Discuss treatment options with your doctor, including the risks and benefits of the entire course of treatment specific to your individual needs. MRIdian MRI-guided radiation therapy systems are only available at appropriately equipped facilities with specially trained physicians.
Why MRIdian?

ViewRay has reinvented prostate cancer treatment with MRIdian MRI-guided radiation therapy. While conventional therapy can require over 40 visits to complete treatment, MRIdian offers shorter course treatments. For those who qualify, patients may complete treatment in as few as five visits, often with little to no side effects.¹

**85% of men treated on MRIdian completed treatment in 5 visits.**²

It is important for patients and their caregivers to fully understand all available treatment options, especially those that have a meaningful impact on extending survival and improving quality of life. Too often, the length of treatment, recovery period, and debilitating side effects can be difficult to cope with.

Your quality of life after prostate cancer treatment matters. Short course MRIdian MRI-guided radiation therapy can help minimize side effects and get you back to your life faster.

Innovations like MRIdian give hope to the millions of men around the world currently battling prostate cancer.
What’s different about MRIdian?

MRIdian is the world’s first linear accelerator combined with magnetic resonance imaging (MRI) technology which uses real-time, diagnostic-quality imaging of tumors and nearby healthy tissue to accurately target and treat cancer.

MRIdian personalizes treatment by accommodating significant changes in the position, shape, and size of the tumor and surrounding healthy tissue that occurs between treatments.

At the beginning of each treatment, with the help of physicians, MRIdian acquires a new on-table MRI scan in seconds and precisely adapts the plan and dose delivery to fit the patient’s anatomy that day.

During treatment when tumors or nearby organs abruptly change position, MRIdian’s real-time 3D tissue tracking and automated radiation beam control instantly reacts, immediately turning the radiation beam off faster than a human could react. When the tumor returns to the correct position, the treatment automatically resumes. This ensures that the radiation beams are precisely focused on targeting the tumor and help to protect healthy tissue from damage.

**MRIdian overcomes the limitations of conventional radiation therapy.**

With conventional radiation therapy, you may need more than 40 daily treatments over weeks and months.

Conventional radiation therapy uses computerized tomography (CT) scans which use X-rays to guide treatment. These scans are usually taken a few days before treatment and don’t account for any changes in the position of a tumor and your internal organs that may happen between or during your treatment sessions. This means nearby sensitive tissues or healthy organs could be exposed to radiation during treatment, which may lead to side effects.

Other short-course radiation therapies that lack real-time, high-resolution MR imaging to identify the tumor require an additional invasive procedure and a hospital visit to implant prostate markers to guide the treatment.

Is MRIdian for me?

MRIdian may offer patients a non-invasive, non-surgical treatment option that does not require an overnight stay at a hospital. Ask your physician if you are a candidate for non-invasive short-course MRIdian MRI-guided radiation therapy.
What about side effects?

With MRIdian, side effects may be minimized compared to conventional radiation therapy. A recent phase III Randomized Controlled Trial called MIRAGE compared acute grade ≥2 genitourinary (GU) side effects and gastrointestinal (GI) side effects in MRIdian MRI-guided versus CT-guided with implanted markers.¹

The study showed that significantly more patients receiving CT-guided treatment experienced large increases in urinary side effects (24.4% MRI-guided compared to 43.4% in the CT group).

Similarly, a significantly greater percentage of patients experienced decreased bowel-related quality of life with MRI-guided (0% MRI-guided compared to 10.5% in the CT group).

Though it is too early to draw final conclusions as more than two-thirds of men on the trial received hormonal therapy, initial analysis of men who did not receive hormonal therapy reported sexual-function scores decreased more in men receiving CT-guided treatment versus men treated on MRIdian.

Important safety information

**Indications for Use (IFU):** The MRIdian MRI-guided radiation therapy system, with magnetic resonance imaging capabilities, is intended to provide stereotactic radiosurgery and precision radiotherapy for lesions, tumors, and conditions anywhere in the body where radiation treatment is indicated. The MRIdian MRI-guided radiation therapy system is not appropriate for all patients, including those who are not candidates for magnetic resonance imaging.

**Important Safety Information (ISI):** Radiation treatments may cause side effects that can vary depending on the part of the body being treated. The most frequent ones are typically temporary and may include, but are not limited to, irritation to the respiratory, digestive, urinary or reproductive systems; fatigue; nausea; skin irritation; and hair loss. In some patients, side effects can be severe. Treatment sessions may vary in complexity and duration.

