* Last reviewed: 02/05/2023
* Reviewed by: Clinical and patient reviewers
* Next review date: 01/05/2027

*The following content contains images and descriptions of cancer treatment that some people may find upsetting or triggering. Please follow the guidance of your clinical team for information specific to your situation. Some medical terms may not translate accurately when using translation tools.*

Radiotherapy is an important treatment for cancer and around 50% or half of people affected by cancer will have it as part of their treatment pathway.

It works by using high energy X-rays which damage the DNA inside cancer cells. This stops the cancer cells growing, repairing and multiplying. Radiotherapy can also change healthy cells. This can cause side effects during, after and a long time after treatment.

But remember:

Healthy cells recover from treatment better than cancer cells

Treatment teams work hard to reduce the effect on healthy cells as much as possible

Radiotherapy can be used as a treatment on its own , or alongside several other treatments.

These can include:

Radiotherapy

Chemotherapy

Surgery

Immunotherapy

Endocrine therapy

What can radiotherapy do?

Radiotherapy is a proven treatment for cancer. Radiotherapy can:

Remove signs of the disease

Reduce the chances of cancer coming back

Reduce the symptoms of cancer, so you feel better and have a better quality of life

Types of radiotherapy

Radiotherapy can be given from outside the body:

[This is called external radiotherapy](https://radiotherapy.org.uk/patients-families/what-is-radiotherapy/external-beam-radiation-therapy/)

https://radiotherapy.org.uk/patients-families/what-is-radiotherapy/external-beam-radiation-therapy/

Radiotherapy can be given from inside the body too:

[This is called internal radiotherapy](https://radiotherapy.org.uk/patients-families/what-is-radiotherapy/internal-radiotherapy/)

https://radiotherapy.org.uk/patients-families/what-is-radiotherapy/internal-radiotherapy/

The most common type of radiotherapy is external beam radiotherapy. This is where a machine, called a linear accelerator, aims high energy X-rays at the part of your body where the cancer has grown.

Internal radiotherapy is where the radioactive source is put inside your body. A radioactive object is placed in, or close to, the tumour; or a radioactive liquid is absorbed by the cancer cells.

More about radiotherapy

Radiotherapy is good at treating common cancers. You might have it before or after surgery or as a main treatment, depending on your diagnosis.

Sometimes it is better to only have radiotherapy. This is because surgery can come with risks, and it can sometimes be safer not to operate.

If your cancer is no longer curable, radiotherapy can still help. It does this by removing some of the pain and problems that cancer causes.

For example, pain in the bones from the spread of cancer can be improved (60%) or even completely removed (25%) for patients (1).

New technology in radiotherapy means it can be used to treat more cancers and make life better for many cancer patients. Treatments have become quicker, more accurate, and more effective.

Understanding side effects

Radiotherapy can cause side effects during, after and a long time after treatment. It is important that every cancer patient understands what these might be and when they might happen.

We have created a dedicated section on our website where you can learn more about side effects.

We encourage you to speak to your team about side effects and ask lots of questions.

[The Challenges of Managing Bone Pain in Cancer – PMC (nih.gov)](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7027188/#b29)

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