A Comprehensive Cancer Center

An integral part of one of the world’s most distinguished medical centers, the Massachusetts General Hospital Cancer Center is chosen by more cancer patients than any other hospital in New England. Its commitment to eradicating cancer is fueled by scientific investigation conducted as part of the largest hospital-based research program in the United States.

Known for providing individualized, compassionate care to both adults and children, the Cancer Center comprises 18 fully integrated, multidisciplinary clinical programs and a vast network of support and educational services.

The Cancer Center is consistently ranked as one of the best in the country by U.S. News & World Report, and its nurses were the first in the state to achieve Magnet status in recognition of the hospital’s exceptional nursing care.

Through a powerful synergy between scientists in the laboratories and physicians at the bedside, the Cancer Center fosters innovation in basic, translational and clinical research.

It is a founding member of the DF/HCC, a Harvard Medical School consortium designated by the National Cancer Institute as a comprehensive cancer center. This prestigious seven-member center forms the largest cancer research collaboration in the country. Also, Massachusetts General Hospital Cancer Center and Dana-Farber/Bronch and Women’s Cancer Center collaborate on joint clinical trials, education, training programs and quality of care improvements.
Cover Art from Illuminations
August Morning — Teresia McCue
"My images are a celebration of the spirituality of nature. They invite the viewer to step into my vision and perhaps find the beauty of their own world."

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On behalf of the entire staff, it is my pleasure to welcome you to the Massachusetts General Hospital Cancer Center and the Department of Radiation Oncology. You have chosen one of the finest medical centers in the world to receive your cancer care. You have the vast resources and expertise of the entire hospital available to you and a dedicated radiation oncology team who will take every advantage of those resources to bring you the safest and most effective treatment for your cancer.

There are no generalists on our staff. Each of our physicians is a specialist in a particular type of cancer. That means that the radiation doctor who is in charge of your care has not only dedicated him/herself to learning all there is to know about your specific disease, but is also involved in clinical research to improve treatment outcomes. Your radiation doctor communicates regularly with your other cancer doctors, ensuring that you receive excellent, coordinated care.

Through the collaboration of physicians and medical professionals from our hospital as well as those at Dana-Farber Cancer Institute, Brigham and Women’s Hospital, and Harvard Medical School, both children and adults with cancer have access to the latest advances in radiation treatment. As a result, many of our patients have the opportunity, when appropriate, to participate in clinical trials of truly promising new therapies.

We have resources here that are found in few other hospitals. For example, our Francis H. Burr Proton Therapy Center is one of only a limited number in the nation. It offers extremely precise targeting of radiation for certain tumors while minimizing damage to surrounding tissue. We also utilize unique, cutting-edge diagnostic imaging tools such as positron emission tomography (PET) and functional MRI, both of which are highly sensitive and valuable for detecting and managing certain cancers.

We realize that excellent patient service depends not only on advanced technology, but also on individualized and personalized care. At the center of all we do is the person for whom we care. We are committed to providing each patient with personalized, compassionate treatment and support. I am proud of the way one of our patients in the Cancer Center summarized her experience: “I receive not only excellent medical care, but caring care.”

This patient information guide offers a general description of what patients can expect during radiation treatment. Not all sections may apply to you. As your therapy will be planned specifically for your needs, your radiation treatment team will explain to you the specific type of treatment you will receive. This pamphlet should serve only as a guide.

We welcome you as a partner with us in your care. We hope you will feel comfortable at all times asking us questions.

Jay S. Loeffler, MD
Chief, Radiation Oncology, Massachusetts General Hospital
Radiation therapy uses high energy X-rays or particles to kill cancer cells. The radiation source may be external (from outside the body) and come from beams and X-rays aimed at the cancer; or, the radiation source may be internal (from inside the body) and come from radioactive implants. The goal of both external and internal radiation therapy is to kill the cancer cells while limiting the damage to healthy normal cells around the tumor. Most healthy cells that are damaged by the radiation can quickly repair themselves.