Radiation treatment is not appropriate for all cancers. You should discuss the potential for side effects and their severity, as well as the benefits of radiation and magnetic resonance imaging with your doctor to make sure radiation treatment is right for you.

**Disclaimer:** Nothing in this material is intended to provide specific medical advice or to take the place of written law or regulations.
What does MRIdian treatment involve?

The following outlines what to expect after your initial consultation and before, during, and after your treatment. The process typically has four stages, although these may vary from center to center: initial scanning session, treatment plan development, treatment sessions, and follow-up.

1. Initial scanning session

The appointment may last two to three hours and involve a magnetic resonance imaging (MRI) scan on the MRIdian and a computerized tomography (CT) scan. It will involve the following steps:

- Your clinical team will explain the process and ask you to complete a MRI safety questionnaire.
- You’ll be asked to change into a gown and remove metal objects such as jewelry, hearing aids, glasses, or dentures.
- Your clinical team will bring you to MRIdian for an MRI-simulation scan. You will lie on the treatment table and be placed into position.
- The clinical team will make some temporary markings on your skin and place soft pads called coils over your pelvis area. These enable MRIdian to capture high-quality MRI scans.
- The scanning session will last for 20–30 minutes, and you can speak to your care team through an intercom.
- You’ll go to a different room for your CT scan. This scan will last around 5–10 minutes. You’ll be placed in the same position as your MRI scan.
- After your scans are complete, you can go home.

Note: Some clinical teams may recommend placing a rectal spacer before your scan. Please consult your physician to learn more about the procedure and how it is integrated into your MRIdian treatment.

2. Treatment plan development

Over the next week, your clinical team will work together to create a MRIdian radiation therapy plan that is specific to you.

3. Treatment sessions

Your treatment includes lying on a table for 30–45 minutes. Your clinical team will talk with you regularly throughout your treatment, and you can speak to them through an intercom.

At the beginning of each treatment session, a new MRI scan will be taken, which will be compared with your initial planning scans. Any movement of your tumor and internal organs will be taken into account. If necessary, your treatment plan will be carefully adapted and optimized to account for these daily changes.

Sometimes you may feel the treatment table you are lying on move slightly; this is just the clinical team placing you in the perfect position for your treatment.

You can go straight home after each treatment session. You’ll be given contact details for your care team so you can call if you have any questions or concerns.

4. Follow-up

After your treatment course has finished, here’s what will happen: You’ll be referred back to your doctor with all the information they need to plan any further treatment you may require.

Seven to ten days later: A member of your care team may call to see how you are feeling and answer any questions you may have.

Four to twelve weeks later: You should attend a follow-up with your treating physician.

Longer term: Your care team will likely continue to follow up on your recovery and well-being through appointments, phone calls, and emails.
What if my cancer returns?

Unfortunately, prostate cancer recurrence is more common than many people realize. And it can happen even if you’ve successfully treated cancer the first time.

MRIdian opens up a new world of treatment options for men whose prostate cancer has returned, whether your initial treatment was radiation or surgery.

A recent phase II clinical study called SCIMITAR studied the use of MRIdian to treat cancer recurrence after surgical prostate removal. The study compared treatment using MRIdian MRI-guided versus CT-guided. The study showed that patients treated with MRI guided had a 30.5% reduction in any grade acute gastrointestinal (GI) side effects and a 32% reduction in any grade cumulative GI side effects up to 6 months.

How to find a center that offers MRIdian?

To find a hospital where MRIdian treatment is available, visit www.viewray.com/mridian-treatment-centers

No patient treated with MRIdian MRI-guided radiation therapy experienced any grade 3 genitourinary (GU) or GI side effect. Researchers noted in the peer-reviewed publication that there were significantly fewer effects in the men who were treated with the MRIdian, largely due to MRIdian’s precise imaging capabilities and ability to treat with smaller margins.

If your cancer has returned, ask your physician if you are a candidate for MRIdian MRI-guided radiation therapy.

Discuss treatment options with your doctor, including the risks and benefits of the entire course of treatment specific to your individual needs. MRIdian MRI-guided radiation therapy systems are only available at appropriately equipped facilities with specially trained physicians.

2. ViewRay data on file
3. Martin Ma, Ting et. al. https://www.redjournal.org/article/S0360-3016(22)03160-1/fulltext