

# How Is Alzheimer's Disease Treated?

[Español](#)



Several prescription drugs are approved by the U.S. Food and Drug Administration (FDA) for Alzheimer's disease to help either manage the symptoms of or to treat the disease. Most FDA-approved drugs work best for people in the early or middle stages of Alzheimer's. There are currently no known interventions that will cure Alzheimer's.

## Medications for mild to moderate Alzheimer's disease

Treating the symptoms of Alzheimer's can help provide people with comfort, dignity, and independence for a longer period of time and also assist their caregivers. Galantamine, benzgalantamine, rivastigmine, and donepezil are cholinesterase inhibitors that are prescribed for mild to

moderate Alzheimer's symptoms. These drugs may help reduce or control some [cognitive and behavioral symptoms](#).

Cholinesterase inhibitors prevent the breakdown of acetylcholine, a brain chemical believed to be important for [memory and thinking](#). As Alzheimer's progresses, the brain produces less acetylcholine and, over time, these medicines lose their effectiveness. Because cholinesterase inhibitors work in a similar way, switching from one to another may not produce significantly different results, but a person living with Alzheimer's may respond better to one drug versus another.

[Lecanemab](#) and [donanemab](#) are FDA-approved immunotherapy drugs for the treatment of early Alzheimer's. These drugs target the protein beta-amyloid to help reduce amyloid plaques, one of the hallmark brain changes in Alzheimer's. Clinical studies to determine the effectiveness of lecanemab and donanemab were conducted in people with early-stage Alzheimer's or mild cognitive impairment due to the disease. These studies showed that the drugs slowed the rate of cognitive decline among some study participants over the course of 18 months and reduced the levels of amyloid in the brain. Currently, insurance may only cover these medications in specific situations. [Medicare Part B](#) covers part of the cost of these medications for patients who meet certain medical criteria.

Before prescribing lecanemab or donanemab, doctors may order PET scans or an analysis of cerebrospinal fluid to evaluate whether amyloid deposits are present in the brain. Possible side effects of these medications include amyloid-related imaging abnormalities (ARIA), which can lead to fluid buildup or bleeding in the brain. In rare instances, the side effects may be serious or life-threatening. Due to these potential risks, doctors should monitor for side effects with MRIs.

Several other medications to treat Alzheimer's are being tested in people with mild cognitive impairment or early Alzheimer's.

## **Medications for moderate to severe Alzheimer's disease**

A medication known as memantine, an N-methyl-D-aspartate (NMDA) antagonist, can be prescribed for moderate to severe Alzheimer's. This drug is prescribed to decrease symptoms, which could enable some people to maintain certain daily functions a little longer than they would without the medication. For example, memantine may help a person in the later stages of the disease maintain their ability to use the bathroom independently for several more months, a benefit for both people with Alzheimer's and their caregivers.

Memantine is believed to work by regulating glutamate, an important brain chemical. When produced in excessive amounts, glutamate may lead to brain cell death. Because NMDA antagonists work differently from cholinesterase inhibitors, the two types of drugs can be prescribed in combination.

The FDA has also approved donepezil, the rivastigmine patch, and a combination medication of memantine and donepezil for moderate to severe Alzheimer's.

Brexpiprazole is an atypical antipsychotic that has been approved to treat agitation associated with Alzheimer's. See below for more information on managing behavioral symptoms and antipsychotics.

## **Dosage and side effects of Alzheimer's disease medications**

Doctors usually start patients at low drug doses and gradually increase the dosage based on how well a patient tolerates it. There is some evidence that certain people may benefit from higher doses of Alzheimer's medications. However, the higher the dose, the more likely unwanted side effects will occur.

Patients should be monitored when a drug is started. All of these medicines have possible side effects that may include

nausea, vomiting, diarrhea, allergic reactions, loss of appetite, headaches, confusion, dizziness, and falls. Report any unusual symptoms to the prescribing doctor right away.

It is important to follow your doctor's instructions when taking any medication, including [vitamins and herbal supplements](#). Talk with your doctor before adding or changing any medications.

## **Alzheimer's disease medications**

The following list provides an overview of Alzheimer's medications. Talk with your health care providers about your options and which ones may be most appropriate for you.

### *FDA-approved medications to manage symptoms*

- Brexpiprazole. *Atypical antipsychotic.* Treats agitation resulting from Alzheimer's. Possible side effects include common cold symptoms, dizziness, high blood sugar, and stroke. Read more about [brexpiprazole](#) on MedlinePlus.
- Donepezil. *Cholinesterase inhibitor.* Treats symptoms of mild, moderate, and severe Alzheimer's by preventing the breakdown of acetylcholine in the brain. Possible side effects include nausea, vomiting, diarrhea, insomnia,

muscle cramps, fatigue, and weight loss. Read more about [donepezil](#) on MedlinePlus.