Radiation therapy is used:

- Alone, as the only treatment you need
- Before surgery to shrink the tumor
- During surgery to protect the area around the tumor
- After surgery to destroy any remaining cancer cells
- With chemotherapy, which makes the cancer cells more sensitive to radiation treatment
- After chemotherapy to kill remaining cancer cells
- To control symptoms such as pain or bleeding

Types of Radiation Therapy

Radiation therapy does not hurt. You will not feel the radiation treatments. The type and dosage of radiation you receive is tailored to treat the type, size, stage, and location of your cancer. Your medical condition is also considered. Your radiation oncologist will work closely with all of your cancer doctors and you to plan the treatment that is best for you. There can be side effects from radiation therapy. Your radiation doctor will discuss these with you before treatment begins. (A section on side effects is on pg. 8.)

We will give you the information you need to make an informed choice about your treatment plan. Please ask your team any questions you may have.
**External Radiation Therapy**

External radiation therapy uses a machine called a linear accelerator to direct beams of high energy X-rays at your tumor. The machine can change positions so the beams may enter your body from any angle. By changing the angle of the beams, your radiation doctor is able to match the shape of your tumor and spare as many healthy cells as possible.

**Types of External Radiation Therapy**

**Stereotactic Radiosurgery (SRS)**
Stereotactic radiosurgery (SRS) aims a precise and intense dose of radiation at a targeted area. SRS is used in place of surgery for some brain tumors. SRS can treat tumors in parts of the brain where surgery is not recommended or possible. SRS differs from other types of radiation because it can be aimed at a small area of tumor tissue without harming the normal brain tissue around the tumor. Many beams of radiation are focused on the tumor from different directions so a high dose of radiation can be safely given in one treatment session.

**Stereotactic Body Radiation Therapy (SBRT)**
Stereotactic Body Radiation Therapy (SBRT) uses special positioning of the body and implanted markers. A higher dose of radiation can then be delivered to a precise area in the body, such as the lung. This precision helps spare healthy tissue.

**Intensity Modulated Radiation Therapy (IMRT)**
Intensity modulated radiation therapy (IMRT) uses a computer to combine precise images of the tumor with a special linear accelerator to vary the angle, shape, and intensity of the radiation beams to different parts of the tumor or treatment area. The precision of IMRT delivers the maximum dose of radiation to the tumor while sparing normal tissue around the tumor. IMRT is used to treat areas such as the brain, head and neck, lungs, and prostate.

**No-exit Dose Proton Beam Therapy**
Proton radiation therapy uses energy from the protons of atoms to destroy cancer cells. A cyclotron produces these high-energy protons. The beam of proton radiation can be aimed at a tumor very precisely and can be concentrated on a tumor with little harm to the surrounding normal tissues. Other types of radiation do some harm to normal tissues as they enter and exit the tumor area. Proton radiation has an entering dose but no exit dose of radiation so the nearby normal cells are protected. External radiation treatments do not make you radioactive. You may go about your normal daily activities. You may have close physical contact with people without worrying that you might expose them to radiation.

**Internal Radiation — Brachytherapy**
Internal radiation therapy, or brachytherapy, means that the radiation source is placed inside your body. These implants hold the source of the radiation and can be thin wires, plastic tubes, capsules, or seeds. Brachytherapy or implants can be used with many types of cancer.

With high dose rate (HDR) brachytherapy, a special machine inserts the radioactive substance into the tumor and delivers a high dose of radiation rapidly. The machine also removes the radioactive substance in the treatment room. Usually, patients need several daily doses to attain proper treatment levels. This type of brachytherapy can usually be done on an outpatient basis.

Brachytherapy can sometimes require a short hospital stay of one to three days. This type of brachytherapy can make you radioactive for a short period of time and there are special precautions you must take. Your doctor or nurse will make sure you understand the type of treatment you will have and what you can and cannot do.
Your Radiation Treatment Team

Your radiation oncology treatment team is made up of many different health care professionals. Each has special training and experience in treating your type of cancer with radiation therapy. Your treatment team will work with you to be sure you get the most effective radiation treatment possible.

The same team members will treat you throughout your therapy. They will get to know you well and you will get to know them. You will find that they are interested in you as a whole person and not just in your disease.

Your treatment team members work and talk with each other all the time to check your progress and make certain you get the best possible care. Any member of your treatment team is available to answer questions.

