

**Table 2. Guidelines for Pharmacologic Treatment of Agitation**

Symptom	Medication and Usual Dosing
Agitation in context of nonacute psychosis	Risperidone <sup>1</sup> ( <i>Risperdal</i> ) 0.25–1.5 mg/d Olanzapine <sup>1</sup> ( <i>Zyprexa</i> , <i>Zydis</i> ) 2.5–10 mg/d Quetiapine <sup>1</sup> ( <i>Seroquel</i> ) 25–400 mg/d Aripiprazole <sup>1</sup> ( <i>Abilify</i> ) 5–10 mg/d Haloperidol <sup>1</sup> ( <i>Haldol</i> ) 0.5–2 mg/d <sup>2</sup>
Agitation in context of acute psychosis (IM, IV needed)	SSRI, eg, citalopram ( <i>Celexa</i> ) 10–30 mg/d
Agitation in context of depression	
Anxiety, mild to moderate irritability	Trazodone ( <i>Desyre</i> ) 50–100 mg/d <sup>3</sup> Buspirone ( <i>BuSpar</i> ) 30–60 mg/d <sup>4</sup>
Alternative treatment for significant agitation or aggression	Divalproex sodium ( <i>Depakote</i> , <i>Epival</i> ) 500–1500 mg/d <sup>5</sup> Carbamazepine ( <i>Tegretol</i> ) 300–600 mg/d <sup>6</sup> Olanzapine ( <i>Zyprexa IntraMuscular</i> ) 2.5–5 mg IM <sup>7</sup>

<sup>1</sup> Greater mortality and cerebrovascular events than placebo; use with particular caution in patients with cerebrovascular disease or hypotolemia.  
<sup>2</sup> Higher dosages may be needed in emergency situations; use for only short periods of time.  
<sup>3</sup> Small divided daytime dosage and larger bedtime dosage; watch for sedation and orthostasis.  
<sup>4</sup> Can be given q 12 h; allow 2–4 wk for adequate trial.  
<sup>5</sup> Can monitor serum levels; usually well tolerated; check complete blood count (CBC), platelets for agranulocytosis, thrombocytopenia risk.  
<sup>6</sup> Monitor serum levels; periodic CBCs, platelet counts secondary to agranulocytosis risk. Beware of drug-drug interactions.

**FDA Advisory Information on Atypical Antipsychotics**  
 In 17 randomized, controlled trials in which 5106 older adults with dementia-related behavioral disorders were enrolled, the risk of death in the drug-treated patients was 1.6–1.7 compared with that of the placebo group. Treatments consisted of Zyprexa (olanzapine), Abilify (aripiprazole), Risperdal (risperidone), or Seroquel (quetiapine). These trials averaged about 10 weeks. The rate of death was about 4.5% in drug-treated patients and about 2.6% in the placebo group. Most of the deaths appeared to be either cardiovascular (eg, heart failure, sudden death) or infectious (eg, pneumonia) in nature.

**CAREGIVER ISSUES AND RESOURCES**

Maintaining the health and well-being of caregivers is essential for effective treatment of dementia patients. Over 50% of caregivers develop depression. Physical illness, isolation, anxiety, and burnout are common. Intensive education and support of caregivers may delay institutionalization of patients with dementia. Adult day care for patients and respite services for caregivers may help.

- Alzheimer's Association ([www.alz.org](http://www.alz.org)) offers support and education; chapters are located in major cities throughout US.
- Family Caregiver Alliance ([www.caregiver.org](http://www.caregiver.org)) offers support, education, and information for caregivers.

**New Feature: Clinical Practice Corner**

A new periodic feature for the AGS Newsletter, the AGS Clinical Corner highlights AGS Clinical tools that are available to our members for free. AGS members can download a pdf of these tools at [www.americangeriatrics.org/myags](http://www.americangeriatrics.org/myags).



**DEMENTIA**  
**A POCKET GUIDE TO DEMENTIA TREATMENT**  
**From THE AMERICAN GERIATRICS SOCIETY**

An estimated 5.2 million Americans have Alzheimer's Disease in 2008. The prevalence of Alzheimer's Disease and other dementias will continue to increase with the rapid growth of our older population. Managing these complex conditions can be a challenge for busy healthcare professionals. The American Geriatrics Society (AGS) is pleased to make this convenient pocket card on the Diagnosis and Treatment of Dementia available to healthcare providers and trainees who care for older adults.

The information in this card is based on two acclaimed AGS publications. *Geriatrics At Your Fingertips*<sup>®</sup> is a convenient, pocket-sized guide to the evaluation and management of diseases and disorders that most commonly affect older people. *The Geriatrics Review Syllabus: A Core Curriculum in Geriatric Medicine* is a comprehensive text for those who wish to expand and update their knowledge in the field.

The AGS is a nationwide, non-profit association of healthcare professionals dedicated to improving the health, independence and quality of life for all older people. The AGS has a diverse, multidisciplinary membership of healthcare professionals, researchers, educators, administrators and students. For more information on the AGS, its publications and membership benefits, please go to [www.americangeriatrics.org](http://www.americangeriatrics.org) or call 800-247-4779.

This pocket card is made available by an unrestricted education grant from Forest Laboratories.

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## TREATMENT

Primary goals are to improve quality of life and maximize functional performance by enhancing cognition and addressing mood and behavior.

