

# Potentially Inappropriate Medications Used in Older Adults

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Patient Safety Center

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<b>Tricyclic Antidepressants</b>	Amitriptyline (Elavil®) Doxepin (Sinequan®)	<ul style="list-style-type: none"><li>• ↑ Anticholinergic effects</li><li>• Changes in arrhythmic properties</li><li>• ↑ Risk of falls</li><li>• <b>CAUTION WITH: Chronic Constipation and Dementia</b></li></ul>	<ol style="list-style-type: none"><li>1. Minimize doses whenever possible</li><li>2. Consider SSRIs for depression; monitor bone density.</li><li>3. Do not use in combination with other anticholinergics.</li><li>4. For insomnia, encourage sleep hygiene. Consider lowest dose of non-barbiturate hypnotics. Use as directed, immediately prior to bedtime.</li></ol>
<b>Antihistamines: 1st Generation</b>	Diphenhydramine (Benadryl®) Clemastine (Tavist®) Chlorpheniramine (Chlor-Trimeton®)	<ul style="list-style-type: none"><li>• ↑ Anticholinergic effects</li><li>• <b>CAUTION WITH: Dementia</b></li></ul>	<ol style="list-style-type: none"><li>1. Use 2nd generation (Claritin® or Allegra®).</li><li>2. Minimize duration of therapy.</li><li>3. Do not use with other anticholinergic medications.</li></ol>
<b>Antispasmodics</b>	Dicyclomine (Bentyl®) Hyoscymine (Levsin®) Hyoscymine (Donnatal®) Clidinium Compound (Librax®)	<ul style="list-style-type: none"><li>• ↑ Anticholinergic effects</li><li>• <b>CAUTION WITH: Dementia</b></li></ul>	<ol style="list-style-type: none"><li>1. Monitor creatinine clearance.</li><li>2. Minimize dosing and duration of use.</li></ol>
<b>Benzodiazepines: Long-acting</b>	Chlordiazepoxide (Librium®) Diazepam (Valium®) Chlorazepate (Tranxene®) Flurazepam (Dalmane®)	<ul style="list-style-type: none"><li>• Prolonged sedation, ↑ risk of falls due to ↓ metabolism and ↑ sensitivity to benzodiazepines</li></ul>	<ol style="list-style-type: none"><li>1. Use shorter-acting benzodiazepines:<ul style="list-style-type: none"><li>Lorazepam® &lt; 3 mg/day</li><li>Oxazepam® 60 mg/day</li><li>Temazepam® &lt; 15 mg/day</li></ul></li></ol>

<b>Antipsychotics:</b> Typical	Thioridazine (Mellaril®) Haloperidol (Haldol®) Chlorpromazine (Thorazine®) Mesoridazine (Serentil®)	<ul style="list-style-type: none"> <li>• ↑ Anticholinergic effects</li> <li>• <b>CAUTION WITH: Dementia, Seizures, Parkinson Disease</b></li> </ul>	<ol style="list-style-type: none"> <li>1. Determine rationale for appropriate use.</li> <li>2. Use atypical anti-psychotics if pharmacotherapy is deemed appropriate.</li> </ol>
<b>Pain Medications</b>	Propoxyphene (Darvocet®) Meperidine (Demerol®) Ketorolac (Toradol®) Tramadol (Ultram®)	<ul style="list-style-type: none"> <li>• Lack of efficacy and ↑ confusion, dizziness due to ↓ renal function</li> <li>• ↑ Renal toxicity with long-term use</li> <li>• ↑ GI toxicity potential</li> <li>• <b>CAUTION WITH: Dementia, Seizures</b></li> </ul>	<ol style="list-style-type: none"> <li>1. Do not use Toradol®.</li> <li>2. None should be considered the drug of choice for pain.</li> <li>3. Consider alternate options for pain with caution based on patient history.</li> </ol>
<b>NSAIDs</b>	Indomethacin (Indocin®) Oxaprozin (Daypro®) Etodolac (Lodine®)	<ul style="list-style-type: none"> <li>• ↑ GI toxicity potential</li> <li>• ↑ risk of CHF exacerbation</li> <li>• <b>CAUTION WITH: Clotting disorders, Anticoagulation Therapy, Heart Failure, Gastric/Duodenal Ulcer</b></li> </ul>	<ol style="list-style-type: none"> <li>1. Use colchicine with renal dosing for gout.</li> <li>2. Use in combination with acetaminophen to limit dose and duration of NSAIDs.</li> <li>3. Use Cox-2 inhibitors or a non-selective NSAID with a PPI.</li> </ol>
<b>Cardiac Medications</b>	Digoxin (Lanoxin®)	<ul style="list-style-type: none"> <li>• Toxicity due to ↓ renal function</li> </ul>	<ol style="list-style-type: none"> <li>1. Monitor creatinine clearance.</li> <li>2. Minimize dosing and duration of use.</li> </ol>
<b>Muscle Relaxants</b>	Cyclobenzaprine (Flexeril®) Carisoprodol (Soma®) Metaxalone (Skelaxin®) Methocarbamol (Robaxin®)	<ul style="list-style-type: none"> <li>• ↑ dizziness</li> <li>• ↑ drowsiness</li> </ul>	<ol style="list-style-type: none"> <li>1. Minimize dose and duration.</li> <li>2. Do not use in combination with other anticholinergics.</li> <li>3. Consider topical analgesics, APAP and physical therapy.</li> </ol>

**Note:** This chart is to be used as a guideline for treating elderly patients in order to prevent falls. It does not contain all medications that may affect fall risk in the elderly. Therefore, providers are cautioned to use their clinical judgment.