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Practical Assessment and Management of Vulnerabilities in Older Patients Receiving Systemic Cancer Therapy

ASCO Guideline Update

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Background & Methodology

Introduction

- This guideline updates the 2018 ASCO guideline on practical assessment and management of vulnerabilities in older patients undergoing chemotherapy.¹
- The present update was prompted by the publication of two large RCTs GAP70+² and GAIN³ that evaluated whether integration of geriatric assessment (GA) and GA-guided management (GAM) would reduce serious chemotherapy-related toxic effects in older adults with cancer.
- Both found clinically significant benefits from GAM in reducing chemotherapy toxicity.
- This guideline update revisits the role of GA in patients aged 65 and older receiving systemic treatment for cancer, including chemotherapy, targeted therapy, and immunotherapy.
- Based on data demonstrating that the uptake of guideline-recommended GA has been uneven at best,^{4,5} the update reconsiders the question of which GA tools are best suited for use in everyday clinical oncology practice.

Introduction

- In that context, the update highlights and makes the case for use of a Practical Geriatric Assessment (PGA) instrument designed to address barriers to routine implementation of GA in clinical practice.
- Clinical adaptation of the GA based on patient population, resources, and time is appropriate.
- The remaining recommendations from the 2018 guideline are unchanged because there were no new potentially practice-changing data to support substantive revisions.

ASCO Guideline Development Methodology

- The ASCO Evidence Based Medicine Committee (EBMC) guideline process includes:
 - a systematic literature review by ASCO guidelines staff
 - an expert panel provides critical review and evidence interpretation to inform guideline recommendations
 - final guideline approval by ASCO EBMC
- The full ASCO Guideline methodology manual can be found at: www.asco.org/guideline-methodology

Clinical Questions

This clinical practice guideline update addresses two overarching clinical questions:

1. What is the role of GA in older adults with cancer to inform specific interventions to improve clinical outcomes?
2. For older patients who are considering undergoing chemotherapy and other systemic treatments, which GA tools and component elements should clinicians use to predict adverse outcomes (including chemotherapy toxicity and mortality)?

Target Population and Audience

Target Population

- Older adults (age \geq 65) with cancer

Target Audience

- Oncologists (medical, radiation, surgical), geriatricians, palliative medicine specialists, primary care physicians, advanced practice providers, pharmacists, oncology nurses, social workers, physical therapists, occupational therapists, nutritionists, dieticians, patients, and caregivers.

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Summary of Recommendations

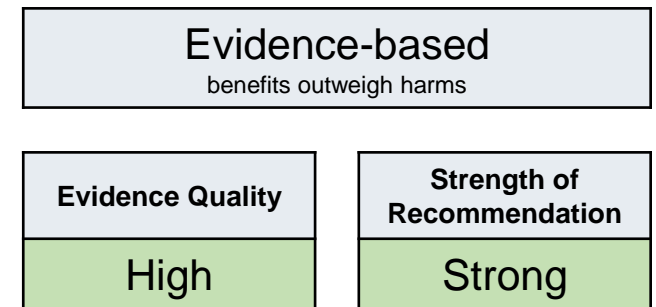
Summary of Recommendations

Clinical Question 1

- What is the role of geriatric assessment in older adults with cancer to suggest specific interventions to improve clinical outcomes?

Recommendation 1.1 (Updated)

- All patients with cancer aged 65 and over with geriatric assessment (GA)-identified impairments should have GA-guided management (GAM) included in their care plan. GAM includes using GA results to: 1) inform cancer treatment decision-making and 2) address impairments through appropriate interventions, counseling, and/or referrals.
- **Amendment 1.1a.** This includes older adults receiving systemic therapy, including chemotherapy, targeted therapy, or immunotherapy.



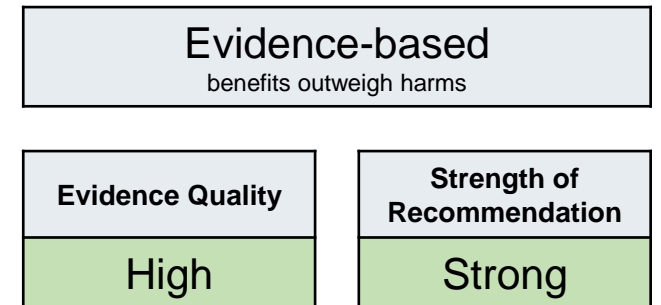
Summary of Recommendations

Clinical Question 2

- For older patients who are considering undergoing chemotherapy and other systemic treatments, which GA tools should clinicians use to predict adverse outcomes (including chemotherapy toxicity and mortality)?

Recommendation 2.1 (Updated)

- A GA should include high priority aging-related domains known to be associated with outcomes in older patients with cancer to include assessment of physical and cognitive function, emotional health, comorbid conditions, polypharmacy, nutrition, and social support.



Summary of Recommendations

Recommendation 2.1 (Updated)

- The Panel recommends the Practical Geriatric Assessment (PGA) as one option for this purpose. See the PGA tool (<https://old-prod.asco.org/sites/new-www.asco.org/files/content-files/practice-patients/documents/2023-PGA-Final.pdf>) and associated videos (How to do a Geriatric Assessment: <https://youtu.be/jnaQljOz2Dw>; What to do with the Results of a Geriatric Assessment: <https://youtu.be/nZXtwaGh0Z0>)

Informal consensus benefits outweigh harms	
Evidence Quality	Strength of Recommendation
Moderate	Weak

Clinical Question 3

- What general (i.e., non-cancer specific) life expectancy data for community-dwelling patients should clinicians consider to estimate mortality and best inform treatment decision-making for older patients with cancer?

