HEALTH SHEET

Autologous stem cell transplantation

Stem cell mobilization





To prepare for this transplant, your bone marrow will be stimulated to produce more stem cells. 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.

What is stem cell mobilization?

Stem cells are found mainly in bone marrow. They produce the cells that circulate in the blood. But stem cells themselves don't circulate very much in your blood.

To be able to reinject you with a lot of stem cells later, more of them have to be produced. To achieve this, treatments are used to stimulate your bone marrow so that it will make a lot of stem cells and pass them into your blood.

This is called "mobilization".

This step is essential before stem cells can be collected.

There are 2 methods of mobilization:

- 1 chemotherapy followed by growth factors
 OR
- 2 taking growth factors only



How is the chemotherapy carried out?

This treatment may include one or more types of chemotherapy. It is given by injections into the veins (intravenously).

It may be the same as what you received to treat your cancer, or it may be different.

The treatment is done at the Outpatient Oncology Clinic on the 15th floor of Pavilion C.

You'll be given an information sheet, schedule, and details on the treatment. Before you begin, you'll also have a teaching session.

You'll receive information sheets and your "oncology passport", a booklet to record everything related to your illness and your treatments.

You'll be told how the treatment is carried out and what the potential side effects are. You'll also be given tips to prevent or reduce these effects.

What are the side effects of the chemotherapy?

Side effects may occur in the first few days after your treatments. They can last a few days.

Here are the main potential side effects. You may have only some or even none.

Nausea or vomiting. See the fact sheet
 Chemotherapy-related nausea and vomiting.



- Hair loss. See the fact sheet <u>Hair</u> <u>loss during cancer</u> <u>treatments.</u>
- Fatigue. See the fact sheet <u>Coping</u> with fatigue related to cancer and treatments.
- Constipation.
 See the fact sheet
 Constipation related
 to cancer treatments.
- Diarrhea. See the fact sheet <u>Diarrhea related</u> to cancer treatments.
- Reduced number of white blood cells, thus greater risk of infection. See the fact sheet <u>Cancer: Preventing infections</u> <u>during chemotherapy - Chemotherapy and</u> <u>targeted therapy.</u>

How are growth factors taken?

This medication stimulates the production of stem cells in the bone marrow and their passage into the blood. It is given by injections under the skin (subcutaneously): 2 injections a day for 7 days.



Injections begin 24 hours after chemotherapy ends. If your mobilization is done only with growth factors, your doctor and pivot nurse (also called nurse navigator) will decide when to start the injections.

You will have a teaching session with a nurse. Your first injection will be given by a nurse at your CLSC. Then, if you feel comfortable doing so, the nurse can teach you how to do the injections yourself.

What are the side effects?

The most common side effect is bone pain, especially in the pelvis and middle of the chest. This pain is normal. It's caused by the faster production of stem cells in your bone marrow.





To relieve the pain, you can take acetaminophen (e.g. Tylenol), 2 tablets of 500 mg every 6 hours.

Caution! Take your temperature by mouth before taking this medicine, as it may mask a fever, and

fever could indicate that you have an infection.

If your pain is intolerable, talk with a member of your healthcare team or your pivot nurse.

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.

Tel.:

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

1888 939-3333

The French National Cancer Institute : en.e-cancer.fr

Lymphome Canada:

lymphome.ca

Myeloma Canada :

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

(5)	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**

