



Patient & Family Guide
2024

Stem Cell Collection

Victoria General (VG)
Site, QE II



www.nshealth.ca

Stem Cell Collection

What are stem cells?

- Your blood has 3 types of blood cells. These cells each do something different in the body:
 - › **White blood cells** protect you from infection.
 - › **Red blood cells** carry oxygen.
 - › **Platelets** prevent bleeding by helping your blood clot (stick together).
- All blood cells start out as stem cells. A stem cell can turn into a white blood cell, a red blood cell, or a platelet depending on your body's needs.

How are stem cells collected?

- For 4 days before your collection, you will need a medication called granulocyte-colony stimulating factor (G-CSF). This helps your body make extra stem cells.
- G-CSF has been used in people with cancer and in healthy stem cell donors.
- The main side effects of G-CSF are:
 - › Bone aches (mostly in your hips, thighs, and breastbone)
 - › Headache
 - › Feeling tired

- You may also have a low-grade fever (37.5 to 37.9 °C). You may take acetaminophen (Tylenol® or Tylenol® Extra Strength) following the directions on the package.

Do not take Aspirin® or any medications that contain Aspirin® (like ibuprofen, Aleve®, or Motrin®).

If your fever does not go away, call your Cell Therapy and Transplant (CTTP) care team.

- There are no known long-term side effects associated with using G-CSF.
- Your CTTP coordinator will arrange for you to get your G-CSF injections at the hospital. You may also give them yourself or have your care partner give them to you.
- If you have any side effects, take Tylenol® (regular or extra strength) 30 minutes before your next injection.
- G-CSF injection medication must be stored in the fridge. **Do not freeze it.**
- On the days you are getting G-CSF, it is important to eat regular meals and drink lots of water.
- If you drink a lot of coffee, try not to have any on the days leading up to your collection. Coffee can cause you to be dehydrated (not have enough fluids).
- **Do not drink coffee or tea on the morning of your collection.**

- Before the day of your collection, your CTPP coordinator will take you to the Apheresis Unit to have your veins checked.
- If the nurses are worried that they will have trouble finding 2 I.V. sites, you may need a **vascath**. This is a special type of I.V. that is put in on the morning of your collection. It will be taken out after the collection is done.
- If you need a vascath, your CTPP doctor or coordinator will give you more information. **Most people do not need a vascath.**

What is apheresis?

- Apheresis is the process of removing blood, filtering out (collecting) stem cells, and returning the filtered blood back into your body.
- The blood is drawn and returned to you through an I.V. (or through a vascath, if needed).
- Usually, 2 I.V.s are inserted into 1 arm.
 - › One (1) I.V. pulls blood (a small amount at a time) into a tube that goes through an apheresis machine. The machine separates your blood, collecting the stem cells.
 - › The rest of the blood is returned to you through the other I.V.
- You must keep the arm that is being used still for the whole procedure.
- Collection will take about 4 to 5 hours.
- This procedure is done as an outpatient.

- You may need 2 days of collection. This will depend on how many stem cells are collected on the first day. The nurses in the apheresis unit will tell you if you need to come back the next day.

What are the possible side effects?

- During the collection, you may have numbness or tingling around your mouth and in your fingertips. This is caused by the blood thinner that is mixed with your blood in the machine to keep it from clotting. This blood thinner binds to the calcium in your blood and causes the tingling sensation (feeling). Your nurses will give you medication to help with this, if needed.
- You may also feel a bit lightheaded when the collection starts. The nurses will be checking your vital signs (like breathing, blood pressure, heart rate) often.
- You may feel tired for a few days after the collection.

May I have visitors?

You may have 1 person stay with you during the collection. Please note that this may change.

Remember:

- **Do not** drink alcohol once the G-CSF injections have started. Alcohol can damage your stem cells and lower your stem cells count.

- **Do not drink a lot of liquids on the morning of the collection.** Once you are hooked up to the apheresis machine, you cannot be unhooked to go to the bathroom. If needed, a nurse will help you with a bedpan, a commode chair, or a urinal.
- Wear comfortable clothes (like sweat pants), as you will be laying in a bed for most of the collection. Wear a shirt with short sleeves to give the nurses easy access to your arms.
- Eat foods that are high in calcium (like milk, cheese, yogurt, oatmeal, figs, broccoli, salmon, sardines, beans) for 7 days before your collection. This can help to lower the numbness and tingling around your mouth and in your fingertips.

Accommodations

- If you need a place to stay in Halifax during your stem cell collection, the arrangements and costs will depend on which province you live in.
- If you live outside of Nova Scotia, ask your provincial liaison nurse what costs are covered. You will likely need to pay up front for your lodging. Keep all your receipts and you will be reimbursed.
- If you are from Nova Scotia and you live more than 45 minutes away from the Victoria General site, your CTPP coordinator can arrange accommodations at **either** The Dr. Susan K. Roberts Lodge That Gives **or** Lord Nelson Hotel & Suites.

The Dr. Susan K. Roberts Lodge That Gives

5826 South Street, Halifax, NS

› Phone: 902-420-1849

- The Lodge is within walking distance of the hospital. Parking is free, but it is limited. You can park in the hospital parking lot and ask the social worker for a half-price ticket. Free taxi service is provided by Casino Taxi from the Lodge to local hospitals.
 - › Phone: 902-429-6666 or 902-425-6666
- If you live in Nova Scotia, there is no cost for the Lodge. Meals are included.

Lord Nelson Hotel & Suites

1515 South Park Street, Halifax, NS

› Phone: 902-423-6331

- Free taxi service is provided by Casino Taxi from the Lord Nelson Hotel to local hospitals.
- If you live in Nova Scotia, there is no cost for the hotel. Meals are **not** included (other than a cold breakfast).

