includes cancers of the esophagus, stomach, small bowel, colon, rectum, pancreas, gallbladder, biliary tree, liver, and other gastrointestinal organs.

Mission Statement

Our mission is to provide the highest quality multi-disciplinary care to patients, while conducting innovative research and educational programs to improve outcomes for patients with GI cancers. The program includes:

» physicians and other health providers from eight different disciplines (medical oncology, radiation oncology, surgical oncology, interventional radiology, gastroenterology, interventional endoscopy, pathology, molecular pathology), all specializing in GI cancers
» multidisciplinary tumor boards, where cases are discussed among 10-15 specialized providers at once; and multidisciplinary clinics, where patients are seen by multiple specialists simultaneously
» cutting-edge research trials
» genetic counseling and screening/prevention educational programs
» Nutrition and survivorship
Medical Oncology

The department of Gastrointestinal Medical Oncology is a team of highly specialized medical oncologists, scientists, nurse practitioners, and research nurses who treat gastrointestinal malignancies, including cancers of the liver, bile duct, gallbladder, pancreas, large and small bowel, stomach, esophagus and other rare tumors.

Our mission is to deliver the highest quality patient care by providing the most advanced medical therapies and opportunities to participate in clinical trials, with the goal of improving survival and quality of life. Our physicians are working to find better therapies, as well as more accurate diagnosis and screening procedures to detect GI cancers in their earliest stages.

Surgical Oncology

Surgical oncologists within the Department of Surgery specialize in treating patients with cancers arising in the gastrointestinal tract. Efforts are directed at improving treatment results by utilizing minimally invasive techniques and combining surgery with chemotherapy, radiation therapy, and novel therapeutics.

The research program in Surgical Oncology emphasizes cellular and molecular biology of gastrointestinal cancers, and incorporating that knowledge into the development of novel cancer prevention and treatment strategies.

Radiation Oncology

At the University of Colorado, we are continuously refining radiation oncology treatment methods to deliver the highest-quality patient care possible. Our unmatched range of equipment includes the latest strategies to treat tumors aggressively, while reducing or eliminating some of the side effects that used to accompany radiation treatment.

By using the most current treatment planning technology available to “map” tumors, our radiation oncologists can design treatments with pinpoint accuracy, ensuring that tumors get the most effective dose while healthy tissues and organs are spared.

At the University of Colorado, we offer stereotactic body radiation therapy (SBRT). SBRT combines elements of three-dimensional conformal radiotherapy (3D-CRT)/intensity-modulated radiation therapy (IMRT), which links CT scans of the tumor site with treatment-planning software to determine optimum photon radiation beam direction and intensity, and image-guided radiation therapy (IGRT) techniques that cope with tumor motion and anatomy changes during the course of radiotherapy.

SBRT allows the delivery of ablative dose of radiation to the target in significantly shortened treatment time, individual treatments, called “fractions” have been reduced from 35 to fewer than 5 in this approach, while minimizing damage to normal tissues in the tumor region. This approach has been used in patients with early stage or isolated recurrent/metastatic cancer in the lung, liver and other sites.
Interventional Radiology

Interventional Radiology is a sub-specialty of Diagnostic Radiology that has evolved over the past 25 years to become an integral part of comprehensive patient care, providing alternatives to surgery for a broad range of health problems.

State-of-the-art imaging techniques including fluoroscopy, ultrasound, computed tomography (CT scans) and magnetic resonance imaging (MRI) are utilized to guide the placement of needles, catheters and devices directly to target sites deep within the body through a small skin incision. These procedures are often performed under local anesthesia with intravenous (IV) sedation and typically do not require general anesthesia.

The Interventional Radiology team at the University of Colorado is a dedicated group of healthcare professionals committed to providing quality patient care, research, and education programs for our patients, the institution, and the community at large, utilizing and promoting innovation in image-guided therapies for benign and malignant oncologic disease processes.

Interventional radiologic procedures performed at the University of Colorado include embolization therapies, ablative therapies, and palliative pain procedures (both approved and investigational) for GI cancers.

