

## Treatments and research

The more you know about Alzheimer's medications, the better prepared you will be to discuss them with your physician and make informed choices about your treatment plan. Although current medications cannot cure Alzheimer's, some drugs may help lessen symptoms, such as memory loss and confusion, for a limited time. Other medicines may delay clinical decline, with benefits to cognition and function.

### FDA-approved drugs for Alzheimer's

The U.S. Food and Drug Administration (FDA) has approved medications that fall into two categories: drugs that may delay clinical decline and drugs that may temporarily mitigate some symptoms of Alzheimer's disease.

When considering any treatment, it is important to have a conversation with a health care professional to determine whether it is appropriate. A physician 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 may delay cognitive decline

Aducanumab (Aduhelm™) is the first therapy to demonstrate that removing amyloid, one of the hallmarks of Alzheimer's disease, from the brain is reasonably likely to reduce cognitive and functional decline in people living with early Alzheimer's. The drug targets beta-amyloid, a microscopic protein fragment that accumulates in the brain and forms into plaques. These plaques disrupt communication between nerve cells in the brain and may also activate immune system cells that trigger inflammation and devour disabled nerve cells. While scientists aren't sure what causes cell death and tissue loss during the course of Alzheimer's, amyloid plaques are one of the potential contributors, and preventing beta-amyloid buildup may provide benefit.

Aducanumab is indicated for the treatment of Alzheimer's disease. Treatment with Aducanumab should be initiated in patients with mild cognitive impairment (MCI) or mild dementia stage of disease, the population in which treatment was initiated in clinical trials. There are no safety or effectiveness data on initiating treatment at earlier or later stages of the disease than were studied.

Name (Generic/Brand)	Approved for	Side effects
Aducanumab Aduhelm™	Alzheimer's disease	ARIA, headache and fall

**Drugs that treat symptoms**

**Cognitive (memory and thinking) symptoms**

These medications are prescribed to treat symptoms related to memory and thinking. While these drugs cannot 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 between the brain's nerve cells.

The drugs currently approved to treat cognitive symptoms are cholinesterase inhibitors and glutamate regulators.

Name (Generic/Brand)	Approved for	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.

**Non-cognitive (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 changes.

Sleep changes may include difficulty sleeping, taking daytime naps and/or experiencing other shifts in sleep pattern. Learn more about sleep changes and available drug and non-drug treatments to address symptoms.

Suvorexant (Belsomra®) is the first medication approved specifically to treat insomnia in people living with Alzheimer's. It works by blocking the activity of a chemical messenger involved in the sleep-wake cycle. It is important to try non-drug strategies to manage non-cognitive symptoms — like sleep changes — before adding medications.

Name (Generic/Brand)	Approved for	Side effects
Suvorexant Belsomra®	Insomnia 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.

Before beginning a new medication, make sure your physician, pharmacist and care team are aware of any of all medications, alternative remedies, products and dietary supplements currently being taken (including over-the-counter and alternative preparations). This is important to ensure that medications will not interact with one another, causing side effects. Be sure to discuss all medications you take with your doctor to understand why they were prescribed and how to take them.

**Alternative treatments and supplements**

Research suggests that lifestyle habits, such as eating a healthy diet, may reduce a person's risk for cognitive decline and dementia. However, there isn't a single food, ingredient or supplement that has been shown to prevent, treat or cure Alzheimer's or other dementias.

There are remedies, supplements and “medical foods” that are often referred to as alternative treatments. Alternative treatments are not regulated and do not need to adhere to the same standards as FDA-approved treatments. Claims about their safety and effectiveness are based largely on testimonials, tradition or a small body of scientific research.

If you are considering taking an alternative treatment or dietary supplement, it's important to talk to your physician. He or she can provide you with the best possible advice for your situation and make you aware of any risks. Even if advertised as “natural,” alternative treatments can involve potentially powerful substances that have not met FDA standards for effectiveness or safety, and some alternative medicines can cause unintended reactions when taken with prescription medications.

Here is a list of questions to ask when considering an alternative treatment or supplement:

- **Has the FDA approved this product for the treatment of Alzheimer's or dementia symptoms?**

The FDA may have reviewed the data on a product, but found it to be ineffective for the intended purpose. In this instance, the company may still release the product as a medical food, either with or without changes. In the United States, a product can only be considered a medical food if it is designed to treat a condition that has a “distinctive nutritional requirement.” According to the FDA, Alzheimer's, as currently understood, does not have distinctive nutritional requirements, and therefore, in the United States, no product can legitimately be described as a medical food for Alzheimer's.

- **Is there independent research to support the safety and effectiveness of this product for treating Alzheimer's or other dementia?**

If the testing entity has a vested interest in the outcome (e.g., testing done by the company developing the product), the results may not be reliable.

To best serve individuals living with Alzheimer's and their families, the Alzheimer's Association strongly encourages makers of products that claim to be beneficial for those with Alzheimer's or other dementia to conduct definitive clinical trials.

- **Does the developer of the product or the person recommending it to you have a potential financial gain from the use of the medication?**

If so, use extreme caution. Check with your care team to see if they have any questions or concerns with your plan to use it.

- **Does the FDA oversee how dietary supplements are manufactured?**

No. It is up to each manufacturer and distributor of dietary supplements to meet all safety and labeling requirements of the Dietary Supplement Health and Education Act of 1994 (DSHEA) and the FDA. Most in the industry act responsibly, but some adulterated or misbranded products have made it to market. Therefore, people with Alzheimer's and their families have no absolute guarantee that supplements contain the ingredients listed on the label in the specified amounts.

- **Is the product compatible with the other medications you are taking or with your diagnoses?**

Be sure to check with your doctor or pharmacist to find out whether the product could cause negative outcomes given your diagnoses and any FDA-approved medications you are taking.

The lack of rigorous research for these products means little (or nothing) is known about the effects, both when taken alone or in combination with approved drugs. We often don't know whether the products will interact with, and possibly decrease, the effectiveness of approved drugs taken for Alzheimer's and other dementia.

### **Research into future treatments**

Researchers are conducting studies to find new interventions and treatments for Alzheimer's. Because the disease is complex and not fully understood — with a multitude of factors that may contribute to risk — today's research focuses on several areas of study.

Many drugs and medical devices in development aim to interrupt the disease process by impacting one or more of the brain changes associated with Alzheimer's. These changes offer potential "targets" for new drugs or devices to slow or stop the progress of the disease. These promising targets include the buildup of beta-amyloid and tau protein (hallmarks of Alzheimer's), neuroinflammation, immune response, metabolic changes and more.

Researchers believe that future treatments will involve a combination of medications or devices aimed at several targets, along with risk reduction strategies similar to current treatments for many cancers and AIDS.

As the leading nonprofit funder of Alzheimer's research, the Alzheimer's Association has played a vital role in every significant development in dementia science.

### **Participate in clinical trials**

Recruiting and retaining clinical trial participants is now the greatest obstacle, other than funding, to developing the next generation of Alzheimer's treatments.

Individuals with dementia, caregivers and healthy volunteers are all needed to participate in clinical studies focused on Alzheimer's and all other dementia.

If you are interested in participating in a current clinical study, Alzheimer's Association TrialMatch® is a free, easy-to-use clinical studies matching service that generates customized lists of studies based on user-provided information.

The TrialMatch database includes:

- Trials for new drugs or non-drug-based dementia treatments.
- Studies on new tests or procedures for diagnosis.
- Trials that investigate ways to prevent the onset of diseases.
- Studies exploring ways to improve quality of life for individuals living with a chronic illness, their caregivers and family members.
- Online studies.

TS-0043 | Updated July 2021