Summary of Recommendations

Recommendation 3

- Based on the best clinical opinion of the Expert Panel, clinicians should use one of the validated tools listed at ePrognosis (<https://eprognosis.ucsf.edu/>) to estimate life expectancy (LE) greater than or equal to 4 years.
 - The Expert Panel especially recommends either the Schonberg or Lee Index (<https://eprognosis.ucsf.edu/leeschonberg.php>). The most common variables considered in these indices include age, sex, comorbidities (e.g. diabetes, COPD), functional status (e.g. ADLs, IADLs, mobility), health behaviors and lifestyle factors (e.g. smoking status, body mass index), and self-reported health.⁶⁻¹⁰
 - Several indices have “presence of cancer” as a relevant variable, answering “no” to this question will allow for non-cancer life expectancy, in order to consider competing risks of mortality.

Informal consensus	
Evidence Quality	Strength of Recommendation
High that it predicts mortality	Strong that it predicts mortality
Insufficient that it improves outcomes or improves decision making	Weak that it improves outcomes or improves decision making

Summary of Recommendations

Clinical Question 4

- How should GA be used to guide management of older patients with cancer?

Recommendation 4

- Delphi consensus panels of experts have established approaches for implementing GA-guided care processes in older adults with cancer.
- The Expert Panel recommends that clinicians apply the results of GA to develop an integrated and individualized plan for patients that informs treatment selection by helping to estimate risks for adverse outcomes and to identify nononcologic problems that may be amenable to intervention.
- Based on clinical experience and the results of formal expert consensus studies, the Expert Panel suggests that clinicians take into account GA results when recommending treatment and that the information be provided to patients and caregivers to guide decision making for treatment. In addition, clinicians should implement targeted, GA-guided interventions to manage nononcologic problems.

Evidence-based
benefits outweigh harms

Evidence Quality
High

Strength of Recommendation
Strong

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Discussion

Patient and Clinician Communication

- Patients 65 and older and their families should be empowered to expect to receive a GA when considering the initiation of therapy for cancer treatment; the panel is hopeful that patients and families will themselves become advocates for the use of the GA.
- The use of the GA to guide therapy for cancer treatment improves prognostication of toxicity outcomes, prediction of life expectancy, communications about aging-related concerns, satisfaction for patients and families with their care, and outcomes when used to guide care.
- The decision making for choosing the most appropriate therapy can be impacted through the use of a GA, including specific information about goals of care, the choices of interventions used to prevent aging-related outcomes, and the likelihood of receiving goal-concordant care.
- This also leads to care that avoids both overtreatment and undertreatment.
- Shared-decision making should include input from patients and families about the GA results, which has been shown to increase satisfaction in their care.

Patient and Clinician Communication

- The specific tools to include in the GA have been identified that are practical in nature, including input based on patient partners on the ASCO Older Adults Task Force.
- Being practical means the GA takes the minimal amount of time possible, can be completed outside of the time spent with a provider in clinic, and can be easily learned and conducted by clinic personnel.
- This emphasis on the practical nature of the proposed PGA minimizes one implementation barrier for cancer patients in the community setting.
- Knowledge and training for staff are important for uptake of the GA. ASCO has tools available:
 - [ASCO Video](#)
 - [ASCO Resources](#)
- The goal is to make it as easy as possible for community oncologists to provide this care for all of their older patients with cancer.

Gaps in the Literature and Future Research Directions

- This guideline includes the most recent evidence supporting the use of GA and GAM as the basis for optimal care for older adults with cancer, but gaps exist.
- The strongest evidence comes from studies enrolling patients with solid tumors or lymphomas receiving chemotherapy, but less is known about other populations. The evidence for other systemic therapies, including immunotherapy, is still being developed.¹¹
- Further information is needed regarding the timing of GA. Most studies have shown its value as a risk-assessment tool, but less is known regarding repeating the GA to reassess patients.
- Additionally, the strongest evidence supporting the use of GA and GAM is not fully representative of those who most often get cancer. The accrual of older adults into clinical trials remains well below their representation as cancer patients.¹²
- Utilization of the GA and facilitating GAM care should improve health equity in clinical trial evaluation and may help to narrow the gap that exists in health care decision making and considerations for trial inclusion for vulnerable populations with cancer.

Additional Resources

- More information, including a supplement and clinical tools and resources, is available at www.asco.org/supportive-care-guidelines.
- Patient information is available at www.cancer.net

Guideline Panel Members

Name	Affiliation/Institution	Role/Area of Expertise
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Abbreviations

- ADLs, Activities of Daily Living
- ASCO, American Society of Clinical Oncology
- COPD, chronic obstructive pulmonary disease
- EBMC, Evidence Based Medicine Committee
- IADLs, Instrumental Activities of Daily Living
- GA, geriatric assessment
- GAM, geriatric assessment-guided management
- LE, life expectancy
- PGA, Practical Geriatric Assessment
- RCT, randomized controlled trial

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