Alzheimer's Disease Medications Fact Sheet

Several prescription drugs are currently approved by the U.S. Food and Drug Administration (FDA) to treat people who have been diagnosed with Alzheimer's disease (AD). Treating the symptoms of AD can provide patients with comfort, dignity, and independence for a longer period of time and can encourage and assist their caregivers as well.

It is important to understand that none of these medications stops the disease itself.

Treatment for Mild to Moderate AD

Medications called cholinesterase inhibitors are prescribed for mild to moderate AD. These drugs may help delay or prevent symptoms from becoming worse for a limited time and may help control some behavioral symptoms. The medications include: Razadyne® (galantamine), previously known as Reminyl®, Exelon® (rivastigmine), Aricept® (donepezil) and Cognex® (tacrine). Cognex® is no longer actively marketed by the manufacturer and is not listed on the chart on the other side of this fact sheet. Scientists do not yet fully understand how cholinesterase inhibitors work to treat AD, but current research indicates that they prevent the breakdown of acetylcholine, a brain chemical believed to be important for memory and thinking. As AD progresses, the brain produces less and less acetylcholine; therefore, cholinesterase inhibitors may eventually lose their effect.

No published study directly compares these drugs. Because they work in a similar way, it is not expected that switching from one of these drugs to another will produce significantly different results. However, an AD patient may respond better to one drug than another.

Treatment for Moderate to Severe AD

A medication known as Namenda® (memantine) is an N-methyl D-aspartate (NMDA) antagonist and is prescribed for the treatment of moderate to severe AD. Studies have shown that the main effect of Namenda® is to delay progression of some of the symptoms of moderate to severe AD. The medication may allow patients to maintain certain daily functions a little longer. For example, Namenda® may help a patient in the later stages of AD maintain his or her ability to go to the bathroom independently for several more months, a benefit for both patients and caregivers.

Namenda® is believed to work by regulating glutamate, another important brain chemical that, when produced in excessive amounts, may lead to brain cell death. Because NMDA antagonists work very differently from cholinesterase inhibitors, the two types of drugs can be prescribed in combination. The FDA has also approved Aricept® for the treatment of moderate to severe AD.

Dosage and Side Effects
Doctors usually start patients at low drug doses and gradually increase the dosage based on how well a patient tolerates the drug. There is some evidence that certain patients may benefit from higher doses of the cholinesterase inhibitor medications. However, the higher the dose, the more likely are side effects. The recommended effective dosages of the drugs prescribed to treat mild to moderate, and moderate to severe AD are summarized in the table on the other side.

Patients may be drug-sensitive in other ways, and they should be monitored when a drug is started. Report any unusual symptoms to the prescribing doctor right away. It is important to follow the doctor’s instructions when taking any medication, including vitamins and herbal supplements. Also, let the doctor know before adding or changing any medications.

**For More Information**

To learn about support groups and publications about AD, contact:

**Alzheimer’s Disease Education and Referral (ADEAR) Center**
P.O. Box 8250
Silver Spring, MD 20907-8250
1-800-438-4380
Website: [www.alzheimers.nia.nih.gov](http://www.alzheimers.nia.nih.gov)

This service of the National Institute on Aging offers information and publications on diagnosis, treatment, patient care, caregiver needs, long-term care, and research.

**Alzheimer’s Association**
225 N. Michigan Avenue, Floor 17
Chicago, IL 60601-7633
1-800-272-3900
Website: [www.alz.org](http://www.alz.org)

This non-profit association supports AD research and families and caregivers of patients with AD. Chapters across the country provide referrals to local resources.

**Table - Medications to Treat Alzheimer’s Disease**

Note: The brief summary provided below does not include all information important for patient use and should not be used as a substitute for professional medical advice. Consult the prescribing doctor and read the package insert before using these or any other medications or supplements. Drugs are listed in order, as approved by the U.S. Food and Drug Administration, starting with the most recent.

(To view this as one table, please open the PDF version of this publication.)

<table>
<thead>
<tr>
<th>DRUG NAME</th>
<th>DRUG TYPE AND TREATMENT</th>
<th>MANUFACTURER’S RECOMMENDED DOSAGE</th>
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<tbody>
<tr>
<td>Namenda® (memantine)</td>
<td>N-methyl D-aspartate (NMDA) antagonist</td>
<td>• 5 mg, once a day, available in tablet form</td>
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<tr>
<td>DRUG NAME</td>
<td>COMMON SIDE EFFECTS</td>
<td>POSSIBLE DRUG INTERACTIONS</td>
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<tr>
<td>Namenda® (memantine)</td>
<td>Dizziness, headache,</td>
<td>Other NMDA antagonist medications, including amantadine, an antiviral used to</td>
</tr>
<tr>
<td>Block the toxic effects associated with excess glutamate and regulates glutamate activation.</td>
<td>constipation, confusion</td>
<td>treat the flu, dextromethorphan, prescribed to relieve coughs due to colds or flu, and ketamine, sometimes used as an anesthetic, have not been systematically evaluated and should be used with caution in combination with this medication.</td>
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<tr>
<td><strong>Razadyne® (formerly known as Reminyl®) (galantamine)</strong> Prevents the breakdown of acetylcholine and stimulates nicotinic receptors to release more acetylcholine in the brain.</td>
<td>Nausea, vomiting, diarrhea, weight loss</td>
<td>Some antidepressants such as paroxetine, amitriptyline, fluoxetine, fluvoxamine, and other drugs with anticholinergic action may cause retention of excess Reminyl in the body, leading to complications; NSAIDs should be used with caution in combination with this medication.*</td>
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<tr>
<td><strong>Exelon® (rivastigmine)</strong> Prevents the breakdown of acetylcholine and butyrylcholine (a brain chemical similar to acetylcholine) in the brain.</td>
<td>Nausea, vomiting, weight loss, upset stomach, muscle weakness</td>
<td>None observed in laboratory studies; NSAIDs should be used with caution in combination with this medication.*</td>
</tr>
<tr>
<td><strong>Aricept® (donepezil)</strong> Prevents the breakdown of acetylcholine in the brain.</td>
<td>Nausea, diarrhea, vomiting</td>
<td>None observed in laboratory studies; NSAIDs should be used with caution in combination with this medication.*</td>
</tr>
</tbody>
</table>

* Use of cholinesterase inhibitors can increase risk of stomach ulcers, and because prolonged use of non-steroidal anti-inflammatory drugs (NSAIDs) such as aspirin or ibuprofen can also cause stomach ulcers, NSAIDs should be used with caution in combination with these medications.

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