The health care professionals on your team:

- **Radiation oncologist** - Doctors who specialize in using radiation to treat cancer. They work with you and your other cancer doctors to develop your treatment plan. The radiation oncologist leads your radiation treatment team and decides which type of radiation and equipment will best treat your type of cancer.
  
  Throughout your treatment, the radiation oncologist continues to monitor your progress.

- **Nursing**

- **Radiation oncology nurse** - A nurse with special training in the care and treatment of patients with cancer. You can turn to your nurse with any question or concern you may have. Your nurse will talk with you about your radiation treatment and help you manage any symptoms or side effects. Remember, your nurse is the person you should call whenever a question arises.

- **Nurse practitioner** - A nurse with advanced training in oncology expertise who works with your doctor and nurse to manage treatment-related side effects.

- **Radiation therapist** - A licensed therapist with specialty training in the fields of radiation physics, biology, radiation safety, and computer-aided biophysics. The therapist sets up your daily radiation treatment, positions you, and delivers the prescribed dose of radiation.

- **Radiation physicist** - A scientist who helps plan the technical part of your treatment. Your radiation physicist decides the best shape and angles for the treatment beams. They make sure the equipment works as planned and delivers the right amount of radiation.

- **Dosimetrist** - A specialist who calculates and plans the doses of radiation therapy.

Safety and Quality Assurance

Our Department of Radiation Oncology is a safe, secure environment. All of our equipment is maintained in top condition according to guidelines set forth by the Massachusetts Department of Public Health and the Joint Commission of Accreditation of Health Care Organizations. In addition, our radiation therapists check the calibrations of the equipment on a daily basis. Our machines are fully shielded so that significant radiation can reach only a specific area necessary for the treatment of your cancer. Lead blocks or shutters protect your healthy tissue. These are custom made to fit the targeted tumor.

Your treatment plan is reviewed by a team of radiation oncologists. They constantly check your status and review your plan throughout your course of therapy. There are several checks and measures at each of your visits to confirm that the proper area of your body is being treated and your treatment is going as planned. (Please see “Planning Your Treatment — Simulation” on page 5 and “The Treatment Process” on page 6.)
Your Radiation Consultation Visit

Your first visit with the radiation oncologist is called your consultation visit. The radiation oncologist will review all your records and pathology reports and give you a physical exam. It is important to bring a list of all your medications. Include all prescription medications, vitamins, supplements and any over-the-counter medications that you take. Please write down the dose (strength) of each medicine, how often you take it and when you take it (for example: morning, lunch, evening).

Make sure you tell your doctor or nurse if you have any allergies or if you are pregnant. (Please see “Fertility — During & After Treatment” on page 9.)

Your treatment team wants you to be their partner in your care. Helping you understand your diagnosis and the treatments available to you is the first step. During this first visit your doctor and nurse will go over information about your type of cancer, the radiation treatment choices, and any possible side effects.

Your radiation doctor will go over your treatment plan. This includes:

- Why the treatment plan is best for you
- What it can and cannot do
- The type and amount of radiation therapy you will receive
- How the treatment is done
- What the side effects of treatment might be

When you understand your treatment plan, you will be asked to sign a consent form before your first treatment.

Planning Your Treatment — Simulation

Your radiation doctor will set up and plan your radiation therapy in a process called “simulation.” The simulation consists of a CT scan or X-rays of the specific area where the tumor is located. Some scans require the use of a contrast material such as barium or dye or metal markers in or near the area to be treated, which makes certain organs visible on the X-ray. With the help of these X-rays and scans, your radiation doctor will map out the exact location of your tumor and the area to be treated.

After the simulation process, your radiation therapist may mark or tattoo your skin. A tattoo is a tiny ink dot marker injected under the skin that helps line up the treatment area. These marks or tattoos are very important because they allow the radiation therapist to position you the exact same way for each treatment. Do not remove the marks during treatment. However, do not worry if the marks happen to come off, they can be reapplied.

Part of the simulation or planning session is finding and recording the best body position for you during your treatment. Special devices, such as molds and masks, can help to keep your body in the correct position. The molds and masks are made to fit your body at the time of the simulation.

