Brivaracetam (BRIVLERA®): the basics

What is brivaracetam used for?

Brivaracetam has been approved by Health Canada for use in combination with other anti-seizure (anti-epileptic) medications to manage **focal (partial) onset seizures** in people aged 4 years and older with epilepsy who are not adequately controlled with conventional therapy.

Your physician may decide to prescribe this medication for a use different from that approved by Health Canada.

If you have questions about whether this medication is appropriate for you, consult with your physician.

What forms does this medication come in? Is there a generic drug version?

In Canada, brivaracetam is sold under the brand name Brivlera®; it is not available as a generic drug.

Dosage form	Strengths available in Canada	Is it covered by the Ontario Drug Benefit (ODB) program?*
Tablets, oral	10 mg, 25 mg, 50 mg, 75 mg,	The tablets are covered by ODB only when specific clinical criteria have
	and 100 mg	been met. Consult your healthcare professional for more information.
Liquid oral	10 m c /m I	No.
solution	10 mg/mL	
Solution for		No.
intravenous	10 mg/mL	
injection		

^{*}Contact your pharmacist for the most up-to-date information regarding drug availability and coverage.

Before starting brivaracetam, inform your healthcare professional of the following:

- your medical history, especially of allergies; mental health, liver, or kidney problems; or blood disorders
- if you are taking levetiracetam
- if you are pregnant, breastfeeding, or considering pregnancy
- any anti-seizure medications you have used in the past
- your current medications (prescription and nonprescription) and any substances you are taking

Brivaracetam may interact with the following:

- **alcohol**. Drinking alcohol while on brivaracetam is not recommended, because brivaracetam can make the side effects of alcohol worse.
- medications and substances that slow down the nervous system (CNS depressants), including alcohol and other antiseizure medications. These may increase the risk of side effects, such as drowsiness or slowed breathing.
- levetiracetam. Levetiracetam may decrease the effectiveness of brivaracetam; combination therapy is not recommended.
- carbamazepine, phenytoin, phenobarbital, and primidone. There may be an increased risk of side effects and/or brivaracetam may not be as effective in controlling seizures.
- many other medications. This is not a comprehensive list of drug interactions. Inform your healthcare professional about all the medicines (prescription and nonprescription) and substances you are taking, including medications from other prescribers, over-the-counter medications, vitamins, minerals, herbal products, or alternative medicines, so they can check for potential drug interactions. A potential drug interaction may not rule out use of the medications together; dosage adjustments and/or additional monitoring (such as lab work) may be carried out by your healthcare professional; check with your physician or pharmacist.

What are possible side effects from using brivaracetam?

Depending on the individual, side effects may occur at varying degrees or not at all, including:

- dizziness, drowsiness, fatigue, and other side effects that can affect your cognition, alertness, coordination, or vision. It is important to avoid activities requiring mental alertness or physical coordination (such as operating hazardous machines or driving) until you are sure that brivaracetam does not affect your abilities.
- a lower-than-normal number of white blood cells. Your blood work may need to be checked on a regular basis.
- mood or behaviour changes, such as aggression, anger, anxiety, depression, restlessness, irritability, or psychomotor hyperactivity. Psychotic symptoms such as hallucinations, delusions, or paranoia have also been reported in people taking brivaracetam. If you or your caregiver/family notice these symptoms or other unusual changes in behaviour or mood, contact your physician immediately.
- thoughts or actions of self-harm. If you have thoughts of suicide or harming yourself, seek medical help.
- rare but serious, life-threatening allergic reactions that require immediate medical help. These reactions mostly occur during the first few weeks of therapy.

This is not a comprehensive list of possible side effects. Consult with your physician or pharmacist for more information about side effects, including what symptoms to monitor for and what to do about them.

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Tips for using brivaracetam (Brivlera®):

- Take your medication as directed by your physician. Read the medication information sheets given to you by your healthcare professional. If you have any questions, ask your physician or pharmacist.
- This medication works best when taken at evenly-spaced intervals, at about the same times each day.
- Brivaracetam can be taken with or without food.
- Swallow the tablets whole with water; do not crush or chew them.
- For the oral solution, use a calibrated measuring device (such as an oral syringe) to measure the correct amount. A household teaspoon or tablespoon may result in too little or too much medication given.
- If your seizures worsen or you experience new types of seizures, contact your physician.

How will my dose be determined?

In general, your physician will start you on a low dose to decrease the risk of side effects. This dose will be adjusted slowly based on seizure control and any side effects experienced. Other factors such as medical history, potential drug interactions, and, if brivaracetam is for a child, body weight will also be taken into consideration when determining your dose.

The usual maintenance dosage range of brivaracetam is given below; however, your physician may prescribe a different dose for you based on the reasons noted above.

	Usual maintenance dosage range*
Adults, children 50 kg or more	50 to 200 mg per day in 2 divided doses
Children under 50 kg	Consult your child's physician/pharmacist for their specific weight-based dosing range.**

^{*}Your dosage will be individualized based on factors such as indication, medical history, potential drug interactions, clinical response, and tolerability.

What if I miss a dose?

If you miss a dose, take it as soon as you remember. But if it is almost time for your next dose, do not take the missed dose; instead, take your next dose at your usual time. Do not double the dose. If you miss more than 1 dose, contact your healthcare professional for advice.

How do I store this medication?

- Store the brivaracetam tablets and liquid oral solution at room temperature (15 to 30°C) in a dry place away from light and heat. Keep out of reach of children.
- Do not freeze the liquid oral solution or solution for injection.
- Store the liquid oral solution in its original container. Dispose of any remaining liquid after 5 months of first opening the bottle. Ask your pharmacist how to properly dispose of this medication.

Medication blood level test – is it required for brivaracetam?

Routine monitoring of the concentrations (levels) of brivaracetam in your blood is usually not required.

Pregnancy and breastfeeding:

- In general, anti-seizure medications may slightly increase the risk of birth defects. It is important to consult with your healthcare professional for preconception care if you are planning to become pregnant.
- Folic acid supplementation should be started at least 3 months before pregnancy to reduce the risk of birth defects. Speak with your healthcare professional to determine the appropriate dose for you.
- Brivaracetam crosses the placenta during pregnancy. It also passes into the breastmilk. The potential benefits of using this medication during pregnancy or breastfeeding must be weighed against any potential risks to your unborn child or breastfeed baby; consult with your physician. Do not stop taking your medication(s) or adjust your dosage on your own.

Warning

Abrupt withdrawal of any anti-epileptic medication may trigger status epilepticus, a potentially fatal condition of continued seizures without recovery. When there is a need for reduction, discontinuation or substitution of the medication, this should be done gradually and under the physician's care. Never discontinue anti-epileptic medications or make changes in activities unless specifically advised to do so by an attending physician.

This material has been created by Stephanie Chiu, RPh, BCGP, CDE for Epilepsy Toronto in 2024 and is offered to provide general information to the public. It is not intended to be taken as medical advice. Epilepsy Toronto and its advisors accept no liability. Consult your physician and/or neurologist with any questions you may have.

^{**}The dosing chart cannot be reproduced in this document due to space constraints.