



High Risk Medications for Patients 65 Years of Age and Older

The risk for adverse effects of some medications increases as we get older. This is due to changes in our bodies that result in decreased ability to process a medication or eliminate it. These changes may put you at risk for serious side effects such as confusion, falling, fractures, blood pressure changes, and other health consequences.

A group of medical experts publishes a list of medications that cause adverse drug effects in adults aged 65 and older. This list, called the Beer's Criteria, includes medications that should be used with extra caution, as well as medications that should be avoided, either in all elderly or in certain populations.

If you are age 65 or older and taking one of these high risk medications, it is important to talk with your doctor to see if the benefit of taking the medication outweighs the risk and to see if an alternative would be effective with less risk. Some of these high risk medications are shown in the chart below.

Drug Name(s) & Common Use	Concerns	Possible Alternatives
Amitriptyline, clomipramine, imipramine These might be used for nerve pain or depression	These medications can cause confusion, dry mouth, constipation, retention of urine, impairment in thinking, drowsiness, and low blood pressure when you stand up. If you have memory loss, constipation, benign prostatic hypertrophy (BPH), or history of falls or bone fractures, using these medications can worsen your condition	Alternatives for nerve pain: nortriptyline, desipramine, duloxetine, venlafaxine, gabapentin, topical lidocaine, capsaicin Alternatives for insomnia: nondrug
		therapy preferred trazodone <i>short-term use (<90 days)</i> of zolpidem, zaleplon, Lunesta Safe for long term use: Rozerem
Benzodiazepines like alprazolam, clonazepam, lorazepam, and temazepam For anxiety, agitation, or difficulty sleeping	Thinking impairment, confusion, unsteady walking, fainting, falls, accidents, bone fractures	Certain benzodiazepines may be appropriate for some medical conditions including seizure disorders and end-of-life care. Alternatives for anxiety: antidepressants like sertraline, citalopram, duloxetine, or the anxiety medicine buspirone. Alternatives for insomnia: nondrug
		therapy preferred trazodone <i>short-term use (<90 days)</i> of zolpidem, zaleplon, Lunesta Safe for long term use: Rozerem
Digoxin (<i>Lanoxin</i>) doses > 0.125 mg per day For treating heart failure or atrial fibrillation	This medicine can be toxic in the elderly with doses larger than 0.125mg and can result in cardiac arrhythmias (irregular heartbeats).	Use digoxin 0.125mg if this medicine is still necessary. Your doctor should check a blood level periodically.

<p>Zolpidem (<i>Ambien</i>), zaleplon (<i>Sonata</i>), and Lunesta</p> <p>For insomnia (difficulty sleeping)</p>	<p>Long term use (more than 3 months) or use in people with memory loss, thinking impairment or in people with a history of falls increases the concern for confusion, unsteady walking, fainting, falls, motor vehicle accidents, and bone fractures</p>	<p>Alternatives for insomnia: nondrug therapy preferred trazodone <i>short-term use (<90 days)</i> of zolpidem, zaleplon, Lunesta Safe for long term use: Rozerem</p>
<p>Glyburide (<i>Diabeta, Glynase</i>), Chlorpropamide</p> <p>For Type 2 Diabetes</p>	<p>Prolonged low blood sugar (hypoglycemia)</p>	<p>Alternative medications: glimepiride (<i>Amaryl</i>), glipizide (<i>Glucotrol</i>) Avoid <i>Glucotrol XL</i> due to hypoglycemia risk.</p>
<p>Estrogen (oral or patch)</p> <p>For hot flashes, symptoms of menopause, vaginal dryness, to prevent osteoporosis, or to protect against heart disease</p>	<p>Breast cancer, uterine cancer, urinary problems. There is no information that estrogen is heart protective.</p>	<p>Hot flashes: nondrug therapy (cool environment, layered clothing), certain antidepressants, gabapentin Osteoporosis: calcium, vitamin D, alendronate and similar medications, Evista Vaginal symptoms, UTI: vaginal estrogen cream</p>
<p>Carisoprodol (<i>Soma</i>), chlorzoxazone, cyclobenzaprine (<i>Flexeril</i>), metaxalone (<i>Skelaxin</i>), methocarbamol (<i>Robaxin</i>), orphenadrine (<i>Norflex</i>)</p> <p>For muscle relaxation</p>	<p>Confusion, dry mouth, constipation, urinary retention, sedation, bone fractures, thinking impairment. These medications may not work very well at tolerated doses.</p>	<p>Alternatives: treat underlying problem, physiotherapy, application of heat or cold; correct seating and footwear</p> <p>baclofen, tizanidine</p>
<p>Nitrofurantoin (<i>Macrobid, Macrodantin</i>) long term use or use in patients decreased kidney function</p> <p>For certain types of bacterial infections</p>	<p>This antibiotic should not be used in patients with decreased kidney function because it may cause toxicity.</p>	<p>Depends on the infection: Trimethoprim/sulfamethoxazole, trimethoprim, ciprofloxacin</p>