

Lacosamide (VIMPAT®): the basics

What is lacosamide used for?

Lacosamide has been approved by Health Canada for use:

- on its own to manage **focal (partial) onset seizures** in adults (aged 18 years and older) with epilepsy.
- in combination with other anti-seizure (anti-epileptic) medications to manage **focal onset seizures** in adults 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, an off-label use.

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, lacosamide is sold under the brand name Vimpat® and also as a generic drug.

| Dosage form | Strengths available in Canada | Is it covered by the Ontario Drug Benefit (ODB) program?* |
|------------------------------------|-----------------------------------|---|
| Tablets, oral | 50 mg, 100 mg, 150 mg, and 200 mg | The tablets are covered by ODB only when specific clinical criteria have been met. Consult your healthcare professional for more information. |
| Solution for intravenous injection | 10 mg/mL | The solution for injection is not covered by ODB and there are no generic versions available in Canada. |

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

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

- your medical history, especially of allergies; heart, kidney, liver, or mental health problems; or blood disorders
- if you have a heart conduction or rhythm disorder, such as heart block or atrial fibrillation
- if you have a mixed seizure disorder that includes generalized onset seizures (lacosamide may worsen myoclonic seizures)
- if you have diabetic neuropathy (nerve damage caused by diabetes)
- 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

Lacosamide may interact with the following:

- **medications and substances that slow down the nervous system (CNS depressants)**, including alcohol and other anti-seizure medications. These may increase the risk of side effects, such as drowsiness or slowed breathing. Limit or avoid drinking alcohol while on lacosamide.
- **medications that can affect how your heart beats**, such as some heart medications, carbamazepine, pregabalin, lamotrigine, and eslicarbazepine. These may increase your risk of side effects with lacosamide.
- **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 lacosamide?

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 lacosamide does not affect your abilities.
- **falling, diarrhea, and tremors**. The risk of these side effects is higher in the elderly.
- **liver injury and lower-than-normal numbers of red blood cells and white blood cells**. These are rare side effects; however, your blood work may need to be checked on a regular basis.
- **heart conduction and rhythm problems**. If you have a history of heart disease, tell your physician.
- **mood or behaviour changes**, like depression or agitation; thoughts or actions of self-harm may occur rarely. If you or your caregiver/family notice these symptoms or other unusual changes in behaviour/mood, contact your physician.
- **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.

Lacosamide (VIMPAT®): the basics

Tips for using lacosamide (Vimpat®):

- 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.
- Swallow the lacosamide tablets whole with water; do not crush or chew them. They can be taken with or without food.
- 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 and potential drug interactions will also be taken into consideration when determining your dose.

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

| Usual maintenance dosage range* | |
|---------------------------------|---|
| Adults | 200 to 400 mg per day in 2 divided doses |
| Children | This is an off-label use in Canada. Consult your child's physician or pharmacist.** |

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

**The weight-based dosing charts cannot be reproduced in this document due to space constraints.

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 lacosamide tablets at room temperature (15 to 30°C) in a dry place away from light and heat. Keep out of reach of children.

Medication blood level test – is it required for lacosamide?

- Routine monitoring of the concentrations (levels) of lacosamide in your blood is usually not required.
- Lacosamide levels can drop during pregnancy. If you are planning to become pregnant, your physician may monitor your levels before, during, and after your pregnancy.
- Unless otherwise instructed by your physician, lacosamide levels should be drawn just before your next dose is due (trough level).

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.
- Lacosamide crosses the placenta during pregnancy. It passes into the breast milk. The potential benefits of using this medication during pregnancy or breastfeeding must be weighed against any potential risks to your unborn child or breastfed 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.