After your simulation, our radiation physicists develop a treatment plan based on your radiation doctor’s design. Once a plan has been made, your treatment can begin.

For more information about children receiving radiation therapy, please ask for “A Guide for Families of Children with Cancer.”
Your Treatment Schedule

The amount of radiation and the number of treatments needed are different for each patient. Most patients receive one radiation treatment a day but some patients receive two treatments a day. At the beginning of your therapy, your radiation doctor will give you an estimate of the number of treatments you will need. Sometimes the number of treatments you need is adjusted toward the end of treatment.

External radiation is usually given in small doses over a period of time, ranging from one day to several weeks. This gives normal cells a chance to recover and repair. For most patients, radiation treatments are given daily, five days a week, Monday – Friday.

The radiation therapist will work with you to arrange your treatment schedule. It is very important that you keep all of your appointments. If you are not feeling well, or if there are severe weather problems, please call 617-726-8650 for instructions.

The Treatment Process

When you come for your first radiation treatment, the daily check-in process will be explained. There are changing rooms where you can put your personal belongings. Please leave any valuables at home. Depending on the area of your body being treated, you may be asked to change into a hospital gown.

Family or friends may come with you to your treatment session. They can sit in the waiting area while you are having treatment. There is also a special waiting area for young children. No one will be allowed in the treatment session.

All of our treatment rooms are private. To help you relax, you may listen to music. We have a selection of tapes or CDs or you may bring your own.

In the treatment room, your radiation therapist will check and recheck all of the equipment settings (calibrations) to make sure your treatment plan is followed exactly. Using the ink marks or tattoos on your skin, the radiation therapist locates your treatment area. They then review your treatment record to place you in the correct position. If a mold or mask has been custom-made to help with positioning, your radiation therapist will place that on or around you.

The radiation therapist will leave the room before the radiation begins. They will watch you constantly on a television monitor. Using an intercom, the therapist can hear you and talk with you throughout your radiation treatment. Remember, the radiation treatments are painless. If you feel uncomfortable for any reason, let your radiation therapist know right away.

During your radiation therapy, you should hold still but you can breathe normally. You will hear noises coming from the machine, but you will not see anything.

As soon as your treatment session is over, you may leave and go back to your normal activities.
How Will I Feel During Radiation Therapy?
Radiation therapy does not hurt. You will not even feel the radiation. However, there can be side effects from radiation therapy. Your doctor will discuss these with you before your treatment. A section on side effects is covered later in this brochure.

Checking Your Treatment Progress
Your radiation oncologist will see you throughout your radiation treatment to monitor the effect the radiation therapy has on your cancer. During these appointments the doctor may:

- Give you a physical exam
- Order blood tests
- Make changes in your treatment plan
- Prescribe medications

These appointments are a good time to ask your doctor and nurse questions and discuss any problems or concerns you may have. Write a list of concerns and questions ahead of time. Having a family member or friend come with you to the visits can also help. They can listen and take notes or ask questions about your care.

You must talk with your doctor or nurse before you start taking any new prescription medicines, over-the-counter drugs, herbal remedies, or vitamins during your radiation treatment.

After Your Treatment Program Ends
When your treatment program ends, your radiation doctor will send a complete report to your referring physician. You should contact the referring physician to schedule follow-up exams.

Your radiation doctor will also schedule follow-up appointments with you to monitor your progress. It is important to keep these appointments. The effects of radiation may continue for several weeks or months after the completion of your treatment. It is important to notify both your referring physician and your radiation doctor if any symptoms or concerns develop after your treatment ends.

Side effects from radiation may continue for weeks or months after your treatment has ended. It is important to notify both your referring doctor and your radiation doctor if any symptoms or concerns develop after your treatment ends.
The goal of radiation therapy is to destroy cancer cells, but radiation therapy can also injure or destroy normal cells. This can cause some side effects. Your radiation doctor will explain any possible side effects before your treatment begins.

Early or acute side effects from radiation therapy can be treated and usually go away a few weeks after your treatment ends. Fatigue, loss of appetite, and skin irritation are examples of acute side effects.

