

PATIENT MEDICATION INFORMATION

READ THIS FOR SAFE AND EFFECTIVE USE OF YOUR MEDICINE

BREYANZI™ **(lisocabtagene maraleucel)**

Read this carefully before you start taking **Breyanzi** (pronounced braye an' zee). This leaflet is a summary and will not tell you everything about this drug. Talk to your healthcare professional about your medical condition and treatment and ask if there is any new information about **Breyanzi**.

Serious Warnings and Precautions

Breyanzi can cause serious side effects. Sometimes, these serious side effects that are life-threatening can lead to death. The following serious side effects have been seen in people taking Breyanzi :

- Fever and chills which may be symptoms of a serious side effect called cytokine release syndrome (CRS), which can be severe or fatal. Other symptoms of CRS are difficulty breathing, dizziness or light-headedness, nausea, headache, fast heartbeat, low blood pressure or fatigue, vomiting, diarrhea, muscle pain and joint pain. Talk to your healthcare professional immediately if you have any of these symptoms.
- Neurological problems like confusion, difficulty with memory, difficulty speaking or slowed speech, difficulty understanding speech, loss of balance or coordination, disorientation, being less alert (decreased consciousness) or excessive sleepiness, loss of consciousness, delirious, fits (seizures), shaking or weakness with loss of movement on one side of the body. Talk to your healthcare professional immediately if you have any of these symptoms.

Breyanzi should only be given by an experienced healthcare professional at qualified treatment centres.

What is Breyanzi used for?

Breyanzi is used to treat adults with a type of blood cancer called lymphoma which affects lymph tissue and causes white blood cells to grow out of control. Breyanzi is used for:

- diffuse large B-cell lymphoma (DLBCL)
- primary mediastinal large B-cell lymphoma
- DLBCL arising from follicular lymphoma

It is used when at least 2 previous treatments have not worked or have stopped working.

How does Breyanzi work?

Breyanzi is a type of treatment called a 'genetically modified cell therapy'. Breyanzi is made from your own white blood cells. Cells are taken from your blood and the white blood cells are separated out. Your white blood cells are then frozen and sent away to make Breyanzi.

Breyanzi cells have been genetically modified to recognise the lymphoma cells in your body. When these cells are introduced back into your blood, they can recognise and attack the lymphoma cells.

What are the ingredients in Breyanzi?

Medicinal ingredients: lisocabtagene maraleucel

Non-medicinal ingredients: caprylic acid, Cryostor® CS10, human albumin, magnesium chloride, N-acetyl-DL-tryptophan, potassium chloride, sodium acetate trihydrate, sodium chloride, sodium gluconate, water for injection

Breyanzi comes in the following dosage forms:

Breyanzi is a cell suspension for injection. Your doctor will check that the Breyanzi was prepared from your own blood by checking the patient identity information on the medicine labels matches your details. Breyanzi is given through a tube into a vein as a single-dose, one-time treatment.

Do not use Breyanzi if:

- you are allergic to Breyanzi or any of the other ingredients of this medicine (listed in “What are the ingredients in Breyanzi?” above). If you think you may be allergic to Breyanzi, ask your doctor for advice.

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

- have any lung or heart problems.
- have low blood pressure.
- have any symptoms of infection or other inflammatory condition, such as fever (100.4°F/38°C), chill, sore throat, coughing, chest pain, stomach pain, vomiting, and diarrhea. The infection will be treated before Breyanzi infusion.
- have had a stem cell transplant from another person in the last 4 months or any other organ transplant in the past. The transplanted cells can attack your body (‘graft-versus-host disease’), causing symptoms such as rash, nausea, vomiting, diarrhea and bloody stools.
- notice the symptoms of your cancer are getting worse. In lymphoma, this might include unexplained fever, feeling weak, night sweats, sudden weight loss.
- had or have hepatitis B or C or HIV (human immunodeficiency virus) infection.
- had a vaccination in the previous 6 weeks or are planning to have one in the next few months.
- have any symptoms of severe allergic reactions, such as shortness of breath or trouble breathing, skin rash, swelling of the lips, tongue, or face, chest pain, feeling dizzy or faint.
- are pregnant, breast-feeding or plan to do so, think you may be pregnant or are planning to have a baby. Ask your doctor for advice before being given this medicine. This is because the effects of Breyanzi in pregnant or breast-feeding women are not known and it may harm your unborn baby or breast-fed child. You will be given a pregnancy test before treatment starts. Breyanzi should only be given if the results show you are not pregnant.
- are pregnant or think you may be pregnant after treatment with Breyanzi. Talk to your doctor immediately.
- are a man and you plan to father a child after Breyanzi treatment.

Other warnings you should know about:

- Do not drive, operate heavy machinery, or do other activities that could be dangerous if you are not mentally alert, for at least 8 weeks after you get Breyanzi. This is because the treatment can cause temporary memory and coordination problems, sleepiness, confusion, dizziness, and seizures.

- Do not donate blood, organs, tissues or cells for transplantation after Breyanzi treatment.

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 Breyanzi:

- Corticosteroids, chemotherapy, and other medications that can weaken your immune system. This is because these medicines may interfere with the effect of Breyanzi and may make Breyanzi less effective.
- Live vaccines: You must not be given certain vaccines called live vaccines (a type of vaccine made from weakened virus):
 - in the 6 weeks before you are given a short course of chemotherapy (called lymphodepleting chemotherapy) to prepare your body for Breyanzi.
 - during Breyanzi treatment
 - after treatment while your immune system is recovering.

