


Prostate Cancer Treatment Options





An individual approach to
patient care.

It's not just prostate cancer.
It's your prostate cancer.

Prostate cancer is one of the most commonly diagnosed forms of cancer. And yet, there is nothing routine about the decisions you are about to make because in this case the patient is *you*.

Knowing you have made well-informed choices will help alleviate anxiety and provide reassurance as you go through your treatment process.

Radiation offers an excellent success rate for most prostate cancers.

Today's highly precise, extremely targetable radiation techniques deliver maximum dosage while minimizing the most common side effects associated with prostate radiation therapy: incontinence and impotence.

External and Internal: The two types of radiation therapy.

There are two basic forms of prostate radiation treatment: External Beam Radiation Therapy (EBRT), and Internal Radiation Therapy, also called Brachytherapy. Both can be effective and both share the same objective: to destroy cancerous cells and help prevent a recurrence while sparing the healthy tissue surrounding the target site. This minimizes the risk of side effects.

What are the possible side effects?

Both external and internal therapies may cause side effects as a result of the radiation affecting healthy tissue surrounding the prostate gland. The good news is that today's extremely high-precision targeting significantly reduces the risk of side effects. Also, those side effects commonly associated with prostate cancer are typically temporary and can be alleviated with treatment:

- › Nausea, vomiting
- › Poor appetite
- › Fatigue
- › Diarrhea
- › Incontinence
- › Impotence
- › Issues with bowel control

External Beam Radiation Therapy

There are several types of EBRT. Each one treats the disease using an external source of radiation located outside the body and each has an excellent prostate cancer cure rate. EBRT can be used alone or as an additional, post-surgical treatment to destroy any remaining cancer cells.

Advanced forms of EBRT help minimize common side effects while delivering maximum dosage.

3-Dimensional Conformal Radiation Therapy (3D-CRT)

3D-CRT uses computers and imaging techniques such as a CT scan to show the location and shape of the tumor. Multiple radiation beams are then precisely directed to target only the tumor.

Intensity-Modulated Radiation Therapy (IMRT)

IMRT is an advanced form of 3D-CRT where many radiation beamlets are individually adjusted in strength to precisely target the tumor while avoiding surrounding rectal and bladder tissue.

3D-CRT and IMRT treatment are typically given once a day, 5 days per week for up to 8 weeks and takes 5-20 minutes per session.

Stereotactic Body Radiotherapy (SBRT)

SBRT is another form of EBRT that may be used successfully against certain prostate cancers. Sharply focused radiation beams target the prostate with knife-like precision by using techniques that allow the beams to follow organ movement. Because it is so precise, radiosurgery can deliver higher dosages in a shorter period of time than traditional EBRT, with less risk to healthy bladder or rectal tissue.

Treatment lasts 5 days or fewer and takes 5-15 minutes per session.

Image-Guided Radiation Therapy (IGRT)

IGRT can be used in combination with all three types of EBRT to more precisely target the tumor. A new CT scan is taken at the beginning of each treatment session and then compared to the original CT used in the treatment planning. The device detects any shift of the tumor and adjusts the radiation beam accordingly. This makes IGRT an ideal choice for prostate cancer since tumors tend to move slightly between sessions.

Internal Radiation Therapy

Internal Radiation, also called Brachytherapy, delivers radiation from a source inserted into the body. This allows the radiation to be positioned very close to the tumor for extremely precise targeting and maximum dosage delivery. Brachytherapy is typically appropriate for small, low-grade tumors.

There are two types of Brachytherapy: High-Dose Rate (HDR) and Low-Dose Rate (LDR):

High-Dose Rate (HDR) Brachytherapy

In HDR Brachytherapy, an applicator with many small tubes is implanted directly into the tumor. A high dosage of radiation is delivered down each tube in the course of one or two days. HDR may be delivered alone or in combination with EBRT.

Treatment is typically given once or twice daily for up to 2 days and takes 30-45 minutes per session.

Low-Dose Rate (LDR) Brachytherapy

LDR Brachytherapy is commonly known as seed radiation because it uses tiny iodine or palladium seeds to irradiate the tumor. These are inserted surgically and release a steady dose of radiation over time. Depending on the specific nature of the prostate cancer, seed radiation can be used alone or in combination with surgery.

Advanced treatment options

help keep your prostate cancer from spreading to your life.

By offering prostate cancer patients the latest, state-of-the-art radiation systems available, we make it possible to choose the best treatment for your particular situation.

Your Radiation Oncologist is there to help you make the right decision. Once your plan is in place, we will be right there with you every step of the way to ensure your treatment is as effective, comfortable and anxiety-free as possible.

Key benefits of prostate radiation treatments

- Advanced radiation technologies deliver more precise targeting and treatment than ever before
- Different systems let Radiation Oncologists choose the most effective radiation treatment for your stage of cancer, its size and location
- Radiation is delivered with pinpoint accuracy, reducing the risk of side effects
- Fast, pain free treatment programs reduce stress