

PATIENT MEDICATION INFORMATION

READ THIS FOR SAFE AND EFFECTIVE USE OF YOUR MEDICINE

CASGEVY (cass-JEH-vee)

Exagamglogene autotemcel infusion

Read this carefully before you receive CASGEVY. This leaflet is a summary and will not tell you everything about this therapy. Talk to your healthcare professional about your medical condition and treatment and ask if there is any new information about CASGEVY.

What is CASGEVY used for?

CASGEVY is used to treat:

- **People aged 12 years and older with sickle cell disease** who have frequent painful crises (called vaso-occlusive crises). Patients with sickle cell disease have an abnormal form of hemoglobin called sickle cell hemoglobin. Sickle cell hemoglobin causes red blood cells to have a sickle-shape, which can lead to blood vessel blockages, causing painful crises.
- **People aged 12 years and older with beta thalassemia** who need regular blood transfusions because they do not have enough hemoglobin, a protein in the blood that carries oxygen throughout the body. This causes low amounts of red blood cells, and regular blood transfusions are needed.

Children under 12 years of age

CASGEVY is not to be given to children under 12 years of age because it is not yet known if CASGEVY is safe and effective in this age group.

How does CASGEVY work?

CASGEVY is a cell therapy made from your own blood stem cells. These cells are taken from your body and are modified to make CASGEVY. CASGEVY is a one-time therapy, administered in a hospital, that works by increasing the production of a type of hemoglobin called fetal hemoglobin. Having more fetal hemoglobin improves the production and function of red blood cells. This can mean that people with beta thalassemia may not need blood transfusions. For people with sickle cell disease, CASGEVY can help stop blood vessel blockages and prevent painful crises.

What are the ingredients in CASGEVY?

Medicinal ingredients: exagamglogene autotemcel

Non-medicinal ingredients: Cryostor CS5 (contains dimethyl sulfoxide (DMSO), dextran 40, mannitol, multiple electrolytes for injection)

CASGEVY comes in the following dosage forms:

CASGEVY is supplied in one or more glass vials. When thawed, CASGEVY is a colourless liquid.

You must not be given CASGEVY if:

- **you are allergic to exagamglogene autotemcel** or any of the other ingredients in this medicine.
- **you are allergic to any of the ingredients** in the mobilization or conditioning medicines you will be given before treatment with CASGEVY.

Tell your healthcare professional straight away if either of these applies to you. The treatment will not be given to you.

To help avoid side effects and ensure proper use, talk to your healthcare professional before you are given CASGEVY. Talk about any health conditions or problems you may have, including if you:

- have an ongoing infection (low neutrophil counts).
- bruise easily, have unexplained bleeding or bleeding that takes a long time to stop.
- have a known allergy to any of the ingredients in CASGEVY such as dimethyl sulfoxide (DMSO), dextran-40 or mannitol.

Your healthcare professional will explain the treatment process and the benefits and risks of each step.

Before treatment with CASGEVY:

- You will have **two other types of medicine** before you are given CASGEVY.
 - **Mobilization medicine** that moves the blood stem cells into the blood stream, allowing them to be collected to make CASGEVY. This step will take 2-6 days.
 - **Conditioning medicine** to remove cells from the bone marrow that would prevent CASGEVY from working properly. Most side effects that make you feel sick are due to the conditioning medicine before you receive CASGEVY.
- Your healthcare professional will discuss the **possible impact of the conditioning medicine on fertility**. See below under *“Pregnancy, breastfeeding and fertility”*.

After treatment with CASGEVY:

- You will have fewer blood cells for a while, until your blood cells treated with CASGEVY increase in your bone marrow. This includes:
 - Low levels of platelets (cells that help the blood to clot); low platelets may cause bleeding.
 - **Tell your healthcare professional right away** if you have any of these signs of low platelet levels: severe headache, abnormal bruising, prolonged bleeding, or bleeding without injury such as nosebleeds, bleeding from gums, blood in your urine, stool, or vomit, or coughing up blood.
 - Low levels of white blood cells (cells that prevent infections); low white blood cells may make infections more likely.
 - **Tell your healthcare professional right away** if you have any of these signs of low white blood cell levels: fever, chills, or infections.

