

Understanding your Blood Cell Counts

Your oncologist may order a blood test for you called a “complete blood count” or “CBC”. A complete blood count (CBC) tells your healthcare team about the kinds and numbers of cells in your blood.

You have 3 kinds of blood cells:

- Red blood cells
- White blood cells
- Platelets

This handout offers information on the 3 kinds of blood cells. The results of the CBC blood test can tell your health care team how well your body is responding to systemic or radiation therapy treatments. You may have this blood test when you come for an appointment at the cancer centre.

Red Blood Cells (RBC)

Red blood cells carry oxygen and help give you energy. Red blood cells contain hemoglobin (Hb). Hemoglobin is a protein that allows your red blood cells to carry oxygen throughout your body. If your hemoglobin count is too low, you may feel weak, tired, dizzy, short of breath (have difficulty breathing), have ringing in your ears and your skin may look pale. Your oncologist may order a blood transfusion if your hemoglobin is too low. You may be prescribed a medication that can help increase your hemoglobin.

What you can do when your hemoglobin is low:

- Rest between your activities.
- Eat more iron-rich foods such as beef, poultry, chicken, lentils, spinach, tofu, and pumpkin seeds.
- Move slowly when you change positions from lying to a sitting or sitting to standing.

White Blood Cells (WBC)

White blood cells help your body fight against infection. When your white blood cell count is too low, you may get an infection. Your oncologist may prescribe an antibiotic for you if this happens. Neutrophils are the most common type of white blood cell that is measured. If your neutrophils are too low (also called neutropenia), your treatment may be delayed or your systemic therapy treatment medication may need to be decreased. Your oncologist may prescribe a medication for you that will help with this.

What you can do to help yourself when your white blood cells are low:

- Wash your hands often and remind those around you to do the same.
- Stay away from large crowds of people.
- Stay away from people that are sick.
- Talk to your oncologist before you go to see a dentist.
- Brush your teeth after meals and at bedtime.
- Wash your fruits and vegetables before you eat them.
- Make sure your meats are cooked well.

- Drink 8 to 10 cups (1 cup = 250 ml) of fluid a day. Drink less fluids with caffeine or alcohol in them.
- Do not clean pet cages or kitty litter.
- Talk to your oncologist before you have any vaccinations.

Platelets (PLT)

Platelets help your blood form clots to stop bleeding and bruising. If you have a low platelet count you may see blood in your urine, vomit, stool or you may have bleeding in your mouth. You may bruise easily or you may see small red spots under your skin (also called petechiae). Tell your oncologist or nurse if you have any of these problems.

What you can do to help yourself when your platelets are low:

- Do not take any medication that has ASA (aspirin) in it. Talk to your oncologist or nurse if you have questions about this.
- Use sharp objects (example: knives or razors) carefully so that you don't cut yourself.
- Brush your teeth gently with an 'ultra' soft toothbrush. Do not floss your teeth.

While you are on systemic therapy treatment:

- Keep a digital thermometer at home and take your temperature if you feel hot or unwell (example: you have chills).
- Do not take any fever medications like acetaminophen (Tylenol®) or ibuprofen (Advil®) before you take your temperature as they may hide a fever.
- Do not eat or drink anything hot or cold right before you take your temperature.

How to tell if you have a fever

You have a fever if your temperature taken by mouth (oral temperature) is:

- 38.3°C (100.9°F) or higher at any time or 38.0°C (100.4°F) or higher for at least one hour.

If you have a fever, go to the Emergency Department at the hospital closest to you.

If you have a problem or concern about a symptom or side effect from your cancer treatment:

1. Call your primary nurse at the cancer centre from Monday to Friday, 8:30 am to 4 pm, (except on holidays). Use the phone number your primary nurse gave you.
2. Contact CareChart Digital Health from Monday to Friday, 4 pm to 8:30 am and anytime on weekends and holidays for symptom management support.

Talk to a nurse using one of these options:

- Call the after-hours telephone line at 1-877-681-3057.
- Request a video call by going to carechart.ca.
- Use the CareChart Digital Health App. This App is available to download for iOS or Android devices.

Call 911 or go to the Emergency Department at the hospital closest to you for a medical emergency. Talk to a member of your healthcare team if you have questions or do not understand any of the information in this handout.

This handout was created by the Patient Education Program at the Durham Regional Cancer Centre/Lakeridge Health. It was last reviewed in April 2026.