



What is this medication used for?

Clozapine was first developed to treat psychotic illnesses such as schizophrenia. Clozapine is not approved by Health Canada for use in children and adolescents. However, research shows clozapine can be used for treatment-resistant schizophrenia in children and adolescents and can also help treat bipolar disorder and schizoaffective disorder.

When potential benefits outweigh risks, clozapine may be prescribed “off-label.” Learn more about off-label medication use:



<http://bit.ly/KMH-off-label-use>

Tell your doctor or pharmacist if you:

- Have allergies or bad reactions to a medication
- Take (or plan to take) other prescription or non-prescription medications, including natural medicines. Some medications interact with clozapine. Your doctor may adjust medication doses or monitor for side effects
- Have a history (or family history) of kidney, liver or bone marrow disease, seizures, bowel obstruction, diabetes, glaucoma or abnormal blood counts
- Have a history (or family history) of heart disease, arrhythmia or “familial long QT syndrome”
- Miss a period, are pregnant, breast-feeding or planning a pregnancy
- Use alcohol or drugs. Taking clozapine together with certain substances may cause a bad reaction. Learn more at www.DrugCocktails.ca



When will the medication start to work?

Some improvements may be seen within 3 to 6 weeks. However, full beneficial effects may take 6 to 12 months. You (or your family members) may notice clearer thoughts, stable mood, and less agitation or intense fears. If you experience seeing, hearing or feeling things that are not there, this may also decrease or stop entirely.

It is important that you continue taking clozapine regularly even if you are feeling well, as it can prevent symptoms from returning. Talk with your doctor if you feel clozapine treatment has not been helpful. Your doctor may recommend adding another medication or switching you to a different medication.



Possible common or serious side effects:

Side effects may be more common when starting a medication or after a dose increase. Talk to your doctor, nurse or pharmacist if any side effect concerns you.

- Dizziness, drowsiness, headache or visual disturbances
- Feelings of agitation or restlessness
- Nausea, constipation or dry mouth
- Increased appetite or weight gain
- Increased salivation, sweating or tremors
- Increased blood glucose or cholesterol levels

Contact your doctor immediately if you experience:

- Unexplained rash, seizure, fever or excessive sweating
- Flu-like symptoms such as extreme tiredness, chills, sore throat or other signs of infection
- Unexplained swelling or pain in one or both legs
- Chest pain or fast or irregular heartbeat
- Shortness of breath at rest or after activity
- Frequent urination accompanied by excessive thirst or difficulty urinating
- Shaking, muscle spasm/stiffness, pain or weakness
- Unusual movements of fingers, toes, neck, lips or tongue (may indicate a rare side effect called “tardive dyskinesia”)
- Thoughts of hurting yourself, suicide, increased hostility or worsening symptoms



This medication is not addictive. Do not stop taking it before talking to your doctor.



How do I take this medication?

Clozapine is usually taken once or twice a day, at the same time(s) each day. You may take clozapine with or without food, but avoid taking antacids (such as Maalox or Tums) or carbonated beverages within 2 hours of your clozapine dose. Usually, you will start with a low dose and slowly increase this dose over several days or weeks, based on how you tolerate it.

What precautions should my doctor and I be aware of when taking this medication?

- When you take this medication, your body may have difficulty maintaining a normal body temperature. Drink enough fluids to avoid becoming dehydrated. Avoid doing a lot of physical activity on hot days.
- While taking this medication, if you feel dizzy, drowsy or slowed down, do not drive a car or operate heavy machinery. Alcohol could make this worse. Try to avoid alcohol while taking clozapine.
- Clozapine levels can be affected by smoking cigarettes. Let your doctor know if you start or stop smoking, or change your smoking habits.
- Clozapine can cause a rare side effect called “neuroleptic malignant syndrome.” Symptoms include severe muscle stiffness, high fever, sweating, increased or irregular heartbeat and increased blood pressure.

How does this medication work?

Like other antipsychotics, clozapine affects actions of the brain chemicals dopamine and serotonin. Clozapine also decreases the actions of other brain chemicals (like norepinephrine, histamine and acetylcholine). The exact way that clozapine improve symptoms of schizophrenia, bipolar disorder and other conditions is not known.

Why do I have to have regular blood tests while taking this medication?

Clozapine is known to cause an uncommon but serious side effect called “agranulocytosis,” which can result in a decrease in infection-fighting cells (neutrophils and white blood cells) in your body. If this happens, your body may not be able to fight off infections and you could become very sick. This occurs in less than 1 out of every 100 people who take clozapine. Initially, you will be asked to get blood tests once weekly. This will become less frequent over time. However, if your neutrophil or white blood cell count drops, you may be asked to temporarily have testing done twice a week or instructed on how to safely stop taking clozapine (in severe cases), which will allow your body to make more infection-fighting cells.

How well does the medication work in children and adolescents?

Available evidence supports the use of clozapine in children and adolescents with schizophrenia, schizoaffective disorder and bipolar disorder when other treatments (usually 2 or more) have not been effective. Clozapine was found to be effective in about two-thirds of children and adolescents with schizophrenia who did not get better with other treatments. Clozapine may also be helpful for suicide prevention and for decreasing aggressive behaviours and psychotic symptoms.

How long should I take the medication for?

This depends on the symptoms you have, how frequently they occur, and how long you have had them. If you have schizophrenia or schizoaffective disorder and you tolerate clozapine well, you may be asked to take clozapine on an ongoing basis. Continuing treatment will significantly decrease the chance that your symptoms will return. As it may take several months to see the full benefits of taking clozapine, do not increase, decrease, or stop taking this medication without talking with your doctor. If you stop taking clozapine suddenly, it is possible that your symptoms may return or you may have a bad reaction.

What special instructions should I follow while using this medication?

- Keep all appointments with your doctor and the lab. Your doctor may order lab tests to check how you are responding and monitor for side effects.
- Try to keep a healthy, well-balanced diet and exercise regularly. Some people may gain weight as a result of increased appetite.
- Do not allow anyone else to use your medication.

What should I do if I forget to take a dose of this medication?

If you take clozapine several times a day and forget to take a dose, take the missed dose as soon as you remember within 2 hours. If it is more than 2 hours after your scheduled dose, skip the missed dose and continue with your regular schedule. DO NOT double your next dose to try to ‘catch up’.

If you take clozapine once daily in the evening and forget to take a dose, take it as soon as you remember before going to sleep. If you remember after waking up in the morning, skip the missed dose and continue regularly with your next scheduled dose.

How do I store this medication?

Keep this medication in the original container, stored at room temperature away from moisture and heat and protected from light. Keep this medication out of reach and sight of children.



TIP: Use the Kelty Mental Health *Antipsychotic Monitoring Form for Children and Adolescents* to help measure your progress on this medication. https://bit.ly/ap_monitoring

Also see the Kelty Mental Health document *Atypical Antipsychotics & Metabolic Monitoring*. https://bit.ly/ap_info