- Your healthcare professional will monitor blood cell levels and give you treatment as required. Your healthcare professional will tell you when your blood cells return to safe levels.
- Your healthcare professional will continue to monitor your blood cell levels and overall health.

If CASGEVY treatment cannot be completed or fails

- If CASGEVY cannot be given after the conditioning medicine, or if the modified blood stem cells do not take hold in the body, your healthcare professional may decide to return your own original blood stem cells (rescue cells) that are collected and stored before treatment starts. If you are given rescue cells, you will not have any treatment benefit from CASGEVY and you will need to return to your previous treatment or start a new treatment for your disease.

Other warnings you should know about:

- **You will never be able to donate** blood, organs, tissues, or cells.
- **CASGEVY contains** ingredients that can result in allergic reactions. The medical team will monitor you closely for any allergic reactions during and after the infusion of CASGEVY.

Tell your healthcare professional about all the medicines you take, including any drugs, vitamins, minerals, natural supplements or alternative medicines.

The following may interact with CASGEVY:

- **Do not take medicines that remove iron from your body** (chelating agents) for at least 7 days before you are given the conditioning medicine. Your healthcare professional will advise you if and when you can start taking these medicines after CASGEVY treatment.
- **Do not take other medicines for sickle cell disease or beta thalassemia** (such as hydroxyurea and luspatercept) for at least 8 weeks before you are given the mobilization and at least 8 weeks before you are given the conditioning medicines. Your healthcare professional will advise if and when you should start taking these medicines after CASGEVY treatment.
- Talk to your healthcare professional if you need to have any **vaccinations**.

Pregnancy, breast-feeding and fertility

- **Pregnancy**
 - **This treatment is not to be given during pregnancy** because of the possibility of birth defects that can be caused by the conditioning medicine. The effects of CASGEVY in pregnant women are not known. Talk to your healthcare professional about pregnancy after receiving CASGEVY.
 - If you are pregnant or think you may be pregnant after treatment with CASGEVY, **talk to your healthcare professional immediately**.
 - If you are a woman who can get pregnant, **you will be given a pregnancy test** before starting mobilization and conditioning medicines to make sure you are not pregnant.
- **Contraception in men and women**
 - If you are a woman who can get pregnant, or a man capable of getting a partner pregnant, **you must use an effective method of contraception** from the start of mobilization and for

at least 6 months after receiving CASGEVY. Talk to your healthcare professional about which methods of contraception are suitable.

- **Breast-feeding**
 - **Breast-feeding must be stopped before receiving conditioning medicine** because the medicine may get into your breast milk and harm your child. Your healthcare professional will advise you if the benefits of breast-feeding your child after CASGEVY treatment outweighs the risks.
- **Fertility in men and women**
 - It may not be possible for you to become pregnant or to get your partner pregnant after you have had the conditioning medicine. **You should discuss your options with your healthcare professional before treatment.** This may include collecting and storing reproductive material (e.g., eggs, sperm) to use at a later time.

How CASGEVY is made and given

CASGEVY is given as an infusion into a vein only once. You will not be given CASGEVY again.

CASGEVY can only be given in a treatment centre (specialized hospital) by healthcare professionals with experience in stem cell transplants, and in the treatment of patients with blood disorders such as beta thalassemia and sickle cell disease.

STEP 1: Before CASGEVY treatment, your healthcare professional will give you **mobilization medicine(s)**. This medicine moves blood stem cells from your bone marrow into the blood stream. The cells are then collected in a machine that separates the different blood cells. The entire step may happen more than once. Each time, it takes about one week.

'Rescue cells' are also collected and stored at the hospital. These are your existing blood stem cells and are kept untreated just in case there is a problem in the treatment process. See above in *"If CASGEVY treatment cannot be completed or fails"*.

STEP 2: Your blood stem cells will be sent to the manufacturing site where they are **used to make CASGEVY**. It may take up to 6 months from the time your cells are collected to manufacture and test CASGEVY before it is sent back to your healthcare professional.