Late or long-term side effects may take months or years to develop and can be permanent. For example, high doses of radiation can cause permanent hair loss and damage to the skin in the treatment area.

You should always tell your treatment team about any symptoms or side effects you have. Your radiation nurse will give you specific information on how to manage those side effects.

**Recommended Skin Care During Radiation Treatment**

Skin reactions within the treatment area are common during radiation therapy. Please follow these skin care instructions during your radiation treatment.

- It is important to wash your skin in the treatment area with warm water and an unscented moisturizing soap, at least once a day. Be gentle. Do not scrub.
- Pat your skin dry.
- A mild shampoo (such as baby shampoo) may be used to wash your scalp if you are receiving radiation to your head.
- A mild, unscented moisturizer may be used 2 to 3 times a day (morning, midday, and at bedtime) to the treatment area. Please see your radiation nurse for specific skin product recommendations and instructions.
- Deodorants/antiperspirants may be used during radiation treatment.
- Do not use anything else on the skin in the treatment area. For example, after-shave lotion, perfume, makeup, or powder.
- If you choose to shave, only use an electric razor in the treatment area.
- Wear loose clothing to avoid friction or tightness in the treatment area.
- Protect your skin from the sun by applying sunscreen (at least SPF 50) to the treatment area before going outside.
- Wear a wide-brimmed hat if you are receiving radiation to your head or neck.
Nutrition

You may notice changes in your appetite during your radiation treatment. It is very important that you eat well to help lessen the side effects of cancer therapy. Eat foods that are high in protein and calories to maintain your weight and strength. You should always check with your doctor or nurse before taking vitamins or other supplements. A consult with a nutritionist is available and in some cases required.

Fatigue

It is normal for you to feel tired during your treatment. Low energy can be a side effect of your treatments. Your body is working very hard to heal and repair itself. Be sure to get plenty of sleep at night. Talk to your nurse or doctor if you are fatigued.

If you are working full-time, you may have to adjust your schedule to part-time or do some work from home. Let family members and friends help you with daily chores.

Sometimes, light exercise, like walking, can help you feel less tired. Ask your doctor or nurse about starting an exercise program.

Hair Loss

Radiation therapy can cause hair loss (also called alopecia) in the area of the body that is being treated. Many patients find that their hair grows back several months after treatments stop. The new hair may be different in color and texture. Whether or not your hair grows back depends on the type and dose of radiation you receive and the area of your body that was treated.

Sexual Activity

You can be sexually active during radiation treatment but you must use a reliable method of birth control to prevent pregnancy. If you are a man in treatment you should not get your mate pregnant.

Feeling tired can reduce your interest and desire. This is temporary and should go away after you complete your therapy.

Fertility – During & After Treatment

For women of child bearing years

If you are already pregnant or think you might be pregnant, tell your radiation doctor before treatment begins. You should not become pregnant during your treatments because the radiation therapy could injure your developing fetus. Talk with your radiation doctor about reliable methods of birth control.

Radiation therapy may affect your future fertility. If you plan to have a child in the future, talk with your doctor about the options for preserving your eggs.

For men

Receiving radiation therapy in the area of your testes can reduce both the number and function of your sperm. This does not mean that conception cannot occur. Talk with your radiation doctor about reliable methods of birth control.

Radiation therapy may affect your future fertility. If you are concerned about fertility, you should discuss sperm banking with your radiation doctor before your treatments begin.

Feelings and Concerns

It is normal for a person with cancer and their family to have worries or concerns. Each person may react differently to the stress cancer treatment has on their daily life. You may also have concerns about your job, parenting, or finances. Sometimes just talking about these issues can be helpful.

Please tell your radiation treatment team about any concerns you may have. They can find the right people and resources to help you. There is a list of Cancer Center services and programs on the following pages.
Clinical Services

Oncology Social Workers provide support, counseling, and resources for radiation oncology patients and their families. Social workers help with emotional issues and other concerns that may come up during cancer care. There are also support groups you may join where you can share your feelings with others going through the same experience.

The Oncology Chaplain can offer spiritual guidance during treatment. The oncology chaplain also works closely with other hospital chaplains of all faiths to meet the spiritual and religious needs of patients and families.