Talk to your doctor if you need to have any vaccinations.

How you will receive Breyanzi:

Giving blood to make Breyanzi from your white blood cells

- Your doctor will take some of your blood by putting a tube (catheter) in your vein. Some of your white blood cells will be separated from your blood. The rest of your blood is returned to your body. This is called 'leukapheresis' (LOO-kuh-feh-REE-sis) and can take 3 to 6 hours. This process may need to be repeated.
- Your white blood cells will then be frozen and sent away to make Breyanzi. It takes about 3-4 weeks from the time your cells are received at the manufacturing site until Breyanzi is available to be shipped back to your treatment centre, but the time may vary.
- There is a risk of manufacturing failure (10.0%). In case of a manufacturing failure, a second manufacturing of Breyanzi may be attempted. While you wait for the product to be made again, your doctor may need to prescribe additional bridging therapy. This bridging therapy may cause side effects, which could delay or prevent you from receiving Breyanzi.

Other medicines you will be given before Breyanzi

- A few days before you receive Breyanzi, you will be given a short course of chemotherapy. This is to clear away your existing white blood cells.
- Shortly before you receive Breyanzi, you will be given acetaminophen and an antihistamine medicine. This is to reduce the risk of infusion reactions and fever.

How Breyanzi is given

- Your doctor will check that the Breyanzi was prepared from your own blood by checking the patient identity information on the medicine labels matches your details.
- Breyanzi is given through a catheter (tube) into a vein (intravenous infusion). Breyanzi is given as infusions of 2 different cell types.
- You will receive infusion of one cell type, immediately followed by the other cell type. The time for infusion will vary, but the treatment usually takes less than 15 minutes for each of the 2 cell types.

After Breyanzi is given

- Stay close to the treatment centre (within 2 hours distance) where you received Breyanzi – for at least 4 weeks.

- During the first week after treatment, you will need to return to the treatment centre 2 to 3 times for monitoring.
- This is so your doctor can check that the treatment is working – and help you if you have any side effects.
- Your doctor will give you a **Patient Alert Card**. Read it carefully and follow the instructions on it.
- Always show the Patient Alert Card to the doctor or nurse when you see them or if you go to hospital.
- Your healthcare professional will want to do blood tests to follow your progress. It is important that you do have your blood tested. If you miss an appointment, call your healthcare professional as soon as possible to make another appointment.

Usual dose:

Breyanzi comes as a cell suspension in up to 4 vials of each CD8 or CD4 component. The dose contains between 60×10^6 to 120×10^6 CAR-positive T-cells. Breyanzi should be given to you as a single-dose, one-time treatment.

What are possible side effects from using Breyanzi?

These are not all the possible side effects you may have when taking Breyanzi. If you experience any side effects not listed here, tell your healthcare professional.

Very common:

- infections – fever, chills, sore throat, chest infection, cough, or any other signs of infection. The infections may be caused by:
 - low levels of white blood cells, which help fight infections, or
 - low levels of antibodies called ‘immunoglobulins’
- low levels of red blood cells, which may make you feel weak or tired.
- bleeding or bruising more easily – due to a low level of blood cells called ‘platelets’
- difficulty sleeping
- confused thinking, feeling anxious
- numbness and tingling in the feet or hands
- low or high blood pressure
- cough
- feeling sick or being sick
- diarrhea or constipation
- stomach pain
- passing less urine, and dark urine
- swollen ankles, arms, legs and face.

Common:

- trouble with balancing or walking
- changes in vision
- changes in the way things taste
- stroke or mini-strokes
- convulsions or seizures (fits)
- heart weakness, causing shortness of breath and ankle swelling
- blood clots
- shortness of breath

- bleeding in your gut
- rash
- infusion reactions – such as feeling dizzy, fever, and shortness of breath.

Serious side effects and what to do about them			
Symptom / effect	Talk to your healthcare professional		Get immediate medical help
	Only if severe	In all cases	
VERY COMMON			
Fever, chills or shaking, feeling tired, fast or uneven heartbeat, feeling light-headed and short of breath – may be signs of a serious problem called ‘cytokine release syndrome’		✓	✓
Feeling very tired, weak and short of breath – may be signs of low red blood cell levels (anemia)		✓	
Bleeding or bruising more easily – may be signs of low levels of cells in the blood known as platelets (thrombocytopenia)		✓	
Low number of white blood cells in your blood test; you may or may not have an infection at the same time (neutropenia or febrile neutropenia)		✓	
COMMON			
Confusion, being less alert (decreased consciousness), difficulty speaking or slurred speech, shaking (tremor), feeling dizzy and headache – may be signs of problems with your nervous system (possible symptoms of neurologic problems)		✓	✓
Feeling warm, fever, chills or shivering – may be a sign of infection		✓	
Dizziness, light headedness caused by low blood pressure (hypotension)		✓	
Bleeding in your stomach, bowel or blood in the stool (gastrointestinal hemorrhage)		✓	

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.

If you want more information about Breyanzi:

- 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 www.bms.com/ca/en, or by calling 1-866-463-6267.

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