Interventional Endoscopy

The Interventional Endoscopy team consists of gastroenterologists working together to provide the highest level of care for patients with a wide variety of gastrointestinal disorders including preneoplastic and malignant conditions. The patient population consists of patients at risk for, or diagnosed with gastrointestinal malignancies (i.e., esophageal, gastric, colorectal, anal, hepatobiliary and pancreatic cancers). Special programs are established for diagnosis and management of individuals with hereditary colon cancers and for diagnosis of primary tumors of unknown origin.

Gastroenterologists provide consultations, endoscopic screening for at-risk groups (adenomatous polyps, Barrett’s esophagus), diagnostic and therapeutic procedures, and hepatology services. Endoscopic procedures are available for diagnostic, therapeutic and research uses and include endoscopic ultrasound, laser therapy, polypectomy, liver biopsy, and dilation.

Pathology

Patients at the UCCC benefit from the experience of our team of subspecialty trained GI pathologists. Our pathologists diagnose thousands of gastrointestinal, pancreatic, and hepatobiliary cases each year from patients operated on at UC and in the form of cases sent for consultation by other pathologists, physicians and patients from all over Colorado and the surrounding states.
Molecular Pathology

The University of Colorado maintains state-of-the-art testing to determine optimum cancer therapy through the Colorado Molecular Correlates Laboratory (CMOCO). This testing, also referred to as ‘personalized medicine’ is done by carefully isolating individual tumor cells from a patient specimen and testing for abnormalities in the DNA that cause or contribute to the cancer. The results of this testing is used to tailor treatment to these abnormalities that are present in the cancer cells, but not the normal cells. For example, for some tumors, evaluation of a gene known as KRAS can help your oncologist determine the therapy that is best for your tumor type. The CMOCO laboratory offers testing for a variety of tumor types, and multiple tests for some tumors to help determine the optimum treatment. The molecular pathologists involved in this testing evaluate the tumor specimen, and oversee all the processes that lead to an accurate result. At the University of Colorado Hospital, we routinely test several tumor types to make sure the treating team has the most up to date information in the most timely manner possible.

Colorado Colorectal Screening Program

The Colorado Colorectal Screening Program (CCSP) is a statewide screening program operated by the University of Colorado Cancer Center. The CCSP pays the costs for screening, diagnosis, and treatment of colorectal cancer for Colorado residents who need to be screened (over age 50 or younger if high risk or symptomatic) but do not have health insurance. For more information about the program, see the CCSP website at www.uccc.info/colonscreen. For information on participating clinics call 866-227-7914.

Multi-Disciplinary Gastrointestinal Tumor Clinic

For GI cancer patients who require multidisciplinary cancer care with surgical, radiation and/or medical oncologists, this clinic allows the patient to be seen by these disciplines simultaneously.

Multi-Disciplinary Gastrointestinal Tumor Board

The GI Cancers Program at the University of Colorado has a weekly meeting where our GI specialists from medical oncology, surgical oncology, radiation oncology, radiologists, pathologists, gastrointestinal endoscopists, and interventional radiologists discuss the medical condition and treatment options for our patients. This allows our patients to benefit from a multi-disciplinary opinion rendered by 10-15 doctors examining scans and microscopic images of tumors simultaneously. The ultimate goal of our gastrointestinal tumor board is to find the best possible treatment plan for our patients.

Hereditary Colorectal Cancer Clinic/Genetics

The Hereditary Colorectal Cancer Program helps patients and their family members assess their cancer risk to evaluate if a family has hereditary colon cancer. Our program is also focused on advancing knowledge of the molecular genetic mechanisms that govern normal and abnormal cellular processes. Areas of research include identifying critical steps in development, differentiation, and DNA repair that may contribute to cancer development.
What is a clinical trial?

A clinical trial is a research study designed to answer questions about new drugs for treatment of a number of diseases. Clinical trials are used to find out if new drugs are both safe and effective. Carefully conducted trials are the fastest and safest way to find treatments that work. New therapies are tested in people only after laboratory and animal studies are first shown to be safe and promising. A clinical trial may include the study of a brand new drug that has been used very little in humans, or it may be designed to study two or more medications about which much is already known. Virtually all drugs currently approved for use in humans are available because they went through the clinical trial process to validate their safety and efficacy.

What is a protocol?

