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## External Beam Radiation Therapy (EBRT)

Includes various forms of radiotherapy that **targets cancer cells via high-energy beams**, such as **X-rays** or **protons**, by a **machine from outside your body**.

### Intensity Modulated Radiation Therapy (IMRT)

- Uses **sophisticated computer planning** to allow precise radiation treatments
- Aims multiple radiation beams to target the tumor from **several angles, or uses a continuously sweeping arc**
- **Adjusts the intensity** of the beams in pre-planned sequence to deliver a higher radiation dose to the cancer while protecting surrounding healthy tissue

IMRT

### Image Guided Radiation Therapy (IGRT)

- Uses treatment machines that have **built-in imaging systems**
- **Allows accurate alignment of the treatment beam to the target treatment area** using pre-treatment images or fiducial markers
- Helps deliver the radiation with **on-target accuracy, protecting normal tissue and decreasing odds of side effects**

IGRT

### Stereotactic Body Radiation Therapy (SBRT)

- Allows your prostate radiation therapy course to be **condensed to just 5 treatment sessions**, usually given every other day
- **Advanced delivery technologies** and radiation planning techniques are used to deliver **higher doses per day in a safe and effective manner**

SBRT

### EBRT is delivered in one of two formats:

**Hypofractionated radiation therapy** is a treatment technique where larger doses are delivered in fewer sessions (**typically 1 to 5 week treatment duration**). This shorter schedule is safe and effective, and many patients prefer it because it's more convenient and cost-effective.<sup>1</sup>

**Conventional radiation therapy** is a treatment technique where **smaller doses are delivered in more sessions** (typically 6 to 8 week treatment duration).

These different radiation treatment schedules depend on the type of radiation being used and specific needs of each patient. **It's important to discuss radiation treatment options with your doctor to determine what's right for you.**

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## Brachytherapy

A form of radiotherapy where the **radioactive** source is placed **inside your body**, directly in (or next to) the area requiring treatment.

### Low Dose Rate (LDR)

- **Radioactive seeds** are placed in the prostate gland **permanently**
- **Slow release of radiation over several months**

### High Dose Rate (HDR)

- **Temporary** insertion and withdrawal of a radioactive isotope
- **Catheters are placed in the prostate gland just before radiation is delivered**, allowing the radiation source to travel temporarily into the prostate gland
- **Catheters are removed immediately after the radiation is delivered**
- May involve multiple sessions

**Brachytherapy combined with EBRT** can be an option for men with a **higher risk of the cancer spreading outside of the prostate** and allows for more dose to the tumor within the prostate.

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## Proton Therapy

An **external beam radiation** of subatomic particles that **mostly deposits dose deep in the body**.

- **Precisely targets your prostate tumor**, while sparing surrounding healthy tissue from radiation exposure.

- All external radiation **starts from outside the body and enters through the skin** as it travels and deposits its dose to penetrate the target. **Photons continue on and exit through the other side of the body**, whereas protons can stop within the target.