

Medications for Memory, Cognition and Dementia-Related Behaviors

Although current medications cannot cure Alzheimer's, two U.S. Food and Drug Administration (FDA)-approved treatments address the underlying biology.

Other medications may help lessen symptoms, such as memory loss and confusion.

- FDA-approved drugs for Alzheimer's
Treatments at a glance
Participate in clinical studies

The FDA has approved medications that fall into two categories: **drugs that change disease progression in people living with early Alzheimer's disease**, and **drugs that may temporarily mitigate some symptoms of Alzheimer's dementia**.

When considering any treatment, it is important to have a conversation with a health care professional to determine whether it is appropriate. A clinician who is experienced in using these types of medications should monitor people who are taking them and ensure that the recommended guidelines are strictly observed.

Drugs that change disease progression

Drugs in this category slow disease progression by going after the underlying biology of the disease process. They aim to slow the decline of memory and thinking, as well as function, in people living with Alzheimer's disease.

Anti-amyloid treatments work by attaching to and removing beta-amyloid, a protein that accumulates into plaques, from the brain. Each works differently and **targets beta-amyloid at a different stage of plaque formation**.

- **Aducanumab (Aduhelm™)**

Aducanumab is an anti-amyloid antibody intravenous (IV) infusion therapy approved for early Alzheimer's disease, including people living with mild cognitive impairment (MCI) or mild dementia due to Alzheimer's disease.

Aducanumab was the first therapy to demonstrate that removing beta-amyloid from the brain reduces cognitive and functional decline in people living with early Alzheimer's.

Aducanumab is indicated for the treatment of Alzheimer's disease.

The drug was studied in people living with early Alzheimer's disease — which includes people with mild cognitive impairment (MCI) or mild dementia due to Alzheimer's disease who also have evidence of a buildup of amyloid plaques in the brain. Treatment with aducanumab may be appropriate for people in the disease stage studied in the clinical trials.

There is no safety or effectiveness data on initiating treatment at earlier or later stages of the disease than were studied.

Some clinical trial participants who received aducanumab experienced **reduction in cognitive decline** observed through measures of cognition and function.

- Examples of cognition measures include:
Memory.
Orientation.
- Examples of functional measures include:
Conducting personal finances.
Performing household chores such as cleaning.

The most common side effects include amyloid-related **imaging abnormalities (ARIA), headache and fall**. Another potentially serious side effect is allergic reaction. ARIA is a common side effect that does not usually cause symptoms but can be serious. It is typically a temporary swelling in areas of the brain that usually resolves over time. Some people may also have small spots of bleeding in or on the surface of the brain with the swelling, although most people with swelling in areas of the brain do not have symptoms. Some may have symptoms of ARIA such as headache, dizziness, nausea, confusion and vision changes.

- **Lecanemab (Leqembi™)**

Lecanemab (Leqembi™) is an anti-amyloid antibody intravenous (IV) infusion therapy approved for early Alzheimer's with confirmation of elevated beta-amyloid.

This drug is approved for people with early Alzheimer's disease (mild cognitive impairment (MCI) or mild dementia due to Alzheimer's disease). These people should also have confirmation of elevated beta-amyloid plaques in the brain.

The most common reported serious side effects were infusion-related reactions and amyloid-related imaging abnormalities (ARIA), a common side effect that does not usually cause symptoms but can be serious. It is typically a temporary swelling in areas of the brain. It usually resolves over time.

Drugs that treat symptoms

Cognitive symptoms (memory and thinking)

As Alzheimer's progresses, brain cells die and connections among cells are lost, causing cognitive symptoms to worsen. While these medications do not stop the damage Alzheimer's causes to brain cells, they may help lessen or stabilize symptoms for a limited time by affecting certain chemicals involved in carrying messages among and between the brain's nerve cells.

The following medications are prescribed to treat symptoms related to memory and thinking.

Cholinesterase inhibitors (Aricept®, Exelon®, Razadyne®)

Cholinesterase (KOH-luh-NES-ter-ays) inhibitors are prescribed to treat symptoms related to memory, thinking, language, judgment and other thought processes. These medications prevent the breakdown of acetylcholine (a-SEA-til-KOHlean), a chemical messenger important for memory and learning. These drugs support communication between nerve cells.

The cholinesterase inhibitors most commonly prescribed are:

- **Donepezil (Aricept®):** approved to treat all stages of Alzheimer's disease.
- **Rivastigmine (Exelon®):** approved for mild-to-moderate Alzheimer's as well as mild-to-moderate dementia associated with Parkinson's disease.
- **Galantamine (Razadyne®):** approved for mild-to-moderate stages of Alzheimer's disease. Though generally well-tolerated, if side effects occur, they commonly include nausea, vomiting, loss of appetite and increased frequency of bowel movements.

