

Prevalence of Potentially Inappropriate Medications Prescribed to Elderly Patients Attending
Primary Health Care Centres in the State of Qatar: A Cross-Sectional Study

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Supplementary File PIMs for older adults as per the updated 2015 American Geriatrics Society (AGS) Beers Criteria

PIMs to avoid for many or most older adults	
Therapeutic category	Medications
Anticholinergics	
First generation antihistamines:	Brompheniramine, carbinoxamine, chlorpheniramine, clemastine, cyproheptadine, dexbrompheniramine, dexchlorpheniramine, dimenhydrinate, diphenhydramine (oral), doxylamine, hydroxyzine, meclizine, promethazine, triprolidine.
Antiparkinsonian agents:	Benzotropine (oral), trihexyphenidyl.
Antispasmodics:	Atropine (excludes ophthalmic), belladonna alkaloids, clidinium- hlordiazepoxide, dicyclomine, hyoscyamine, propantheline, scopolamine.
Antithrombotics	
	Dipyridamole (oral short-acting; does not apply to the extended release combination with aspirin), ticlodipine.
Anti-infective	
	Nitrofurantoin.
Cardiovascular	
Peripheral alpha-blockers:	Doxazosin, prazosin, terazosin.
Central alpha-blockers:	Clonidine, guanabenz, guanfacine, methyl dopa, reserpine (>0.1 mg/d).
Others:	Disopyramide, dronedarone, digoxin, nifedipine (immediate release), amiodarone.
Central Nervous System	
Antidepressants (alone or in combination):	Amitriptyline, amoxapine, clomipramine, desipramine, doxepin >6 mg/d, imipramine, nortriptyline, paroxetine, protriptyline, trimipramine.
Barbiturates:	Amobarbital, butabarbital, butalbital, mephobarbital, pentobarbital, phenobarbital, secobarbital.
Benzodiazepines	
Short- and intermediate- acting:	Alprazolam, estazolam, lorazepam, oxazepam, temazepam, triazolam.
Long- acting:	Clorazepate, chlordiazepoxide, clonazepam, diazepam, flurazepam, quazepam.
Benzodiazepine receptor agonist hypnotics, Nonbenzodiazepine:	Eszopiclone, zolpidem, zaleplon.
Antipsychotics (first and second generation)	
Others:	Meprobamate, ergoloid mesylates, isoxsuprine.
Endocrine	
Androgens:	Methyltestosterone, testosterone.
Sulfonylureas, long-duration:	Chlorpropamide, glyburide.
Others:	Desiccated thyroid, estrogens with or without progestins, growth hormone, insulin, sliding scale, megestrol.
Gastrointestinal	
Proton pump inhibitors	
Others:	Metoclopramide, mineral oil (given orally)
Pain medication	
Non-COX-Selective NSAIDs:	Aspirin >325 mg/d, diclofenac, diflunisal, etodolac, fenoprofen, ibuprofen, ketoprofen, meclofenamate, mefenamic acid, meloxicam, nabumetone, naproxen oxaprozin, piroxicam, sulindac, tolmetin, indomethacin, ketorolac
Skeletal muscle relaxants:	Carisoprodol, chlorzoxazone, cyclobenzaprine, metaxalone, methocarbamol, orphenadrine
Others:	Meperidine, pentazocine.
Genitourinary	
	Desmopressin

PIMs to be used with caution in older adults	
Therapeutic category	Medications
Antidepressant agents:	Mirtazapine, SNRIs, SSRIs, TCAs
Antineoplastic agents:	Carboplatin, cisplatin, cyclophosphamide, vincristine
Anticonvulsant agents:	Carbamazepine, oxcarbazepine
Antiplatelet/anticoagulant agents:	Prasugrel, dabigatran (in adults aged ≥ 75 years old), aspirin for primary prevention of cardiac events (in adults aged ≥ 80 years old).
Diuretics	
Vasodilators	