

Understand Your Blood Tests

For patients and families

Read this pamphlet to learn:

- What a blood test is
- What a complete blood count (CBC) is
- How to understand your complete blood count results
- What an electrolyte test is
- How to understand your electrolyte test results



What is a blood test?

A blood test or “blood work” uses your blood to find out many things about your health. For example, a blood test can be used to:

- check the general state of your health
- see how well certain organs are working
- see how well a treatment is working
- help diagnose (find) certain diseases
- check if you have an infection

Not every patient will get the same blood tests. The type of tests you get depends on the type of illness you have.

These are the 2 common blood tests you may get:

- Complete blood count test (CBC)
- Electrolyte test

What is a complete blood count?

A complete blood count or CBC is a blood test that is done to get information about the cells in your blood. You may get a complete blood count done:

- during your clinic visits
- at follow up appointments
- while you are staying in the hospital

Why are blood counts important?

Blood counts help your health care team plan and monitor (check) your response to treatment or other reasons. Your blood counts tell your health care team if your blood counts are too high or too low.

Blood counts that are too high or too low can be caused by your cancer or your cancer treatments. If your blood counts are too high or too low, you may need treatments to fix this.

Learn how to track your blood counts, so that you can understand your health. Your blood counts tell how well you are doing during your treatment.

How can I tell if my blood counts are normal?

The only way to tell if your blood counts are normal is to get a blood test. A blood test is when a sample of your blood is taken. The sample is then sent to a lab to be checked.

How to understand your blood results

You can check your blood count results on the myUHN Patient Portal. myUHN is a secure website for patients of University Health Network (UHN).

You can also ask a member of your health care team for a printout of your blood count results for your records.

The myUHN website lets you see your appointments and results from all UHN sites as soon as they are ready. To register for myUHN, ask for your sign up code at your next clinic appointment.

Use the information on the next few pages to help you read and understand your blood count results.

Blood is made up of many different parts. A complete blood count measures how much of these different parts you have in your blood:

- Red Blood Cells (RBC) and Hemoglobin (HB)
- White blood Cells (WBC)
- Neutrophils (Neut)
- Platelets (PLT)

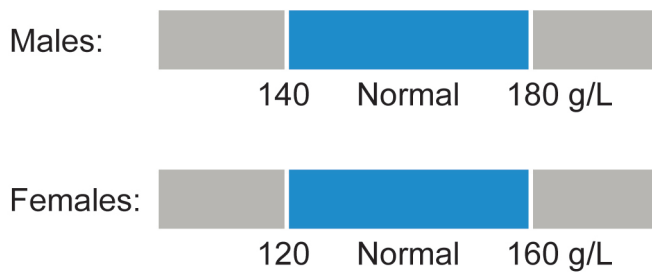
Red Blood Cells (RBC) and Hemoglobin (Hgb)

Red blood cells carry oxygen and nutrients (vitamins and minerals) to all the cells in your body. Hemoglobin is the part of the red blood cells that carries the oxygen. If your hemoglobin is low, you may feel tired or short of breath.

Normal range:

Male: 140 – 180 grams per Litre (g/L)

Female: 120 – 160 grams per Litre (g/L)



Range during treatment: Can be less than 80 g/L and will vary for many weeks

You may get a red blood cell transfusion if your red blood cell counts are very low. A red blood cell transfusion helps raise your blood count by replacing missing red blood cells. Transfusions are given through an intravenous (IV) line into your vein.

White Blood Cells (WBC)

White blood cells are the cells of your immune system. White blood cells fight infection and remove damaged or abnormal cells. White blood cells are also called leukocytes.

You may not notice any changes if your white blood cell count is too low or too high. But if your white blood counts are too low or too high, you may be at risk for infections. Your health care team will tell you how to protect yourself from infections.

Normal range: 4 – 11 billion per litre (bil/L)



Range during treatment: Can drop to 0 bil/L during treatment

If your white blood cell counts are too low, you may get antibiotic medicine. Antibiotic medicine helps to prevent and fight infections.

Neutrophils (Neut)

Neutrophils (Neut) are a special type of white blood cell. Neutrophils are the first cells to fight infection. You may not notice any changes if your neutrophil count is too low or too high.

But if your neutrophils are too low or too high, you may be at risk for infections. Your health care team will tell you how to protect yourself from infections.

Normal range: 2.0 – 7.5 billion per liter (bil/L)



Range during treatment: Can drop to 0 bil/L during treatment

You may get antibiotic medicine if your neutrophil count is too low. Antibiotic medicine helps prevent and fight infections. You may also get medicines to increase the number of neutrophils during your cancer treatment.

Platelets (PLT)

Platelets are blood cells that form clots to help stop bleeding when you are cut or hurt. A low number of platelet raises your risk of bleeding too much. Tell your health care team if you notice these signs of low platelets:

- easy bruising
- lots of bruising
- blood in your (urine) pee or stool (poo)
- bleeding from your gums

Normal range: 150 – 400 billion per Litre (bil/L)



Range during treatment: Can be less than 10 bil/L and will vary for a few weeks

If your platelet count is low, you may get a platelet (PLT) transfusion to help reduce the risk of bleeding or stop bleeding. When platelets count are low, be extra careful to prevent falls. Try to avoid doing things that may carry a risk of bleeding.

Who can I ask for more information about my blood counts?

Ask a member of your health care team for help, if you have questions about:

- how to read your blood count results
- what your blood count results mean

What is an electrolyte test?

Your doctor may order an electrolyte test as well as a complete blood count. An electrolyte test measures the levels of electrolytes in your body.

Electrolytes are salts and minerals that are found in body fluids like blood or within cells. Electrolytes control many functions in our bodies like muscle movement.

If your doctor orders an electrolyte test, you may see some or all of the following parts on your blood results sheet. You can also see these results through the [myUHN Patient Portal](#).

An electrolyte test measures common electrolytes such as:

- Calcium (Ca)
- Sodium (Na)
- Potassium (K)
- Magnesium (Mg)
- Phosphate (PO₄)
- Creatinine (Creat)

Use the information on the next few pages to help you read and understand your electrolyte results.

Calcium

Ca

Calcium helps keep teeth and bones strong. Calcium also maintains normal heart functions and muscle movement.

Normal range:

2.20 – 2.62 millimoles per Litre (mmol/L)



Sodium

Na

Sodium helps balance the amount of water and blood in your body.

Normal range:

135 – 145 mmol/L



Potassium

K

Potassium helps your heart, kidneys and muscles work well.

Normal range:

3.2 – 5.0 mmol/L



Magnesium

Mg

Magnesium helps support healthy muscles, nerves, heart and immune system.

Normal range:

0.70 – 1.1 mmol/L



Phosphate

PO4

Phosphate is important for building and repairing bones. Phosphate also helps your nerves and muscles to work well.

Normal range:

0.80 – 1.4 mmol/L



Creatinine

Creat

Creatinine is used to check how well your kidneys are working.

Normal range:

50 – 98 mmol/L



Creatinine is not an electrolyte but it is often measured at the same time.

Electrolyte counts that are too high or too low can be caused by your cancer or your cancer treatments. If your electrolyte counts are too high or too low, you may need treatments to fix this.

Who can I ask for more information about my electrolytes?

Ask a member of your health care team for help, if you have questions about:

- how to read your electrolyte results
- what your electrolyte results mean

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