

Understanding targeted therapy

Information for patients



What is targeted therapy?

Targeted therapy is a way of treating cancer using drugs.

These drugs are designed to damage cancer cells without harming normal cells. They do this by affecting specific molecules, known as molecular targets.

Molecular targets are usually genes or proteins that are involved in cancer growth. They can be located inside or on the surface of cancer cells, or in the area around the cancer.

Most people who have targeted therapy also have other types of treatment, such as surgery, chemotherapy, radiation therapy or hormone therapy.

Who can have targeted therapy?

Targeted therapy is only suitable for some cancers because not all cancers have molecular targets. Even for cancers of the same type, e.g. breast cancer, some will have molecular targets and others won't.

Your cancer tissue may be tested to see if it has a molecular target and whether there is a targeted therapy suitable for you.

How does targeted therapy work?

Different types of targeted therapy drugs act on different molecular targets.

They also work in different ways to stop the cancer from growing, including:

- blocking how the cancer cells grow and multiply
- attaching to cancer cells and delivering substances to the cancer cells to kill them
- starving the cancer cells of nutrients leading to the cancer cells dying
- attaching to the cancer cells so it is easier for the immune system to find and destroy them.

How is targeted therapy given?

Targeted therapy can be given in different ways:

- by injection or infusion into a vein (drip)
- by injection under the skin
- as tablets or capsules.

Who decides if I need targeted therapy?

Your doctor works with a team of other doctors, nurses and allied health professionals. This is called a multidisciplinary team or MDT.

The MDT has regular meetings to discuss and work out the best treatment for people with cancer.

How will I know if it is working?

Even when cancers have molecular targets, targeted therapy can work better for some people than for others.

You will have regular appointments with your doctor. They will examine you and order tests to see how your cancer is responding to treatment.

What are the side effects of targeted therapy?

The side effects of targeted therapy depend on which targeted therapy drug you are given. Side effects also vary from one person to another.

Side effects of targeted therapies may include:

- sensitivity to sunlight – dry, red, or itchy skin
- skin rash that looks like acne
- tenderness and blistering of the palms of the hands and soles of the feet (hand-foot syndrome)
- extreme tiredness – fatigue
- diarrhoea (watery poo)
- muscle, bone, and joint pain
- numbness or tingling of the hands or feet
- high blood pressure
- decreased numbers of certain cells in the blood
- bleeding or blood clots
- slow wound healing
- changes to the way the heart works.

Ask your doctor, nurse or pharmacist what side effects to expect, how to manage them and when to seek help.

Questions to ask

It is important for you and your family to ask questions and be involved in making decisions about your treatment. For example:

- What targeted therapy are you recommending?
- Do I have targeted therapy on its own or with other types of cancer treatment?
- What is the aim of my targeted therapy?
- How often will I have it?
- Who should I contact if I have any questions or concerns?
- What side effects could I get?
- Who should I contact if I have side effects?
- Is there anything I should do to prepare for targeted therapy?
- How will we know if it is working?

Who to contact in an emergency

Daytime: _____

Night/weekend: _____



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