Glutamate regulators (Namenda®)

Glutamate regulators are prescribed to improve memory, attention, reason, language and the ability to perform simple tasks. This type of drug works by regulating the activity of glutamate, a different chemical messenger that helps the brain process information. This drug is known as:

- **Memantine (Namenda®):** approved for moderate-to-severe Alzheimer's disease. Can cause side effects, including headache, constipation, confusion and dizziness.
- **Cholinesterase inhibitor + glutamate regulator (Namzaric®)**
This type of drug is a combination of a cholinesterase inhibitor and a glutamate regulator.
- **Donepezil and memantine (Namzaric®):** approved for moderate-to-severe Alzheimer's disease. Possible side effects include nausea, vomiting, loss of appetite, increased frequency of bowel movements, headache, constipation, confusion and dizziness.

Non-cognitive symptoms (behavioral and psychological symptoms)

Alzheimer's affects more than just memory and thinking. A person's quality of life may be impacted by a variety of behavioral and psychological symptoms that accompany dementia, such as sleep disturbances, agitation, hallucinations and delusions. Some medications focus on treating these non-cognitive symptoms for a time, though it is important to try non-drug strategies to manage behaviors before adding medications.

At this time, the FDA has approved one drug to address symptoms of insomnia that has been tested in people living with dementia, but trials testing drugs that address other non-cognitive symptoms are underway.

- **Orexin receptor antagonist (Belsomra®)**

Prescribed to treat insomnia, this drug inhibits the activity of orexin, a type of neurotransmitter involved

in the sleep-wake cycle:

- **Suvorexant (Belsomra®):** approved for treatment of insomnia and has been shown in clinical trials to be effective for people living with mild to moderate Alzheimer's disease. Possible side effects include, but are not limited to: risk of impaired alertness and motor coordination (including impaired driving), worsening of depression or suicidal thinking, complex sleep behaviors (such as sleep-walking and sleep-driving), sleep paralysis and compromised respiratory function.

Medication safety

Before beginning a new medication, make sure your physician and pharmacist are aware of all medications, dietary supplements or other products currently being taken (including over-the-counter and alternative preparations). This is important to make certain medications will not interact with one another, causing side effects.

Participate in clinical studies

Scientists have made remarkable progress in understanding how Alzheimer's disease affects the brain.

Ultimately, the path to effective therapies is through clinical studies. Learn more about Alzheimer's Association TrialMatch®, a free clinical studies matching service, and how you can participate in vital Alzheimer's disease research. Recruiting and retaining trial participants is now the greatest obstacle, other than funding, to developing the next generation of Alzheimer's treatments. Individuals living with dementia, caregivers and healthy volunteers are all needed to participate in clinical studies focused on Alzheimer's and other dementias. Treatments at a glance

Change disease progression

Name (Generic/Brand) Indicated For

Common Side Effects

Aducanumab Aduhelm™	Alzheimer's disease (MCI or mild dementia)	ARIA, headache and falls
Lecanemab Leqembi™	Alzheimer's disease (MCI or mild dementia)	ARIA, infusion-related reactions

Treats cognitive symptoms (memory and thinking)

Name (Generic/Brand)	Indicated For	Common Side Effects
Donepezil Aricept®	Mild to severe dementia due to Alzheimer's	Nausea, vomiting, loss of appetite, muscle cramps and increased frequency of bowel movements.
Galantamine Razadyne®	Mild to moderate dementia due to Alzheimer's	Nausea, vomiting, loss of appetite and increased frequency of bowel movements.
Rivastigmine Exelon®	Mild to moderate dementia due to Alzheimer's or Parkinson's	Nausea, vomiting, loss of appetite and increased frequency of bowel movements.
Memantine Namenda®	Moderate to severe dementia due to Alzheimer's	Headache, constipation, confusion and dizziness.
Memantine + Donepezil Namzaric®	Moderate to severe dementia due to Alzheimer's	Nausea, vomiting, loss of appetite, increased frequency of bowel movements, headache, constipation, confusion and dizziness.

Treats non-cognitive symptoms (behavioral and psychological)

**Name
(Generic/Brand)**

Indicated For

Common Side Effects

Suvorexant
Belsomra®

Insomnia, has been shown to be effective in people living with mild to moderate Alzheimer's disease

Impaired alertness and motor coordination, worsening of depression or suicidal thinking, complex sleep behaviors, sleep paralysis, compromised respiratory function.