

Frequently Asked Questions

Magnetic Resonance guided Radiation Therapy

We know that going through cancer treatment can be distressing, and that you likely have many questions regarding your treatment. This sheet answers questions often asked by patients about Magnetic Resonance guided Radiation Therapy (MRgRT), also known as MR Linac treatment.

If you have more questions or would like to discuss the information provided after you read this sheet, please talk to your healthcare provider.



What is MRgRT?

MRgRT is a new and innovative treatment option that allows doctors to watch your tumor as it's treated. The therapy provides real-time visualization of tumors that allows your treatment to be specifically adapted to you. Effective, targeted radiation therapy can mean reduced side effects and fewer treatment sessions.^{1,2,3}

How does MRgRT work?

The technology allows your doctor to see your tumor and surrounding organs, to more effectively target your cancer.^{1,2} Your tumor's size, shape and location change throughout treatment. MRgRT allows doctors to react to the way your tumor is responding to therapy.

When is MRgRT used?

MRgRT can be used in the early stages of cancer or if it has started to spread.

Is MRgRT the right treatment for me?

Your doctor will help you decide which treatments could be best for you. Please contact your healthcare provider to discuss your treatment options.

What is different about MRgRT?

Unlike other cancer radiation therapies, MRgRT combines the imaging capabilities of an MRI scan with the power of radiation therapy to deliver treatment that is tailored to you. This means that doctors can see tumors that couldn't be seen before, in a much clearer way.^{1,2} It also means that your clinical team will be able to react to the way your tumor is responding to therapy and improve your treatment accordingly.

Is MRgRT safe?

Radiation therapy has been used to successfully treat cancer patients for many years, and advances have been made to ensure that it is safe and effective. MRgRT guards your healthy organs from exposure to radiation, which can mean you may experience fewer side effects compared to other treatment options.^{1,2} Your doctor will check and update your therapy throughout your treatment.

Are there any side effects to MRgRT?

Although there can be side effects to any radiotherapy treatment, the most common side effects of radiation therapy are typically temporary and will vary depending on which area of the body is being treated. Please be sure to talk to your doctor about any concerns or discomfort you may have during or after your treatment.



What questions should I ask my doctor?

We know that going through treatment can be stressful. It helps to be informed, so please find below a list of questions you may want to ask your doctor at any stage during your treatment:

- Is MRgRT the best treatment for my type of cancer?
- How will the radiation therapy be given?
- What does it feel like to receive MRgRT treatment?
- How many treatment sessions will I receive?
- Are there alternatives to MRgRT treatment?
- What are some of the support groups I can turn to during treatment?
- If I have questions after I leave, who can I speak to?
- How can I expect to feel during treatment and in the weeks following treatment?
- Will I be able to continue my normal activities during and after treatment?
- What side effects may occur from the radiation and how are they managed?
- Do I need a special diet during or after my treatment?
- After my treatment is finished, do I need to return for checkups?

Where can I go for updates and more information?

Please contact your healthcare provider with any questions/concerns.

How long does MRgRT treatment last?

Average MRgRT treatment sessions range from 20–45 minutes. However, with MRgRT it is possible to reduce the number of treatment sessions by increasing the dose (amount of radiation) per session. You'll need an average of five treatments, but all cancers are different so this can vary.⁵

Radiation therapy models usually have a structure where the doctor meets with the patient, performs the simulation and then treats a week later. MRgRT aims to limit the amount of time you are needed in clinic, to reduce any anxiety you may have.

What does MRgRT treatment feel like?

The experience is similar to an MRI (magnetic resonance imaging) scan. There's no sensation associated with the radiation. You won't be able to feel the radiation or magnetic field. The couch is fairly soft, and pads are put around your arms and legs to make sure you are comfortable. You are given earplugs or earphones if you wish to listen to music. The machine can be adapted to your position. You are always able to communicate with the radiation therapist.

Do I need to be admitted to a hospital to receive MRgRT?

MRgRT treatments are typically outpatient procedures and do not require a hospital stay.