

# Autologous stem cell transplantation

## Treatment and reinjection



Once your stem cells have been collected you'll receive intensive chemotherapy: the conditioning treatment. Then your stem cells will be reinjected into you. This fact sheet explains how this is done.

For a full overview of autologous stem cell transplantation, see the fact sheet [Autologous stem cell transplantation - General information](#).

### How can I prepare?

Adopt or maintain healthy lifestyle habits.

This reduces the risk of complications. It also helps you recover faster after a stem cell transplant. Here's what you can do :

- **Stay active.** Walk or cycle once a day to strengthen your muscles.
- **Eat well.** Eat a variety of foods. See Canada's Food Guide for more information. If necessary, you can see our nutritionist, who will help you find some ideas for balanced meal. Drink 10 to 12 glasses of water a day.



- **Quit smoking.** This reduces the risk of complications. Talk with your doctor or pivot nurse (also called nurse navigator) for help.
- **Maintain good mouth hygiene.** Brush your teeth after each meal, 3 to 4 times a day, with a soft-bristled toothbrush.

### What should I bring to the hospital?

You'll stay in the hospital 20 to 30 days. Consult the [Guide de votre séjour](#) on the CHUM website. And don't forget to also bring :

- > Mint-flavoured chewing gum (useful on the day when your stem cells are reinjected).
- > Something to pass the time: books, cell phone, tablet, laptop, etc.



As you'll be staying a long time at the hospital, bringing photos of your loved ones might be helpful.

## What happens once I'm at the hospital?

You'll have time to settle in to your room. Then you'll meet with your healthcare team, who will follow you throughout your stay. They'll explain the various treatments and exams you'll have (blood tests, radiology exams, etc.).

## What is the conditioning treatment?

It's intensive chemotherapy. It destroys the cancer cells in your blood and the abnormal stem cells caused by the cancer.

This chemotherapy is stronger than those you've received so far. It will have more side effects.

The treatment is administered through your veins. For this, a central catheter with 2 lines is installed in Radiology into your neck. The frequency and duration of the chemotherapy depends on each case.



## What are the possible side effects?

Here are the main ones. They can occur in the first days after your treatments and can last several days.

- nausea or vomiting
- diarrhea
- pain and ulcers in the mouth
- hair loss
- loss of appetite



### IMPORTANT

Tell your doctor or nurse as soon as a side effect occurs. There are medications and ways to prevent and reduce them.

Chemotherapy mainly destroys cancer cells, but it also destroys normal blood cells (e.g. white and red blood cells, platelets, etc.).

To check the number of cells in your blood, blood tests are done every day. Depending on their results, you may need blood or platelet transfusions.

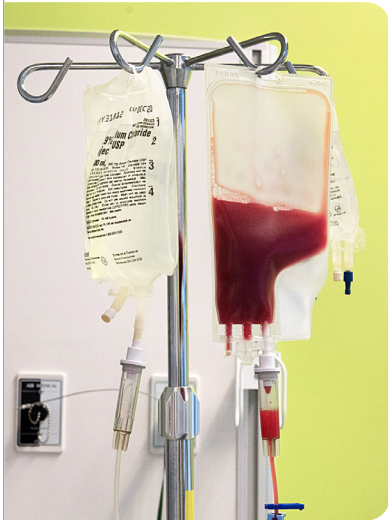
White blood cells protect against infections. Because their numbers will go down, infection prevention measures will be put in place for you, your loved ones, and the healthcare team. It's important to follow them!

- > You'll be in a positive pressure isolation room (double glass door).
- > There will be a limit of 2 visitors at a time in your room.
- > People with a cold or flu must not come to visit you.
- > The nutritionist will plan a special diet with a controlled number of bacteria.
- > You'll need to wash your hands often, especially before meals and before and after going to the bathroom. Your loved ones and the staff will also need to wash their hands often.
- > All staff members and your loved ones will need to put on a mask to enter your room. And you will have to put one on when you go out.
- > It will be important that you wash yourself daily and brush your teeth with a soft-bristled toothbrush, 3 to 4 times a day.



## What is a stem cell transplant?

After the intensive chemotherapy treatment, you'll have 1 or 2 days of rest in the hospital.



The transplant involves reinjecting you with your normal stem cells that were collected from you. These are injected into your veins through the central catheter. They will then settle into your bone marrow, where they will produce new blood cells: red and white blood cells, platelets, etc.

## How is the stem cell reinjection carried out?

- The day before, the stem cells that were collected from you will arrive at the CHUM blood bank. On the day of the transplant, they'll be brought to your room and thawed.
- On the morning of the transplant, you'll need to store your personal items away in the cupboards to free up the workspace.
- The room will be cleaned and some supplies will be brought in. They won't all be used, but they will still be brought in, in case the healthcare team needs them.
- The nurse will inject all your bags of stem cells through your central line (like a blood transfusion).



During the injection, you'll probably have a taste of garlic or corn in your mouth. This comes from the product that was used to preserve the cells.

The taste and smell could continue for 24 to 48 hours after the injection. Use mint-flavoured chewing gum to remove the taste.

## Are there any possible side effects?

Yes, but before the injection the nurse will give you medications to reduce these.

The main ones are :

- abdominal pain
- headache
- red patches on the face
- nausea or vomiting



## What should I expect afterwards?

After the reinjection, it can take 10 to 15 days for the number of cells in your blood to increase.

During this time, you may be tired and have :

- greater risk of infection
- diarrhea
- mouth ulcers
- reduced appetite

You'll be offered medication and advice to reduce these effects.



During this period, you'll need to focus on :

- eating well and drinking plenty of water
- exercising (using a stationary bike or walking in the corridor on the care unit)

This will help you to recover faster and will make your return home easier.



### Who can I contact for help or to ask questions?

Feel free to contact any member of your healthcare team. Your pivot nurse will also follow you throughout your treatment.

Tél. : .....

The pivot nurse is available Monday to Friday, from 8:00 a.m. to 4:00 p.m.



### USEFUL RESOURCES

Canadian Cancer Society :  
[cancer.ca](http://cancer.ca)  
 1 888 939-3333

The French National Cancer Institute :  
[en.e-cancer.fr](http://en.e-cancer.fr)

Lymphome Canada :  
[lymphome.ca](http://lymphome.ca)

Myeloma Canada :  
[myelomacanada.ca/en](http://myelomacanada.ca/en)

Other health sheets published by the CHUM are available. Ask for those that might fit your situation.



You can also find them on our website

[chumontreal.qc.ca/fiches-sante](http://chumontreal.qc.ca/fiches-sante)



### Questions


*The content of this document in no way replaces the recommendations and diagnoses made, or the treatment suggested by your health professional.*

To find out more about the Centre hospitalier de l'Université de Montréal  
[chumontreal.qc.ca](http://chumontreal.qc.ca)

