

Medications for Alzheimer's disease: are they right for you?

There are no medications today that can cure Alzheimer's disease. But there are medications approved by Health Canada which can help with some of the symptoms for a period of time or slow the rate of progression of the condition.

When you or someone you support is diagnosed with Alzheimer's disease, it's important to talk to a health-care team about whether or not the medications available are right for you or the person you support.

This sheet will provide you with information about medications for Alzheimer's disease such as potential benefits, common side effects and when to start or stop taking medications. Knowing what to expect from medications can help you or the person you support make an informed decision about whether to take one or more medications.

What medications are available?

The medications approved by Health Canada to treat Alzheimer's disease include cholinesterase inhibitors and an N-methyl-D-aspartate (NMDA) receptor antagonist. These medications have been available for many years and a lot has been learned about their potential benefits, limitations and side effects.

The cholinesterase inhibitors available are called donepezil (doe-NEP-e-zil), galantamine (ga-LAN-ta-meen) and rivastigmine (RIV-a-STIG-meen). These medications are believed to work by preventing the breakdown of a chemical in the brain called acetylcholine, which is important for learning and memory. In Alzheimer's disease, nerve cells that make acetylcholine are lost, causing lower levels of acetylcholine in the brain. These medications provide an increased concentration of it, which may temporarily ease or stabilize some of the person's symptoms. These types of medications are approved for people in early, middle and late stages of Alzheimer's disease.

The NMDA receptor antagonist called memantine (me-MAN-teen) is thought to work by blocking the effect of too much glutamate, a brain chemical which helps to send messages between brain cells. Glutamate is released in excessive amounts when brain cells are damaged by Alzheimer's disease. Memantine is only approved for middle to late stages of Alzheimer's disease. It is often used when people have trouble taking cholinesterase inhibitors.

The following is a list of the some of the generic and brand names used for the cholinesterase inhibitors and NMDA receptor antagonist.

Generic name	Brand name
Donepezil (cholinesterase inhibitor) Note: Medications may be prescribed with other prefixed versions of this name such as Apo-Donepezil.	Aricept™
Galantamine (cholinesterase inhibitor) Note: Medications may be prescribed with other prefixed versions of this name such as Auro-Galantamine.	
Rivastigmine (cholinesterase inhibitor) Note: Medications may be prescribed with other prefixed versions of this name such as Apo-Rivastigmine.	Exelon™
Memantine (NMDA receptor antagonist) Note: Medications may be prescribed with other prefixed versions of this name such as Apo-Memantine.	Ebixa®

Are these medications covered by provincial/territorial health insurance plans?

Medication coverage varies depending on the province/territory you live in. Individuals may be required to cover some of the costs associated with these medications. The person must meet specific criteria in their province/territory to be entitled to coverage for medications. These medications may also be covered by private insurance plans. It is also important to know that as a person's condition progresses, some insurance plans may stop covering the costs associated with these medications. If this happens, you will have to decide (after discussing with your health-care team) whether taking these medications is worth the cost.

How effective are these medications?

Benefits can be small and difficult to notice, even for a health-care provider or someone who knows the person with dementia well. It also may take several months to notice the benefits. Some people will benefit from taking these medications, and others will not. Some of the improvements that you might notice include:

- Less cognitive decline. There may be improvements in memory, concentration and attention.
- Less functional decline. The person may be more engaged in daily activities (such as cooking and personal care), more motivated to do things, calmer and more communicative.

Some people treated with these medications will not show any significant improvement, but their condition may remain the same or not progress as quickly as it did before starting treatment. Because Alzheimer's disease is progressive and gets worse over time, it may take

more than six months to notice a change. Check with your health-care team to find out if it is time to change medications if you do not notice any benefits. If these medications are stopped because they do not seem to be helping, the person being treated should be watched for the next few weeks to see if they experience significant negative changes. This would suggest that there were benefits from the medication that were not easy to notice before. If this happens, consider restarting the medication.

Are these medications effective for other types of dementia or mild cognitive impairment?

Donepezil and rivastigmine can be used to treat Lewy body dementia. Rivastigmine can also be used to treat Parkinson's disease dementia. There is not enough evidence to support the use of cholinesterase inhibitors or memantine in people with vascular dementia. However, for people with a combination of Alzheimer's disease and vascular dementia (known as mixed dementia), cholinesterase inhibitors may be used when Alzheimer's disease is thought to be the main cause of the dementia symptoms.

These medications are generally not approved for mild cognitive impairment (MCI). Also, using these medications does not significantly reduce the risk of progression of MCI to Alzheimer's disease or other type of dementia.

Dementia affects each person differently and what works for one person may not work for another. For more information about medications available to treat a particular type of dementia, or symptoms that are affecting you or the person you support, talk to a health-care team. They can be helpful in assessing signs of dementia and prescribing treatment.

What are the common side effects of medications for Alzheimer's disease?

Some of the common side effects of the cholinesterase inhibitors and NMDA receptor antagonist are listed below.