- Galantamine. *Cholinesterase inhibitor.* Treats symptoms of mild to moderate Alzheimer's by preventing the breakdown of acetylcholine and stimulates nicotinic receptors to release more acetylcholine in the brain. Possible side effects include nausea, vomiting, diarrhea, decreased appetite, weight loss, dizziness, and headache. Read more about [galantamine](#) on MedlinePlus.
- Benzgalantamine. *Cholinesterase inhibitor.* The active component of this compound, galantamine, treats symptoms of mild to moderate Alzheimer's disease. Benzgalantamine was developed to reduce some of the side effects associated with galantamine, including digestive upset. Galantamine prevents the breakdown of acetylcholine and stimulates nicotinic receptors to release more acetylcholine in the brain. Read more about [benzgalantamine](#) on MedlinePlus.
- Memantine. *NMDA antagonist.* Treats symptoms of moderate to severe Alzheimer's by blocking the toxic effects associated with excess glutamate and regulates glutamate activation. Possible side effects include dizziness, headache, diarrhea,

constipation, and confusion. Read more about [memantine](#) on MedlinePlus.

- Memantine and Donepezil (manufactured combination). *NMDA antagonist*. Treats symptoms of moderate to severe Alzheimer's by blocking the toxic effects associated with excess glutamate and prevents the breakdown of acetylcholine in the brain. Possible side effects include headache, nausea, vomiting, diarrhea, dizziness, anorexia, and ecchymosis (small bruising from leaking blood vessels). Read more about [memantine](#) and [donepezil](#) on MedlinePlus.
- Rivastigmine. *Cholinesterase inhibitor*. Treats symptoms of mild, moderate, and severe Alzheimer's by preventing the breakdown of acetylcholine and butyrylcholine (a chemical similar to acetylcholine) in the brain. Possible side effects include nausea, vomiting, diarrhea, weight loss, indigestion, decreased appetite, anorexia, and muscle weakness. Read more about the [liquid and capsule forms of rivastigmine](#) and the [transdermal patch form of rivastigmine](#) on MedlinePlus.

#### FDA-approved medications to treat Alzheimer's

- Lecanemab. *Disease-modifying immunotherapy*. Treats mild cognitive impairment or mild Alzheimer's by removing abnormal beta-amyloid to

help reduce the number of plaques in the brain. Possible side effects include brain swelling and bleeding, headache, cough, diarrhea, nausea, vomiting, fever, chills, body aches, fatigue, high blood pressure, low blood pressure, and low oxygen. Read more about [lecanemab](#) on MedlinePlus.

- Donanemab. *Disease-modifying immunotherapy.* Treats mild cognitive impairment or mild Alzheimer's by removing abnormal beta-amyloid to help reduce the number of plaques in the brain. Possible side effects include brain swelling and bleeding, headache, confusion, dizziness, vision changes, nausea, seizures, and difficulty walking. Read more about [donanemab](#) on MedlinePlus.

## Managing behavioral symptoms of Alzheimer's disease

Common behavioral symptoms of Alzheimer's include [sleeplessness](#), [wandering](#), [agitation](#), anxiety, aggression, restlessness, and depression. Scientists are learning why these symptoms occur and are studying new treatments – drug and non-drug – to manage them. Research has shown that treating behavioral symptoms can provide comfort for people with Alzheimer's and make things easier for [caregivers](#).

Experts agree that medicines to treat these behavior problems should be used only after other non-drug strategies have been tried. Learn more about [behavioral changes in people with Alzheimer's disease and ways to cope](#).

## **Medicines to be used with caution in people with Alzheimer's disease**

Some medicines, such as sleep aids, anti-anxiety drugs, anticonvulsants, and antipsychotics warrant extra caution for people living with Alzheimer's. These drugs should only be considered as options after:

- A doctor has explained all the risks and side effects of the medicine
- Other, safer non-drug options have not helped treat the problem

People living with Alzheimer's and their caregivers must watch for side effects from these medications.

Sleep aids are used to help people get to sleep and stay asleep. People with Alzheimer's should *not* use these drugs regularly because they make the person more confused and more likely to [fall](#). There are lifestyle changes people can make to improve their sleep. Learn more about [getting a good night's sleep](#).

Anti-anxiety drugs are used to treat agitation. Certain types of anti-anxiety drugs, such as benzodiazepines, can cause sleepiness, dizziness, falls, and confusion. For this reason, doctors recommend they only be used for short periods of time, if at all.

Anticonvulsants are drugs sometimes used to treat severe aggression. Side effects may cause sleepiness, dizziness, mood swings, and confusion.

Antipsychotics are drugs used to treat hallucinations, delusions, and paranoia, and agitation and aggression. Their side effects can be serious, including increased risk of death in some older people with dementia. These medications should only be given to people with Alzheimer's when the doctor agrees the symptoms are severe.

## **The future of Alzheimer's disease treatments**

Alzheimer's researchers continue to explore a variety of innovative approaches to treat symptoms as well as underlying disease processes. In ongoing clinical trials, they are developing and testing several new possible interventions. These include additional immunotherapy and other drug therapies, cognitive training, diet, and physical activity.