

# Magellan Anticholinergic Risk Scale

1 POINT	
GENERIC	BRAND
Alprazolam	Xanax®
Aripiprazole	Abilify®
Asenapine	Saphris®
Captopril	Capoten®
Chlordiazepoxide	Librium®
Chlorthalidone	Diuril®
Clonazepam	Klonopin®
Clorazepate	Tranxene®
Codeine	--
Diazepam	Valium®
Digoxin	Lanoxin®
Dipyridamole	Persantine®
Famotidine	Pepcid®
Fentanyl	Duragesic®
Fluoxetine	Prozac®
Flurazepam	Dalmane®
Fluvoxamine	Luvox®
Furosemide	Lasix®
Haloperidol	Haldol®
Hydralazine	Apresoline®
lloperidone	Fanapt®
Isosorbide	Imdur®
Mirtazapine	Remeron®
Morphine	MS Contin®
Nifedipine	Procardia®
Nizatidine	Axid®
Oxycodone	Oxycontin®
Paroxetine	Paxil®
Prednisone	Deltasone®
Quinidine	Quinaglute®
Ranitidine	Zantac®
Risperidone	Risperdal®
Temazepam	Restoril®
Tramadol	Ultram®
Trazodone	Desyrel®
Triamterene	Dyrenium®
Warfarin	Coumadin®
Ziprasidone	Geodon®

2 POINTS	
GENERIC	BRAND
Amantadine	Symmetrel®
Baclofen	Liorsesal®
Carbamazepine	Tegretol®
Carisoprodol	Soma®
Cetirizine	Zyrtec®
Cimetidine	Tagamet®
Clidinium & Chlordiazepoxide	Librax®
Cyclizine	Cyclivert®
Cyclobenzaprine	Flexeril®
Cyproheptadine	Periactin®
Disopyramide	Norpace®
Fluphenazine	Prolixin®
Loperamide	Diamode®
Loratadine	Claritin®
Loxapine	Loxitane®
Meperidine	Demerol®
Methocarbamol	Robaxin®
Oxcarbazepine	Trileptal®
Pimozide	Orap®
Prochlorperazine	Compazine®
Pseudoephedrine	Sudafed®
Quetiapine	Seroquel®
Trimethobenzamide	Tigan®

KEY

**1 Point** = low risk of anticholinergic Side effects

**2 Points** = moderate risk of Anticholinergic side effects

**3 Points** = high risk of Anticholinergic side effects

3 POINTS	
GENERIC	BRAND
Amitriptyline	Elavil®
Amoxapine	Asendin®
Atropine	--
Benzotropine	Cogentin®
Brompheniramine	Respa-BR®
Carbinoxamine	Arbinoxa®
Chlorpheniramine	Chlor-Trimeton®
Chlorpromazine	Thorazine®
Clemastine	Tavist®
Clomipramine	Anafranil®
Clozapine	Clozaril®
Darifenacin	Enablex®
Desipramine	Norpramin®
Dicyclomine	Bentyl®
Dimenhydrinate	Dramamine®
Diphenhydramine	Benadryl®
Doxepin	Sinequan®
Flavoxate	Urispas®
Glycopyrrolate	Robinul®
Hydroxyzine	Atarax®
Hyoscyamine	Anaspaz®
Imipramine	Tofranil®
Meclizine	Antivert®
Mepenzolate	Cantil®
Methscopolamine	Pamine®
Nortriptyline	Pamelor®
Olanzapine	Zyprexa®
Orphenadrine	Norflex®
Oxybutynin	Ditropan®
Perphenazine	Trilafon®
Promethazine	Phenergan®
Propantheline	Pro-Banthine®
Protriptyline	Vivactil®
Scopolamine	Transderm Scop®
Thioridazine	Mellaril®
Thiothixene	Navane®
Tizanidine	Zanaflex®
Tolterodine	Detrol®
Trifluoperazine	Stelazine®
Trihexyphenidyl	Artane®
Trimipramine	Surmontil®
Tropium	Sanctura®

## Anticholinergic Syndrome Pneumonic

- Hot as a hare (hyperthermia)
- Blind as a bat (dilated pupils)
- Dry as a bone (dry skin)
- Red as a beet (vasodilation)
- Mad as a hatter (hallucinations/agitation)
- The bowel and bladder lose their tone and the heart goes on alone (ileus, urinary retention, tachycardia)

Anticholinergic Side Effects*	Potential Complications
<b>PERIPHERAL</b>	
Decreased salivation	Dental caries, ulceration of gums and buccal mucosa
Decreased bronchial secretions	Mucous plugging of small airways in patients with asthma or bronchitis
Increased pupil size	Photophobia precipitation of acute narrow angle glaucoma
Inhibition of accommodation	Blurred vision, especially when reading small print
Increased heart rate	Angina, myocardial infarction
Difficulty urinating	Bladder distention, urinary retention
Decreased GI motility	Constipation
<b>COGNITIVE</b>	
Cognitive Impairment	Impaired concentration, confusion, attention deficit, memory impairment

\*Of note, elderly patients may be particularly sensitive to these anticholinergic side effects

## Preferred Agents to Decrease Anticholinergic Load

Disease State	Preferred Drug (drugs to avoid in parenthesis)
<b>Allergies</b>	loratadine, cetirizine (avoid diphenhydramine and 1 <sup>st</sup> generation agents)
<b>Depression</b>	SSRIs including sertraline, citalopram, or fluoxetine or an SNRI (avoid TCAs, paroxetine)
<b>Insomnia</b>	Trazodone (avoid antihistamines)
<b>Movement disorder</b>	Dopamine agonists, levodopa
<b>Nausea</b>	Ondansetron, metoclopramide (avoid meclizine, promethazine)
<b>Pain</b>	Gabapentin for neuropathic pain, oxycodone/acetaminophen, morphine (avoid meperidine)
<b>Psychotic symptoms</b>	Risperidone, Ziprasidone, Lurasidone (phenothiazines, clozapine and olanzapine have the highest burden)
<b>Urinary Incontinence</b>	Trospium (Sanctura) or solifenacin (Vesicare) are more selective for the bladder (avoid oxybutynin or tolterodine)
<b>Reflux disorder</b>	PPIs such as esomeprazole, omeprazole, lansoprazole (avoid H2 antagonists such as cimetidine, ranitidine)

## References

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3. Kansas Foundation for Medical Care, Inc. Anticholinergic Risk Scale for Commonly Prescribed Medications. <http://www.kfmc.org/qio/images/docs/Providers/ADE/Anticholinergic%20Risk%20Scale%20Table.pdf> (accessed 2013 Oct 3).
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7. Stahl, SM. The prescriber's guide: Stah's essential psychopharmacology. 3<sup>rd</sup> ed. Cambridge: Cambridge University Press; 2009.