Did You Know?

AGS Beers Criteria®

WHAT IS IT?

This drug compendium identifies and provides recommendations on **Potentially Inappropriate Medications (PIMs)** in the **senior population** (≥ 65 years of age).

These medications warrant additional attention as they *may* present an unfavorable balance of benefits vs. harms in seniors.
Criteria are updated by the American Geriatric Society (AGS) every 3 years for up-to-date guidance.
The list is intended for all ambulatory, acute and institutional practice settings (but not hospice/palliative care).

WHY DO WE NEED IT?

Seniors present many hurdles to safe medication use due to a variety of factors associated with the natural aging process:

- Increased frailty worsens health outcomes of certain Adverse Drug Events (ADEs)
  - E.g, anticoagulation and bleeding risks, CNS depression and cognitive dysfunction, oversedation and fall risks
- Changes in body composition and metabolism affect drug pharmacokinetics and the elders' pharmacodynamic responses
  - Predisposes seniors to certain ADEs
- Comorbidity incidence drive a correspondingly high prevalence of polypharmacy
  - Predisposes seniors to certain drug–disease state and drug–drug interactions and subsequent ADEs

GOALS

↓ Exposure to PIMs | Avoid ADEs | Improve drug selection | Educate clinicians and patients

HOW TO USE BEERS CRITERIA

Historically, practical employment of the AGS Beers Criteria has prompted controversy and a number of **myths** summarized here (right chart).

Key Principles to Guide Optimal Use of the American Geriatrics Society (AGS) Beers Criteria
1. Medications in the AGS Beers Criteria are potentially inappropriate, not definitely inappropriate.
2. Read the rationale and recommendations statements for each criterion. The caveats and guidance listed there are important.
3. Understand why medications are included in the AGS Beers Criteria and adjust your approach to those medications accordingly.
4. Optimal application of the AGS Beers Criteria involves identifying potentially inappropriate medications and, where appropriate, offering safer non-pharmacological and pharmacological therapies.
5. The AGS Beers Criteria should be a starting point for a comprehensive process of identifying and improving medication appropriateness and safety.
6. Access to medications included in the AGS Beers Criteria should not be excessively restricted by prior authorization and/or health plan coverage policies.
7. The AGS Beers Criteria are not equally applicable to all countries.

Statement	
Beers list drugs are universally inappropriate in geriatric patients	**Myth** ✗
Health Systems should implement quality improvement programs that unilaterally disallow Beers list drugs from being prescribed to geriatric patients	**Myth** ✗
Clinicians should entirely avoid use of PIMs in geriatric patients	**Myth** ✗
3rd party payors should consistently condition Prior Authorizations upon a medication's status on the Beers List	**Myth** ✗
The rationale and recommendations made around any Beers List drug are essential for contectualizing its status as potentially inappropriate in older adults and integral to informing prescribing decisions	**True** ✓
The Beers List Criteria should be included as only one of many considerations in a clinician's patient-specific workup to make prescribing decisions	**True** ✓

The AGS panel addressed these concerns with the 2015 companion article (linked below) that is still the best way to advise patients, providers, and health systems on how to use – and not use – the 2019 AGS Beers List.

Reference this "how to use" article **here!**
(Or navigate to the Journal of the American Geriatrics Society, Volume 63, Issue 12)

The **Key Principles for Use** of the Beers Criteria are summarized here (left chart).

Information presented in this document is for general informational purposes only. Any changes in therapy must be discussed with the prescriber prior to initiation.

Did You Know?

AGS Beers Criteria®

TABLES

Potentially inappropriate medications are stratified into the following categories:

- Meds Potentially Inappropriate in MOST older adults **(Table 2)**
- Meds Potentially Inappropriate in older adults with CERTAIN CONDITIONS **(Table 3)**
- Meds that should be used with CAUTION **(Table 4)**

The Beers List also identifies:

- Important DRUG-DRUG INTERACTIONS to avoid in older adults **(Table 5)**
- Medications to avoid or reduce dosages based on KIDNEY FUNCTION **(Table 6)**
- Drugs with strong ANTICHOLINERGIC properties **(Table 7)**

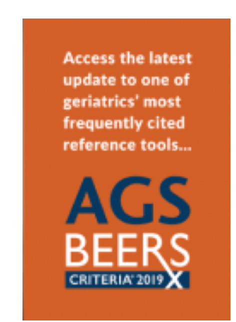

Table 2. Potentially Inappropriate Medications in MOST Older Adults

Drugs	Rationale	Recommendation	Quality of Evidence	Strength of Recommendation
Antidepressants Ex. Amitriptyline	Highly anticholinergic, sedating, and cause orthostatic hypotension	Avoid	High	Strong

Table 3. Potentially Inappropriate Medications in Older Adults with Certain Conditions

Disease	Drug	Rationale	Recommendation	Quality of Evidence	Strength of Recommendation
Heart Failure	Thiazolidinediones Ex. Pioglitazone	Potential to promote fluid retention and/or exacerbate heart failure	Use with Caution	High	Strong

Table 4. Potentially Inappropriate Medications: Drugs to be Used with Caution in Older Adults

Drugs	Rationale	Recommendation	Quality of Evidence	Strength of Recommendation
Diuretics	May exacerbate or cause SIADH or hyponatremia; monitor sodium level closely when starting or changing dosages in older adults	Use with caution	moderate	Strong

Table 5. Potentially Clinically Important Drug-Drug Interactions to Avoid in Older Adults

Object Drug	Interacting Drug	Risk Rationale	Recommendation	Quality of Evidence	Strength of Recommendation
Warfarin	NSAIDS	Increased risk of bleeding	Avoid when possible; If used together, monitor closely for bleeding	High	Strong

Table 6. Medications that Should be Avoided or Reduce Dosages Based on Kidney Function

Medication	CrCl (mL/min)	Rationale	Recommendation	Quality of Evidence	Strength of Recommendation
Apixaban	< 25	Lack of evidence for efficacy and safety in patients with a CrCl < 25mL/min	Avoid	Moderate	Strong

Table 7. Drugs with Strong Anticholinergic Properties

Drug Class	Antiarrhythmics	Antiemetics	Antihistamines	Antimuscarinics	Antipsychotics	Muscle Relaxants
Example	Disopyramide	Promethazine	Hydroxyzine	Oxybutynin	Clozapine	Cyclobenzaprine

Understanding the Beers List Criteria, the methodology for its construction, and how to implement its information into your clinical practice is essential to providing safe and effective medication therapy to older adult patients.

Now that you are familiar with the Beers List, download the most recent update here! (Or navigate to the American Geriatrics Society webpage at www.americangeriatrics.org)

Information presented in this document is for general informational purposes only. Any changes in therapy must be discussed with the prescriber prior to initiation.