Medication	Common side effects
Donepezil, galantamine and rivastigmine* *Note: Rare but more serious side effects can include: losing consciousness from a slow heart rate, muscle breakdown, and a serious skin reaction.	<ul style="list-style-type: none">• Nausea, vomiting, and/or diarrhea• Loss of appetite and anorexia• Dizziness• Fatigue• Insomnia, abnormal dreams
Memantine	<ul style="list-style-type: none">• Constipation or diarrhea• Headaches• Dizziness• Depression• Confusion• High blood pressure

A very common side effect of cholinesterase inhibitors is stomach upset. These types of side effects sometimes lessen or go away over time or with reduced dosage. Medications are usually started at the lowest dose available, to minimize side effects. If the person is tolerating the medication when started, the dosage is usually increased slowly to an effective amount. How these medications are taken and whether the person is taking other medications can increase the risk of side effects. If the side effects outweigh the benefits or are intolerable, the medication should be stopped.

It is important to discuss any side effects with your health-care team, as well as interactions of the medication with any other drugs you may be taking. **If the person experiences dizziness, a slower heart rate, falls, headaches, or unintended weight loss, contact your health-care team as soon as possible.**

When should you start taking a medication for Alzheimer's disease and for how long?

After being diagnosed, if there are no other symptoms or health conditions that could make taking these medications too dangerous or inappropriate for the person living with Alzheimer's disease, doctors often suggest a trial of one of these medications. Most people treated with these medications can tolerate them and will experience some benefit. This is why it is important to start treatment as soon as possible after Alzheimer's disease or other dementia symptoms are experienced. The decision about whether to start treatment should be decided by the person who will take the medication and/or their substitute decision-maker.

The person taking the medication and/or their substitute decision-maker can also choose to stop treatment at any time. Reasons for not taking the medication might include: no clear

benefit, a safety concern, side effects that are too difficult to manage, or the person dislikes or does not want to take the medication. Before changing the dosage of medication or stopping treatment, check with your health-care team.

To benefit from these medications and minimize side effects, the person should take the medications as prescribed. If taking these medications is challenging, ask your pharmacist for advice, such as having medications blister packaged. If a long time has passed since taking these medications, when restarted the dosage will have to be slowly increased.

If the person is benefiting from the medication without any significant side effects, it is often recommended that they continue taking it until they are in an advanced stage of the condition. At this stage they may be no longer able to communicate, be bed-bound and/or need assistance for care.

How can you tell if the medications are helping?

The different types of dementia medications all seem to be equally effective, but individuals may tolerate or experience more benefits with one medication over another because each medication is slightly different. Because the potential benefits of these medications are small, it can be challenging to notice whether the medication is helping. First, find out if the medication is safe for you or the person you support and that side effects (if any) can be tolerated.

Looking for positive changes in the person's abilities and interactions with others can be better than cognitive testing at telling if the medications are helping. Tests may not be sensitive enough to show the small benefits that a person could be experiencing from taking medication.

Here are some questions for caregivers to ask themselves to help find out if medications are working:

- Does the person seem more engaged, communicative, social or alert?
- Is the person more motivated to do some of the things that they enjoyed doing in the past?
- Is the person able to complete tasks such as personal care?
- Does the person seem less anxious, less easily frustrated or happier?

These small improvements may have a significant benefit on the person's daily quality of life and may also help reduce caregiver stress. Noticing no change in the person for a long time may also be a positive benefit because it suggests that the medication is slowing the progression of the condition, especially if the person had been noticing changes before starting treatment.

It can be helpful for the person and/or caregivers to talk with their health-care team about any changes they have noticed. You might want to make some notes about symptoms or changes in a diary for a follow-up appointment with your doctor. Make notes about symptoms or daily activities that you were concerned about before treatment. This information will be useful

and important in helping to make the right decisions about continuing, changing or stopping treatment.

What other treatment options are available?

As medications are only one part of the overall care for a person, people living with dementia should also consider:

- maintaining a healthy diet
- participating in physically, cognitively and socially stimulating activities
- receiving pet therapy, music therapy, aromatherapy or massage therapy
- getting Cognitive Behavioural Therapy (CBT), cognitive rehabilitation or behavioural therapy

These recreational, complementary or alternative treatments are being increasingly used in combination with medications; however, more research is needed to determine their effectiveness.

Be cautious about taking supplements or health products for Alzheimer's disease or other dementias. More research is needed to confirm the potential benefits and risks of taking supplements to reduce the symptoms of dementia. Before taking any supplements or health products, talk with your health-care team to find out whether there are any risks. For more information see alzheimer.ca/alternativetreatments or contact your local Alzheimer Society at alzheimer.ca/find or 1-855-705-4636.

Ready to talk with your health-care team?

If the person living with Alzheimer's disease or other dementia does not have any other health conditions that could make taking these medications a risk for them, these medications are an option. If you have accurate information and realistic expectations about the potential benefits and possible side effects of these medications, you'll be ready and prepared to talk with your health-care team about whether these medications are right for you.

This resource is informed by research. We thank Dr. David Hogan, Professor, University of Calgary; Dr. Feng Chang, Associate Professor, University of Waterloo and Dr. Tejal Patel, Clinical Associate Professor, University of Waterloo for their generous contribution to the development of this resource.

The contents of this document are provided for informational purposes only, and do not represent advice, an endorsement or a recommendation, with respect to any product, service or enterprise, and/or the claims and properties thereof, by the Alzheimer Society of Canada. To provide feedback on this factsheet, please email publications@alzheimer.ca.

Alzheimer Society

Alzheimer Society of Toronto

20 Eglinton Avenue West, 16th Floor, Toronto, Ontario, M4R 1K8

Tel: 416-322-6560 • E-mail: info@alz.to • Website: www.alz.to



Charitable registration number: 10670 5262 RR0001