STEP 3: Shortly before you are given CASGEVY, your healthcare professional will first give you a **conditioning medicine** for a few days in hospital. This will prepare you for treatment by removing cells from the bone marrow that would prevent CASGEVY from working properly. After you are given this medicine, your blood cells will fall to very low levels. You will stay in the hospital at this point until after the CASGEVY infusion.

STEP 4: More than one vial of CASGEVY may be required. The contents of each vial is injected directly into your vein. The time it takes to be treated with CASGEVY depends on the number of vials required. Each vial is thawed for injection only after the contents of the previous vial is administered. It could take a few hours for you to receive the full dose of CASGEVY. After administration of CASGEVY, you will

stay in hospital so that your healthcare team can closely monitor your recovery. Times can vary but you may need to stay for approximately 2 months to allow your blood cells treated with CASGEVY to increase to normal levels. A healthcare professional on the team will decide when you can go home.

Usual dose:

CASGEVY is a one-time treatment. The dose is made for specifically for you.

What are possible side effects from using CASGEVY?

These are not all the possible side effects you may have during treatment with CASGEVY. If you experience any side effects not listed here, tell your healthcare professional.

Very common side effects (may affect more than 1 in 10 people)

- low levels of white blood cells, sometimes with a fever, which may make you more susceptible to infection
- infections
- increased heart rate
- increased blood pressure
- swelling or irritation of the stomach or colon
- stomach pain
- difficulty or discomfort when urinating
- symptoms of drug withdrawal (agitation, anxiety, muscle aches, insomnia, sweating)
- anxiety
- insomnia
- headache
- dizziness
- fever
- feeling tired or weak
- tingling or prickling sensations
- blurred vision
- hot flashes
- cough
- nosebleeds
- nasal congestion
- swelling or irritation of mucous membranes (e.g., gums)
- nausea or vomiting
- decreased appetite
- weight loss
- heartburn or acid reflux
- indigestion
- constipation
- diarrhea
- gallstones
- toothache
- muscle or joint pain, general pain
- swelling of the hands or feet

- itchy, dry, or flaky skin
- sunspots, pimples, or freckles
- hair loss
- rash

| Serious side effects and what to do about them | | |
|--|--------------------------------------|--------------|
| Symptom / effect | Talk to your healthcare professional | |
| | Only if severe | In all cases |
| VERY COMMON | | |
| Pain in the right upper abdomen under the ribs, yellowing of eyes or skin, rapid weight gain, swelling of arms, legs and abdomen, and trouble breathing. These may be signs of a serious liver condition called veno-occlusive disease. | | ✓ |
| Severe headache, abnormal bruising, prolonged bleeding, or bleeding without injury such as nosebleeds, bleeding from gums, blood in your urine, stool, or vomit, or coughing up blood. These may be signs of bleeding caused by lower levels of platelet cells in your blood, reducing the ability of blood to clot. | | ✓ |
| Fever, chills or infections. These may be signs of lower levels of white bloods cells, reducing the ability to fight infections. | | ✓ |

Tell your healthcare professional immediately if you get any of the side effects listed above.

If you have a troublesome symptom or side effect that is not listed here or becomes bad enough to interfere with your daily activities, tell your healthcare professional.

Reporting Side Effects

You can report any suspected side effects associated with the use of health products to Health Canada by:

- Visiting the Web page on Adverse Reaction Reporting (<https://www.canada.ca/en/health-canada/services/drugs-health-products/medeffect-canada.html>) for information on how to report online, by mail or by fax; or
- Calling toll-free at 1-866-234-2345.

NOTE: Contact your health professional if you need information about how to manage your side effects. The Canada Vigilance Program does not provide medical advice.

Storage:

CASGEVY will be stored by the healthcare professionals at your healthcare facility. You will not store CASGEVY yourself.

If you want more information about CASGEVY:

- Talk to your healthcare professional
- Find the full product monograph that is prepared for healthcare professionals and includes this Patient Medication Information by visiting the Health Canada website: (<https://www.canada.ca/en/health-canada/services/drugs-health-products/drug-products/drug-product-database.html>); the manufacturer's website: (<https://www.vrtx.ca/>), or by calling 877-634-8789.

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