### General Treatment Principles

- Identify and treat comorbid physical illnesses (eg, hypertension).
- Promote brain health by exercise, balanced diet, stress reduction.
- Avoid anticholinergic medications, eg, benztropine, diphenhydramine, hydroxyzine, oxybutynin, tricyclic antidepressants, clozapine, thioridazine.
- Limit use of as-needed psychotropic medications.
- Institute stroke prophylaxis for vascular and mixed dementias.
- Maximize activities of daily living (ADLs) and exercise (eg, walking).
- Establish and maintain relationship with patient and family.
- Assess and monitor cognition, mood, and behavior.
- Monitor physical environment for safety (eg, stairs).
- Advise patient and family about driving, sources of support, financial and legal issues, and advance directives, including establishing surrogate decision maker.

### Nonpharmacologic Approaches

- Advise caregiver(s) to:
- Use scheduled toileting and prompted toileting for incontinence.
  - Offer graded assistance (as little help as possible) to perform ADLs), role modeling, cueing, and positive reinforcement to increase independence.
  - Avoid adversarial debates; try to redirect conversation instead.
  - Use services of caregiver support groups (see *last panel*).

### Pharmacologic Treatment of Cognitive Dysfunction

Patients with mild or moderate Alzheimer's disease (AD) should receive a cognitive enhancer (Table 1). Because the effects of treatment cannot be fairly evaluated until the patient has been on a cognitive enhancer for some time, caregivers should commit to a trial treatment period of at least 3 months before the medication is started. In controlled trials, modest symptomatic benefit for cognition, mood, behavioral symptoms, and daily function was seen in patients with AD treated for 1 year with cholinesterase inhibitors versus placebo; open trials demonstrated benefit for 3 yr. Only 10%–25% of patients taking cholinesterase inhibitors show clinical improvement, but 80% have less rapid decline. Initial studies have shown benefits of these medications for patients with dementia associated with Parkinson's disease, Lewy body dementia, and vascular dementia. These drugs may attenuate noncognitive symptoms and delay nursing-home placement. Memantine (*Namenda*) demonstrated modest efficacy compared with placebo in moderate to severe AD as monotherapy and when combined with donepezil (*Aricept*).

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## Table 1. Cognitive Enhancers

<b>Donepezil (<i>Aricept</i>)<sup>1</sup></b>	Start at 5 mg/d, increase to 10 mg/d after 1 mo
<b>Galantamine (<i>Razadyne</i>)<sup>1,2</sup></b>	Start at 4 mg q 12 h, increase to 8 mg q 12 h after 4 wk; recommended dosage 8 or 12 mg q 12 h
<b>Extended release Rivastigmine (<i>Exelon</i>)<sup>1</sup></b>	Start at 1 capsule daily, preferably with food; titrate as above
<b>Rivastigmine (<i>Exelon</i>)<sup>1</sup></b>	Start at 1.5 mg q 12 h and gradually titrate up to minimally effective dosage of 3 mg q 12 h, continue up to 6 mg q 12 h as tolerated; for patch, start at 4.6 mg/d, may be increased after ≥4 wk to 9.5 mg/d (recommended effective dosage); retitrate if medication is stopped
<b>Memantine (<i>Namenda</i> [<i>NMDA antagonists</i>)<sup>3</sup></b>	Start at 5 mg/d, increase by 5 mg at weekly intervals to max of 10 mg q 12 h; reduce dosage if kidney function impaired

<sup>1</sup> Cholinesterase inhibitors: FDA labeling for AD is as follows: donepezil—mild, moderate, severe; galantamine—mild, moderate; rivastigmine—mild, moderate. Continue if patient improves or stopping medication can lead to rapid decline. Adverse events increase with higher dosage. Possible adverse events include nausea, vomiting, diarrhea, dyspepsia, anorexia, weight loss, leg cramps, headache, insomnia, and agitation.

<sup>2</sup> Increased mortality found in controlled studies of mild cognitive impairment.

<sup>3</sup> Approved by FDA for moderate to severe AD. Possible adverse events include dizziness, headache, somnolence. NMDA = N-methyl-D-aspartate.

### Evaluation of Response to Any Cognitive Enhancer

- Elicit caregiver observations of patient's cognitive function and behavior (laterness, initiative) and follow functional status (ADLs and instrumental ADLs).
- Follow cognitive status (eg, improved or stabilized) by caregiver's report or serial ratings of cognition (eg, Mini-Cog).

### Treatment of Agitation

- First, identify and examine context of behavior (is it harmful to patient or others?), environmental triggers (eg, overstimulation, unfamiliar surroundings, frustrating interactions).
- Are delusions or hallucinations interfering with function?
- Exclude underlying physical discomfort (eg, illnesses or medications).
- Consider nonpharmacologic strategies.
- Select pharmacologic agent on the basis of symptoms (Table 2).
  - Cognitive enhancers may slow deterioration, and agitation may worsen if they are discontinued.
  - Low dosages of antipsychotic medications have a limited role but may be necessary at times. Note: this use is "off label"; use in AD patients has a BLACK BOX warning because the risk of death was higher with drug treatment than with placebo in clinical trials. Risk–benefit must be discussed with both patients and caregivers before starting treatment. In the CATIE-AD trial (NEJM 2006;355:1525–1538), modest treatment with atypical antipsychotics showed no significant benefit (p=0.22). Olanzapine, risperidone, and quetiapine had marginally higher response rates (32%, 29%, and 26%, respectively) than placebo (21%). Response was mitigated by greater extrapyramidal symptoms, sedation, and confusion in the treated groups.



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