



General Assessment Series

Best Practices in Nursing Care to Older Adults

The American Geriatrics Society (AGS) 2023 Updated AGS Beers Criteria® for Potentially Inappropriate Medication Use in Older Adults

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WHY: Older adults take prescribed medications more frequently than any other age group in the United States (American Geriatrics Society, HealthinAging.org, 2024). Clinicians need to promote medication safety and reduce potential harms. The American Geriatrics Society (AGS) 2023 Updated Beers Criteria® (AGS Beers Criteria®), updated from 2019, are designed to reduce older adults' drug-related problems including, but not limited to exposure to potentially inappropriate medications, drug-disease interactions, and medications that warrant extra caution in the older adult population.

BEST TOOL: The AGS Beers Criteria® include the same five main categories as in 2019 and previous updates: (1) potentially inappropriate medications in older adults; (2) potentially inappropriate medications to avoid in older adults with certain diseases or syndromes; (3) medications to be used with caution in older adults; (4) medication combinations that may lead to harmful drug-drug interactions; and (5) a list of medications that should be avoided or dosed differently for those with poor renal function. The 2023 AGS Beers Criteria® provides new information involving anticoagulation including changes, supporting literature, and recommendations, as well as an update to the initiation and continuation of estrogen in postmenopausal women (AGS, 2023).

TARGET POPULATION: The AGS Beers Criteria® are to be used in the care of older adults >65 years of age in all ambulatory, acute, and institutional care settings except hospice and end-of-life care settings. The intention of the AGS Beers Criteria® is to: (1) reduce older adults' exposure to potentially inappropriate medications (PIMs) by improving medication selection; (2) educate clinicians and patients; and (3) serve as a tool for evaluating the quality of care, cost, and patterns of drug use in older adults.

VALIDITY AND RELIABILITY: The AGS Beers Criteria® were developed in 2012 using an evidence-based approach which substantially followed the Institute of Medicine standards for evidence and transparency, including a peer and public review of the draft. The 2023 update followed a similar update process as in 2019 and 2015. This included a 12-member expert panel from medicine, nursing, and pharmacy, as well as representatives from the Centers for Medicare and Medicaid Services, the National Committee for Quality Assurance, and the Pharmacy Quality Alliance. The literature search identified 33,965 references from June 1, 2017 to May 31, 2022, of which 7,352 abstracts were reviewed by panelists and 1,574 references selected for full review. A total of 451 studies were used to create evidence tables. Methods of review were based on the Grading of Recommendations Assessment, Development and Evaluation (GRADE) criteria for clinical trials and observational studies, the Assessing the Methodological Quality of Systematic Reviews (AMSTAR) criteria for systematic reviews and meta-analyses, and consistent with the American College of Physicians' evidence grading framework (AGS, 2023).

STRENGTHS AND LIMITATIONS: The AGS Beers Criteria® increase awareness of inappropriate medication use in older adults, as well as assist nurses and interprofessional team members in medication reviews and ongoing monitoring. Additionally, they inform prescribers and clinical decision support providers as they work to improve patient outcomes. The AGS Beers Criteria® do not identify all cases of potentially inappropriate prescribing and do not address overtreatment (e.g. excessive duration of therapy) or underuse of helpful medicines. More studies are needed with adequate enrollment of underrepresented, disproportionately affected, and understudied populations in clinical trials. The AGS Beers Criteria® was designed for use in the United States as there may be additional considerations for certain drugs in other countries.

FOLLOW-UP: The AGS Beers Criteria® should be used to inform clinical practice, evaluation, education, research, and policy to improve the safety and quality of medication prescribing for older adults. The AGS Beers Criteria® do not substitute for professional judgment or the need to tailor care to each patient's individual needs, goals, and unique situation. Consideration should be given that the AGS Beers Criteria® may be used in conjunction with other resources and criteria, such as deprescribing resources available at [deprescribing.org](https://www.deprescribing.org) and The Screening Tool of Older Persons Potentially Inappropriate Prescriptions and Screening Tool to Alert Doctors to the Right Treatment (STOPP/START criteria), to best guide health care providers through the medication decision-making process.

The Beers Criteria was originally developed by the late Dr. Mark Beers and colleagues at the University of California Los Angeles in 1991 to evaluate inappropriate medication use in nursing home residents. An expert panel process supported by the American Geriatrics Society provides for a more frequent monitoring and update of the AGS Beers Criteria®.