Dietitians can help you with eating and nutrition during your cancer treatment and recovery.

Support and Education Programs

Maxwell V. Blum Cancer Resource Room – Visit the Blum Cancer Resource Room located in Yawkey Center, 8th Floor, Suite 8C. Come in to attend a HOPES program workshop, relax with a puzzle, or check your email. Here you’ll find:

- A lending library, pamphlets, and DVDs
- Advanced literature searches (medical journals and databases)
- Help finding the resources and programs that best fit your needs

No time to visit? The staff can help by phone, call (617) 724-1822.

HOPES Program – The HOPES Program offers a variety of wellness services and educational and support workshops for patients and families. The HOPES Calendar lists a schedule of these services and is available throughout the Cancer Center. Most programs take place in Yawkey 8C or Lunder LL2 or LL3. Programs are free, unless noted. Program offerings may vary at our Emerson Hospital, Newton Wellesley Hospital, and North Shore Danvers locations.

HOPES Wellness Services in the Lunder Building, Radiation Oncology, include:
- Acupuncture – Acupuncture Workshop: Learn how acupuncture can help with side effects | Group acupuncture for radiation patients | Fee-for-service acupuncture clinic
- Massage | Gentle Yoga | Open Art Studio | Nutrition Workshops | Spiritual Tune-Up

Network for Patients & Families Peer Matching Program – Peer mentors offer information and support to patients and families living with cancer. The Network also holds an annual conference focused on education and self-care topics. Call (617) 643-1784 or visit the Blum Cancer Resource Room in Yawkey Center, Suite 8C.

The Marjorie E. Korff Parenting At a Challenging Time (PACT) Program – Gain support and information about helping the children in your life cope with a parent’s cancer. For free one-on-one consultation with one of PACT’s child psychiatrists or child psychologists, call (617) 724-7272.

Images Oncology Boutique – Images teaches you how to manage hair loss and about skin care. It has wigs, hats, breast prostheses, and more. Located in Yawkey Center, 9th Floor, (617) 726-3211, and by appointment at Mass General North Shore Cancer Center, (978) 882-6365.

General Hair Care Center – This full-service salon offers many services plus professional hair care and skin care products. It is located in the Blake Building, 1st Floor, next to Blossom Street Café.

A Guide to the Cancer Center for Patients and Families – Take time to read your patient guide. It has many helpful resources you should know about.
Alopecia - hair loss
BID - twice daily radiation therapy

Brachytherapy - a method of radiation treatment where radioactive sources are placed directly in, or up against, the target tissues. Various techniques and instruments are used to safely and accurately place, then remove, the source(s) from the body. If brachytherapy is advised, the specific technique recommended by the radiation oncologist will depend on the part of the body to be treated.

Chemotherapy - the treatment of cancer using specific chemical agents or drugs that destroy malignant cells and tissues

CT Scan - sometimes called “CAT” scan, stands for computerized tomography. It's a valuable, painless diagnostic test that allows radiologists (doctors who specialize in the use of imaging for diagnosing diseases) to see inside some areas of the body that cannot be seen using conventional X-rays. This imaging method produces a series of pictures that are then reconstructed by a computer into cross-sectional views.

Dosimetrist - a member of the radiation therapy team who assists the radiation doctor and radiation physicist in calculating the proper radiation dose for treatment

External Radiation Therapy - radiation treatment delivered from outside the body. You are not radioactive when you receive this type of therapy.

Fractionated - means divided into parts. Because the effect of radiation is cumulative, radiation therapy is divided into small doses to protect healthy cells and allow normal tissues or cells affected by the treatment to heal

High Dose Rate Brachytherapy (HDR) - uses radioactive sources that deliver a larger radiation dose per minute. The implant procedure can be completed quickly and can be done on an outpatient basis.

Intensity Modulated Radiation Therapy (IMRT) - a course of radiation where the dosage of each beam can be regulated, thereby delivering high doses of radiation where it is needed most and minimizing the amount to healthy nearby tissue

Internal Radiation Therapy - radiation treatment where the radioactive source is put inside the body; also called “brachytherapy,” sometimes called “seed therapy”

Intra-operative Radiation Therapy (IORT) - a single radiation therapy treatment delivered in the operating room during the course of a surgical procedure

Linear Accelerator - a machine that creates high-energy radiation to treat cancer

Low Dose Rate Brachytherapy (LDR) - uses radioactive sources that deliver a small radiation dose per minute. The length of the implant procedure can take up to several days and requires the patient to remain in the hospital.

