# DIAGNOSIS AND TESTS For cancer



Tests play a big part in diagnosing cancer and the ongoing monitoring of your treatment. It can be stressful and scary waiting for results, but the more information your team has, the better they'll be able to help you.

## Be heard and understood

Your first tests help doctors figure out what type of cancer you have, and where it is in your body. You might not want to deal with medical stuff right now. It's fine to leave it to your parents or partner if you prefer. But if you want to know what's going on and play an active role in your treatment, it's important that your questions and thoughts are listened to by professionals.

Scan the QR code at the end of this factsheet for the full story on how to communicate confidently with your team about your body and your tests. It includes what to do if you think you're pregnant, plus the support and techniques available if you're scared of needles or blood tests.

## A–Z of tests you might have

#### Biopsy

A small part of a lump or tumour is taken and tested to find out more about it. There are different types of biopsies. Many will only need a local anaesthetic and are straightforward and painless. Some need a sedative or general anaesthetic.

#### Blood tests

Usually done before, during and after treatment. There's a variety of reasons they're used, from detecting cancer to monitoring your treatment and blood count.

#### Bone marrow test

Usually for cancers that affect the blood, like leukaemia. You'll have a local anaesthetic to numb the area, plus a sedative to make you drowsy, or a general anaesthetic so you're completely asleep. A needle is inserted into the bone to draw out some of the bone marrow, which is checked in the lab. It can be uncomfortable, but your team will make it as easy as possible for you.

#### Bone scan

Highlights rapidly growing or changing areas of your bone. A small amount of harmless radioactive fluid ('tracer') is injected into your vein to travel to your bones. The liquid will collect in areas where your bones aren't acting normally ('hot spots') and will show up darker on a scan.

#### CT scan

CT or CAT scans use x-rays to get images of the inside of your body. It only takes a few minutes and the worst part is lying still! Sometimes an injection of a dye (called 'contrast') is needed to help different parts of your body show up more clearly on the scan image.

#### Lumbar puncture

Tests the fluid around your spinal cord for cancer cells. This is usually if leukaemia, lymphoma or other tumours are suspected. You'll have a local or general anaesthetic and then lie curled up on your side. A needle is inserted between the bones in your lower spine and a few drops of fluid is collected. It sounds scary but usually it's just a bit uncomfortable.

#### MRI scan

Uses magnetic waves to create detailed images of the inside of your body. Like the CT scan, you may have an injection of dye beforehand to make a part of the body more visible. You'll lie on a flat bed that's moved into a scanner – it's pretty narrow and loud, but you'll have headphones and can talk to the radiographer on an intercom. An MRI can last up to an hour, so ask ahead if you'd like something to focus on while you lie super-still. The scanner might have a music player or TV screen.

#### PET scan

Measures how much glucose (sugar) parts of the body are using. Bit random? It's because cancer often uses more glucose than normal cells. They're similar to CT scans, in that you'll need to lie still on a bed that moves into a machine. Before the scan, you have an injection of a glucose solution with a small, safe amount of radioactivity. Then you have to lie still for up to an hour while the radioactive glucose gets into your tumour cells. The scanner then moves over your body, picking up areas where the glucose is more concentrated.

#### Ultrasound scan

Sound waves are used to show unhealthy tissue inside your body, especially your heart, liver or kidneys. An external ultrasound is the same type of scan that monitors an unborn baby. You might need to remove some outer clothing, then the person doing your scan will put some gel on your skin, which might be a bit cold. They'll move a handheld 'wand' around, pressing it over the part of your body being scanned while viewing an image on a screen. An internal ultrasound, where the wand is inserted, is used for areas like the prostate or vagina. It might be uncomfortable but won't take long.

#### Whole genome sequencing

Two tests look at the DNA in a tumour or blood cancer, then compare it to the DNA in your healthy cells. This can give information that guides doctors to the best treatment options for you.

#### X-ray

A painless procedure to produce an image of the inside of your body, which helps diagnose tumours or check for things like a chest infection. You'll need to take off jewellery or clothing with any metal. If you have body piercings, tell your doctor or radiologist – there's nothing they haven't seen before!

### Getting the results

One of the main reasons for having all these tests will be to find out how advanced your cancer is. When it comes to the results, there are two main things to understand:

- Staging: the stage describes how big the tumour is and how far it has spread from where it started
- Grading: this tells you how much your cancer cells have changed, compared to a normal cell.

The result might be a jumble of numbers that don't mean much. So it's important that your team explain simply and clearly what your results mean. If you don't understand, do NOT Google it. There are so many variables – the profile of your results, your age and your body is unique to you. Go back to your medical team and tell them you need the right information presented in a way that you understand.



**Contact us for support, Monday to Friday:** Phone: 0300 303 5220 (9am–5pm) Email: getsupport@younglivesvscancer.org.uk (9am–5pm) Live chat at younglivesvscancer.org.uk (10am–4pm)

Scan the QR code for more info about the tests and what's involved

Young Lives vs Cancer helps young people and their families find the strength to face everything cancer throws at them. We've been there before. We'll face it all, together.