A protocol is a set of rules that guide a clinical trial. The protocol describes the type of people who may enroll in a trial; the schedule of tests, procedures, medications and dosages; and the length of the study and trial.

What are the phases of drug development?

Experimental drugs in clinical trials go through three phases before the Food and Drug Administration (FDA) reviews the results to decide whether or not to approve the treatment for broader use. The FDA is charged with regulating medications nationally. In developing new drugs, there are several “phases” of clinical trials that a drug must pass through in order to become FDA approved. For cancer drugs, the following general principles apply:

**Phase I trials** are done with small groups of patients (30-50) with different types of cancer to:

- Establish the safe dose range and frequency of administration of the drug
- Determine the side effects
- See how the body handles the drug by measuring drug levels in the blood
- Get early evidence of whether the drug is effective in cancer

**Phase II trials** are done with larger groups of patients (60-150) all with the same type of cancer to:

- Find out if the new treatment works well enough to be tested in much larger numbers of patients
- Establish the types of cancer the treatment is most effective in
- Gather more information about side effects and how to manage them
- Gain more information about the best dose and schedule to use

**Phase III trials** compare new treatments with the current standard treatment in larger groups of patients (>500) all with the same kind of cancer to:

- Get information about the effectiveness of the new drug
- Continue to monitor side effects
- Compare it to commonly used treatments
- Further assess safety
What is informed consent?

Informed consent is the process of learning the key facts about a clinical trial before you decide whether or not to participate. These facts include the questions:

» Why the research is being done?
» What the researchers want to learn from the study?
» What will be done during the trial and for how long?
» What are the possible risks from the trial?
» What are the possible benefits from the trial?
» What other treatments might be available?
» The fact that your participation is completely voluntary, and you have the right to stop your participation in the trial at any time

It is a good idea to take any consent documents home to review and discuss them with any members of your family and/or friends who may help you in making the decision as to whether to enter the study or not. Because this is an important decision, you should ask the clinical trial staff any questions you may have regarding the study and the consent forms before you make a decision. The process of informed consent continues as long as you are in a study and you will be given any new information that is learned during and following your participation.

What are the benefits and risks associated with clinical trials?

Benefits may include:

» Taking an active role in your own health care
» Gaining access to new treatments that are not available to the general public
» Obtaining expert medical care at a leading health care facility

Risks may include:

» Known or unknown side effects or reactions to the study medication
» Treatment may not be effective
» Time consuming protocol requirements including frequent clinic visits and blood tests

Can I leave the clinical trial after it has begun?

Yes, you may choose to end your participation at any time in the study.

Why am I being asked to provide a tissue sample or to undergo tumor and/or normal tissue biopsies?

Looking in the laboratory at biopsies (that can be from tumor or from normal tissue like the skin) or sometimes blood samples is helpful to identify factors that determine if a patient will respond or will develop more toxicity. Although undergoing a biopsy can be cumbersome, the risks are typically limited, and it can be really important to advance in individualizing anticancer therapy.

Emergencies and Urgent Medical Assistance

In case of a medical emergency, please call 911 and your physician immediately.

If you are seen in any emergency room or admitted to any hospital, please let your physician know as soon as possible. However, do not delay any essential or emergency treatment while waiting to let us know. In addition, you should let the provider treating you know if you are participating in a clinical research study. Our medical staff will be able to provide them with information that will assist them in providing the best care possible. Because many of the drugs used in our clinical trials are not FDA approved, there is little information about them available to the general medical community. It is important that we provide this information to any practitioner who is seeing you.
Resources

The following resources are available through the University of Colorado Cancer Center:

» Licensed Social Workers who can assist with financial, employment, insurance, and emotional concerns
» Registered Dieticians who specializes in assisting patients with cancer regarding concerns about diet, weight and eating problems
» American Cancer Society (ACS) Navigator who can assist with lodging and access to ACS programs;
» Art therapy
» Cancer Support groups and educational programs
» Cancer Resource Center at 720-848-0316 or on facebook at http://www.facebook.com/CancerResourceCenter@UCH
» Cancer.gov provides guides to clinical studies and can be accessed at http://www.cancer.gov/clinicaltrials/learning

If you would like to utilize any of the above resources, notify your study coordinator or healthcare provider and they will assist you to make contacts.