Oncology - the branch of medicine that deals with cancerous tumors

Positron Emission Tomography (PET) - diagnostic test that looks at your body's metabolic activity and provides important information about your body's tissues

Proton Therapy - no-exit dose radiation beam that can be directed to and stopped at the diseased tissue, sparing surrounding healthy tissue

Radiation Oncologist - a doctor who specializes in radiation therapy

Radiation Oncology Nurse - a nurse who specializes in caring for patients undergoing radiation therapy

Radiation Physicist - a doctoral-level scientist who helps in the technical planning of radiation treatment

Radiation Therapist - the certified licensed health care professional who administers the radiation treatment prescribed by the radiation doctor

Radiation Therapy - a medical specialty that uses high energy X-rays or particles to kill cancer cells

Seed Implant Therapy - a source of radiation that is implanted inside your body in the area to be treated. The implant may be temporary, during which time you are radioactive, or the implant may be permanent and lose its radioactivity over a period of time. This therapy may also be referred to as “internal radiation” therapy or “brachytherapy.”

Single Photon Emission Computed Tomography (SPECT) - a nuclear imaging procedure similar to PET in that it looks at the body’s biochemical functions

Stereotactic Radiosurgery (SRS) - a single, high dose radiation therapy treatment used for some intracranial tumors. Multiple narrow beams are used to focus on the target tissue. The patient is immobilized for this procedure with a special halo-type frame, a CT scan is then performed, a treatment plan is created, and treatment is delivered all on the same day.

Stereotactic Radiation Therapy (SRT) - utilizes the same approach as SRS, except that the immobilization device is somewhat different and the radiation dosage is delivered over many treatment days
**HELPFUL HINTS**

✔ Arrive at least 15 minutes before your scheduled appointments.

✔ Always bring your radiation identification card with you to every appointment. You will receive this card on your first visit.

✔ Ask your team if there are special instructions you need to follow.

✔ Get tips from your doctor and nurse about managing side effects.

✔ We have found that information reduces patients’ fears and helps patients and families care for themselves. You can get information about radiation therapy by:
  
  • Reading this guide.
  
  • Attending the free HOPES workshop “Radiation Therapy… What You Should Know” to learn more about your radiation treatments.
  
  • Asking your doctor and nurse any questions you have.
  
  • Visiting or calling the Blum Cancer Resource Room which is located in the Yawkey Building 8th floor.
  
  • Checking out the HOPES Calendar for a listing of Wellness Services and Educational Workshops.

✔ If you need help getting to other appointments at Massachusetts General Hospital, please ask us.

✔ Talk with an oncology social worker about any concerns you may have. They provide counseling and access to hospital and community resources.
A Comprehensive Cancer Center

An integral part of one of the world’s most distinguished medical centers, the Massachusetts General Hospital Cancer Center is chosen by more cancer patients than any other hospital in New England. Its commitment to eradicating cancer is fueled by scientific investigation conducted as part of the largest hospital-based research program in the United States.

Known for providing individualized, compassionate care to both adults and children, the Cancer Center comprises 18 fully integrated, multidisciplinary clinical programs and a vast network of support and educational services.

The Cancer Center is consistently ranked as one of the best in the country by U.S. News & World Report, and its nurses were the first in the state to achieve Magnet status in recognition of the hospital’s exceptional nursing care.

Through a powerful synergy between scientists in the laboratories and physicians at the bedside, the Cancer Center fosters innovation in basic, translational and clinical research.

It is a founding member of the DF/HCC, a Harvard Medical School consortium designated by the National Cancer Institute as a comprehensive cancer center. This prestigious seven-member center forms the largest cancer research collaboration in the country. Also, Massachusetts General Hospital Cancer Center and Dana-Farber/Brigham and Women’s Cancer Center collaborate on joint clinical trials, education, training programs and quality of care improvements.