READ THIS FOR SAFE AND EFFECTIVE USE OF YOUR MEDICINE

PATIENT MEDICATION INFORMATION

BRINEURA
cerliponase alfa

Read this carefully before you start taking **Brineura** and each time you get a refill. 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 **Brineura**.

What is Brineura used for?

- Brineura contains the active substance cerliponase alfa, which belongs to a group of medicines known as enzyme replacement therapies. It is used to treat patients with neuronal ceroid lipofuscinosis type 2 (CLN2) disease, also known as tripeptidyl peptidase-1 (TPP1) deficiency.

- People with CLN2 disease do not have any enzyme called TPP1 or they have too little of it and this causes a build-up of substances called lysosomal storage materials. In people with CLN2 disease, these materials build-up in certain parts of the body, mainly the brain.

How does Brineura work?

This medicine replaces the missing enzyme, TPP1, which minimises the build-up of the lysosomal storage materials. This medicine works to slow the progression of the disease.

What are the ingredients in Brineura?

Medicinal ingredients: Cerliponase alfa
Non-medicinal ingredients: Calcium chloride dihydrate; Magnesium chloride hexahydrate Potassium chloride; Sodium chloride; Sodium dihydrogen phosphate monohydrate; Sodium phosphate dibasic heptahydrate; Water for injection.

Brineura comes in the following dosage forms:

Solution for Infusion; 150 mg/5 mL (30 mg/mL)

Do not use Brineura if:

- a device has been implanted to drain extra fluid from the brain.
- there are signs of a device infection or problems with the device.
- you are severely allergic to cerliponase alfa or any of the other ingredients of this medicine, including any non-medicinal ingredient, or component of the container (see “What are the ingredients in Brineura” for a complete list of ingredients in Brineura).

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

- Get problems with the implanted device used during treatment with Brineura, including infection or a fault in the device. Some infections may be serious and require immediate medical attention. Signs that you may have an infection include fever, headache, neck stiffness, light sensitivity, nausea, vomiting, and change in mental status. Treatment may be

interrupted if the device needs to be replaced or until the infection clears. Talk to your doctor if you think you may have an infection or have any questions about your device.
- Experience allergic reactions. Your doctor will monitor for symptoms of allergic reactions, such as hives, itching or flushing, swollen lips, tongue, and/or throat, shortness of breath, hoarseness, turning blue around finger tips or lips, low muscle tone, fainting or incontinence.
- Have a history of seizures.
- Have a history of heart problems. Your doctor will check your heart rate, blood pressure, respiratory rate, and temperature before, during, and after treatment. Your doctor will check for abnormal heart electrical activities (ECG) every 6 months. Your doctor or nurse will monitor your heart activity during each infusion. The doctor may decide on additional monitoring if it is needed.

Your doctor may send samples of brain fluid to check for signs of infection.

Tell your healthcare professional about all the medicines you take, including any drugs, vitamins, minerals, natural supplements or alternative medicines. Know the medicines you take. Keep a list of your medicines with you and show it to your healthcare provider when you get a new medicine. Studies to test how Brineura interactions with other medicines have not been done.

How to take Brineura:
You or your child will need to have surgery to implant the device for giving Brineura. The device helps the medicine to reach a specific part of the brain.

Brineura will be given by a doctor with knowledge of giving medicines by intracerebroventricular use (infusion into the fluid of the brain) in a hospital or clinic.

Brineura has not been given to patients younger than 2 years of age or older than 8 years of age (at the start of the clinical trial). There is limited experience in a few patients aged 2 years old.

The medicine is slowly pumped through the implanted device. After the medicine has been given, a shorter infusion of a solution is given to flush Brineura out of the infusion equipment so that the full dose reaches the brain. The medicine and solution will be given over about 2 to 4 hours and 30 minutes according to your or your child's dose. Your doctor may lower the dose or the speed of the infusion based on your response during the treatment.

Your doctor may give you or your child medicines, such as antipyretics to reduce fever or antihistamines to treat allergic reactions before each treatment with Brineura to reduce side effects that can occur during or shortly after treatment.

Usual dose:
The recommended dose of Brineura is based upon you or your child's age, and is given once every other week as follows:

- birth to < 6 months: 100 mg
- 6 months to < 1 year: 150 mg
- 1 year to < 2 years: 200 mg (first 4 doses), 300 mg (all other doses)
- ≥ 2 years: 300 mg

Overdose:
Brineura is administered under the supervision of a health professional, who will check that the correct dose has been given and treat any overdose.

If you think you have been given too much Brineura, contact your healthcare professional, hospital emergency department or regional poison control centre immediately, even if there are no symptoms.

Missed Dose:
If you have missed a Brineura treatment, contact your healthcare professional.

What are possible side effects from using Brineura?
These are not all the possible side effects you may feel when taking Brineura. If you experience any side effects not listed here, contact your healthcare professional.

Side effects may include:

Very common: ≥1/10 (≥10%)
- Fever
- Convulsions (seizures)
- Needle issue (infusion needle falls out of implanted device)
- Increased or decreased protein in the brain fluid
- Abnormal results of heart electrical activity (ECG)
- Increased cells in the spinal fluid detected by laboratory monitoring
- Headache
- Vomiting
- Feeling irritable

Common (frequent): ≥1/100 and <1/10 (≥1% and <10%)
- Rash
- Hives
- Leakage of the device
- Decreased blood pressure
- Feeling nervous
- Slower heart beat

Serious side effects and what to do about them			
Symptom / effect	Talk to your healthcare professional		Stop taking drug and get immediate medical help
	Only if severe	In all cases	
VERY COMMON			
Fever		√	
Convulsion (seizures)		√	√
Increased cells in the spinal fluid detected by laboratory monitoring		√	√
Allergic reactions shortly after being given Brineura		√	√
COMMON			
Device-related bacterial infection		√	√
Leakage of the device		√	√
Needle falls out of implanted device		√	√
Frequency not known			
Inflammation of the brain due to device-related infection		√	√

If you have a troublesome symptom or side effect that is not listed here or becomes bad enough to interfere with your daily activities, talk to 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 (http://www.hc-sc.gc.ca/dhp-mps/medeff/report-declaration/index-eng.php) 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:
Store upright in a freezer (-25°C to -15°C). Transport and distribute frozen (-85°C to -15°C). Store in the original package, in order to protect from light.

Thawed Brineura and flushing solution should be used immediately. Product should only be withdrawn from the unopened vials immediately prior to use. If immediate use is not possible, unopened vials of Brineura or flushing solution should be stored at 2-8°C and used within 24 hours.

Chemical and physical in-use stability has been demonstrated for up to 12 hours at room temperature (19-25°C). From a microbiological point of view, open vials or medicinal product held in syringes should be used immediately. If not used immediately, in-use storage times and conditions prior to use are the responsibility of the user.

Keep out of reach and sight of children.

If you want more information about Brineura:

- 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 (http://hc-sc.gc.ca/index-eng.php); or by calling 1-877-597-6744.

This leaflet was prepared by BioMarin International Limited.

Last Revised December 19, 2018