

Blood Testing

Information for patients receiving chemotherapy



Why do I need a blood test?

Blood tests are requested by the healthcare professionals responsible for your care. Your blood sample is analysed in the lab, and the results are used to diagnose and monitor health conditions, plan treatment or monitor your response to therapy.

The results from your blood test must be within a certain range for your chemotherapy treatment to be released from the Pharmacy. These ranges depend on the specific chemotherapy regime. Occasionally, your treatment may have to be postponed if the results are not within these set ranges.

What are you testing for?

At a large NHS Trust like Leeds, we have very well-equipped laboratories and perform a great number of different tests. These may require different tube types which is why several tubes with different coloured lids might be collected. Some commonly requested blood tests for patients receiving chemotherapy include:

Urea and electrolytes (U&E) - used as a measure of kidney function and includes eGFR (estimated glomerular filtration rate). The higher the eGFR, the better the kidney function.

Liver function tests (LFT) - shows whether there is any damage to liver cells or blockage of vessels and channels in the liver.

Magnesium - an essential mineral which is important for calcium regulation. Magnesium might be lost through the urine due to the effects of chemotherapy on the kidney, or if you are suffering from diarrhoea.

Bone profile - measures calcium, phosphate, albumin and alkaline phosphatase which are involved in bone turnover.

Tumour markers - these are used to monitor the progression of disease, response to treatment, or to look for recurrence. Examples are CA15-3 for breast cancer, CA125 for ovarian cancer, CEA for gastrointestinal cancers and CA 19-9 for pancreatic cancer. Small changes in tumour marker results may not represent a significant change in your condition. Not all cancers have tumour markers that we can measure in the blood.

Full blood count (FBC) - measures the number, type and size of the red and white blood cells and platelets in your blood. Chemotherapy affects rapidly dividing cells, so can also temporarily affect the bone marrow and cause low blood counts. A low red cell count (anaemia) may cause you to feel tired, short of breath or dizzy. A low white cell count increases your risk of infection. Platelets are important for blood clotting and a low platelet count can increase the risk of bleeding and bruising.

Blood film - a more detailed examination of your blood cells under the microscope. This test may be requested if the FBC is abnormal or if more information is needed. This is a more time-consuming test, so when it is requested or added, it can delay the release of the FBC results.



What will happen to my sample?

Your sample will be labelled with your details and sent to the laboratory. It will be booked onto the computer system and processed by our automated analysers. Once analysis is complete, the results are checked by healthcare scientists to ensure they are accurate.



If required, the scientists may add on further tests or discuss the results with your Oncologist to ensure that you receive the best possible care. Your information will be kept confidential.

When will the results be available?

For patients requiring a blood test on the day of their chemotherapy, samples are hand-delivered to the laboratory and are processed urgently. We aim to have the results available within one hour of the sample arriving.

For other patients, blood tests will be taken within your outpatient appointment. This will allow results to be checked and Pharmacy to make up your treatment.

Genetics tests (e.g. for BRCA mutations) may take several weeks.

Where can I find more information?

You can ask your Nurse or Doctor about blood testing. Alternatively, visit Lab Tests Online UK, a free, evidence-based and not-for-profit resource to help patients understand why tests are performed and what the results mean:

http://labtestsonline.org.uk



What did you think of your care? Scan the QR code or visit <u>bit.ly/nhsleedsfft</u> Your views matter



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