

AGS 2023 Updated Beers Criteria®

WHAT IS IT?

- The Beers Criteria identifies and provides recommendations on **Potentially Inappropriate Medications (PIMs)** for older adults.
- This drug compendium explicitly lists PIMs that warrant additional attention, as they *may* present an unfavorable balance of benefits vs. harms in seniors in most circumstances or under specific situations.
- Criteria are updated by the American Geriatric Society (AGS) every 3 years for up-to-date guidance – last published in 2023.
- The list is intended for all ambulatory, acute and institutional practice settings (but *not* hospice/palliative care).

WHY DO WE NEED IT?

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

- Changes in body composition and metabolism may change drug pharmacokinetics and pharmacodynamic responses
 - Predispose seniors to certain Adverse Drug Events (ADEs)
- Potentially advanced frailty may worsen health outcomes of ADEs
 - E.g., anticoagulation and bleeding risks, CNS depression and cognitive dysfunction, oversedation and fall risks
- Relatively higher rates of multiple comorbidities and polypharmacy
 - Predispose seniors to certain drug–disease state and drug–drug interactions

INTENTIONS

- Reduce Older adults’ exposure to PIMs by improving drug selection**
- Educate clinicians and patients**
- Reduce adverse drug events**
- Serve as a tool to evaluate quality of care, cost, and patterns of drug use in older adults**

HOW TO USE THE BEERS CRITERIA

Historically, use of the AGS Beers Criteria has at times prompted controversy and a number of **myths** summarized in the left chart.

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 contextualizing 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 ✅

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.

The AGS panel addressed these concerns with the 2015 companion article, [How to Use the AGS 2015 Beers Criteria](#), which is still a great way to advise patients, providers, and health systems on its use (adapted as table 11 in the 2023 Beers Criteria).

These [Key Principles to Guide Optimal use of the AGS Beers Criteria](#) are summarized in the right chart.

Now that you are familiar with the Beers List, download the most recent update [here!](#)

TABLES

Potentially inappropriate medications for older adults are organized into the following categories:

- Medications considered as potentially inappropriate in **MOST** older adults (Table 2)
- Medications potentially inappropriate in those with **CERTAIN CONDITIONS** (Table 3)
- Medications that should be used with **CAUTION** (Table 4)



The Beers Criteria also identifies:

- Potentially inappropriate **DRUG-DRUG INTERACTIONS** (Table 5)
- Medications whose dosages should be adjusted based on **KIDNEY FUNCTION** (Table 6)
- Drugs with strong **ANTICHOLINERGIC** properties (Table 7)

Changes to the Beers Criteria are summarized as follows:

- Medications/Criteria **REMOVED** since 2019 AGS Beers Criteria (Table 8)
- Medications/Criteria **ADDED** since 2019 AGS Beers Criteria (Table 9)
- Medications/Criteria **MODIFIED** since 2019 AGS Beers Criteria (Table 10)

Example selections of medications from the 2023 AGS Beers Criteria

Drugs	Rationale	Recommendation	Quality of Evidence	Strength of Recommendation
Anti-infective Nitrofurantoin	Potential for pulmonary toxicity, hepatotoxicity, and peripheral neuropathy, especially with long-term use; safer alternatives available.	Avoid in individuals with CrCl <30mL/min or for long-term suppression.	Low	Strong

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 in Asymptomatic HF; Avoid in Symptomatic HF	High	Strong

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

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

Medication	CrCl (mL/min)	Rationale	Recommendation	Quality of Evidence	Strength of Recommendation
Spironolactone	< 30	Hyperkalemia	Avoid	Moderate	Strong

Drug Class	Antidepressants	Antiemetics	Anti-histamines	Anti-muscarinics	Antiparkinsonian Agents	Antipsychotics	Antispasmodics	Skeletal Muscle Relaxants
Example	Imipramine	Promethazine	Meclizine	Oxybutynin	Benztrapine	Clozapine	Atropine	Orphenadrine

Medication / Criterion	Reason for Removal
Pentobarbital	Not on US market

Medication / Criterion	Reason for Addition
Use with Caution – Ticagrelor	Emerging Data

Medication / Criterion	Modification
Proton Pump Inhibitors	Noted additional adverse outcomes in the rationale statement given supporting data

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 adults.

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