Selection of Optimal Adjuvant Chemotherapy and Targeted Therapy for Early Breast Cancer: ASCO Guideline Update

Denduluri et al.
Introduction

- In 2016, ASCO published an adaptation of the Cancer Care Ontario (CCO) guideline on the selection of optimal adjuvant chemotherapy regimens for early breast cancer and adjuvant targeted therapy for HER2–positive breast cancers,\(^1\) which was updated in 2018.\(^2\)
- This focused update of the 2018 guideline adaptation was prompted largely by the publication of the KATHERINE Phase III trial.\(^3\)
- This update provides a new recommendation for the use adjuvant trastuzumab emtansine (T-DM1) after completion of standard preoperative chemotherapy and HER2-targeted therapy in patients with HER2-positive breast cancer with residual invasive cancer in the breast or lymph nodes at surgery.
- The Expert Panel also decided to expand the guideline update scope to address the use of biosimilar forms of trastuzumab.
- The remaining recommendations from the 2018 ASCO guideline adaptation are unchanged because there were no new potentially practice-changing data to support substantive revisions.
ASCO Guideline Development Methodology

The ASCO Clinical Practice Guidelines Committee 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 CPGC

The full ASCO Guideline methodology manual can be found at:
www.asco.org/guideline-methodology
Clinical Questions Address in Focused Update

1. Should adjuvant trastuzumab emtansine (T-DM1) be offered following completion of standard preoperative chemotherapy and HER2-targeted therapy in patients with HER2-positive breast cancer with residual invasive cancer in the breast or lymph nodes at surgery?

2. Among patients with HER2-positive breast cancer who receive adjuvant trastuzumab therapy, do trastuzumab, trastuzumab and hyaluronidase-oysk, and currently available FDA-approved biosimilars of trastuzumab differ with respect to safety or efficacy?
Target Population and Audience

**Target Population**

Patients who have undergone preoperative standard chemotherapy and HER2 targeted therapy are being considered for, or who are receiving, systemic therapy following definitive surgery for early-stage invasive breast cancer.

*Concomitant endocrine therapy and radiation were allowed according to trial protocol and institutional guidelines.*

**Target Audience**

Medical oncologists, pathologists, surgeons, oncology nurses, patients, and caregivers.
Summary of Recommendations

CLINICAL QUESTION 1
Should adjuvant trastuzumab emtansine (T-DM1) be given following completion of standard preoperative chemotherapy and HER2-targeted therapy in all patients with HER2-positive breast cancer with residual invasive cancer in the breast or lymph nodes at surgery?

Recommendation 1.1
Patients with HER2-positive breast cancer with pathologic invasive residual disease at surgery following standard preoperative chemotherapy and HER2-targeted therapy should be offered 14 cycles of adjuvant trastuzumab emtansine (T-DM1) unless there is disease recurrence or unmanageable toxicity. (Type: Evidence-based, benefits outweigh harms; Evidence quality: high; Strength of recommendation: strong.)
Summary of Recommendations

CLINICAL QUESTION 2
Among patients with HER2-positive breast cancer who receive adjuvant trastuzumab therapy, do trastuzumab, trastuzumab and hyaluronidase-oysk, and currently available FDA-approved biosimilars of trastuzumab differ with respect to safety or efficacy?

Recommendation 2.1
Clinicians may offer any of the available and approved formulations of trastuzumab, including trastuzumab, trastuzumab and hyaluronidase-oysk, and available biosimilars. (Type: Evidence-based, benefits outweigh harms; Evidence quality: high; Strength of recommendation: strong.)
Cost Considerations

- Increasingly, individuals with cancer are required to pay a larger proportion of their treatment costs through deductibles and co-insurance. These costs have been shown to be a barrier to initiating and adhering to recommended cancer treatments. ⁴, ⁵

- Medication prices of these agents vary markedly, depending on negotiated discounts and rebates.

- Discussion of cost can be an important part of shared decision-making. Clinicians should exercise judgment, and, whenever it is practical and feasible, discuss with patients the use of less expensive alternatives when considering two or more treatment options that are comparable in terms of benefits and harms. ⁶

- Cost-effectiveness analyses can help highlight which costly treatments offer the greatest value. Conducting a formal cost effectiveness analysis to guide the selection of an optimal targeted adjuvant therapy was beyond the scope of this guideline. However, several manuscripts have analyzed the cost effectiveness of targeted therapies for breast cancer. ⁴-¹³
Additional Resources

More information, including a supplement, slide sets, and clinical tools and resources, is available at

www.asco.org/breast-cancer-guidelines

Patient information is available at www.cancer.net
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