The 2023 American Geriatrics Society Updated Beers Criteria® for Potentially Inappropriate Medication Use in Older Adults

Primary source: The 2023 American Geriatrics Society Beers Criteria® Update Expert Panel (2023). American Geriatrics Society 2023 Updated AGS Beers Criteria® for Potentially Inappropriate Medication Use in Older Adults. *Journal of the American Geriatrics Society*, 71(7), 2052-2081. <https://doi.org/10.1111/jgs.18372>. Available online at <https://agsjournals.onlinelibrary.wiley.com/doi/epdf/10.1111/jgs.18372>

The above article contains the following AGS 2023 Beers Criteria® tables:

- Table 2: 2023 American Geriatrics Society Beers Criteria® for Potentially Inappropriate Medication Use in Older Adults (pp. 2057-2063 in the above article)
- Box 1: Synthesis of Anticoagulation Recommendations (p. 2064 in the above article)
- Table 3: 2023 American Geriatrics Society Beers Criteria® for Potentially Inappropriate Medication Use in Older Adults Due to Drug–Disease or Drug–Syndrome Interactions That May Exacerbate the Disease or Syndrome (pp. 2065-2067 in the above article)
- Table 4: 2023 American Geriatrics Society Beers Criteria® for Potentially Inappropriate Medications to Be Used with Caution in Older Adults (p. 2068 in the above article)
- Table 5: 2023 American Geriatrics Society Beers Criteria® for Potentially Clinically Important Drug-Drug Interactions that Should be Avoided in Older Adults (pp. 2070-2071 in the above article)
- Table 6: 2023 American Geriatrics Society Beers Criteria® for Medications that Should be Avoided or Have Their Dosage Reduced with Varying Levels of Kidney Function in Older Adults (pp. 2072-2073 in the above article)
- Table 7: Drugs with Strong Anticholinergic Properties (p. 2074 in the above article)
- Table 8: Medications/Criteria Removed since 2019 American Geriatrics Society Beers Criteria® (pp. 2075-2076 in the above article)
- Table 9: Medications/Criteria Added Since 2019 American Geriatrics Society Beers Criteria® (p. 2076 in the above article)
- Table 10: Medications/Criteria Modified Since 2010 American Geriatrics Society Beers Criteria® (pp. 2077-2078 in the above article)

MORE ON THE TOPIC:

American Geriatrics Society 2023 Updated AGS Beers Criteria® for Potentially Inappropriate Medication Use in Older Adults. *Journal of the American Geriatrics Society*, 71(7), 2052-2081. <https://doi.org/10.1111/jgs.18372>. Available online at <https://agsjournals.onlinelibrary.wiley.com/doi/epdf/10.1111/jgs.18372>

American Geriatrics Society, HealthinAging.org. (2024). Medications & Older Adults. Available at <https://www.healthinaging.org/medications-older-adults>

Best practice information on care of older adults and best practices to guide non-pharmacologic intervention: <http://hign.org>.

O’Mahony, D., Cherubini, A., Guiteras, A. R., Denking, M., Beuscart, J. B., Onder, G., Gudmundsson, A., Cruz-Jentoft, A. J., Knol, W., Bahat, G., van der Velde, N., Petrovic, M., & Curtin, D. (2023). STOPP/START criteria for potentially inappropriate prescribing in older people: Version 3. *European Geriatric Medicine*, 14(4), 625-632. <https://doi.org/10.1007/s41999-023-00777-y>

The below 2023 AGS Beers Criteria® resources may be accessed at <https://geriatricscareonline.org/toc/american-geriatrics-society-updated-beers-criteria/CL001>

- Updated 2023 AGS Beers Criteria®
- Teaching Slides: How to Use the AGS Beers Criteria®
- Pocket card: 2023 AGS Beers Criteria®
- Mobile app: 2023 AGS Beers Criteria® for Potentially Inappropriate Medications for Older Adults
- 2019 Using Wisely: A reminder on how to properly use the AGS Beers Criteria®

Public Education Resources for Patients & Caregivers

- Ten Medications to Avoid or Use with Caution
- What to Do if a Medication You Take is Listed in the AGS Beers Criteria® for Potentially Inappropriate Medications for Older Adults
- Avoiding Overmedication and Harmful Drug Reactions
- My Drug and Supplement Diary
- Alternatives for Medications Listed in the 2023 AGS Beers Criteria® for Potentially Inappropriate Medications for Older Adults