

Self-Study Chapter 1: Advanced HER2-Positive Breast Cancer Select Treatment Options

Introduction

In this activity, participants will review sequencing of HER2-directed therapies, recognize the frequency of brain metastases, and explore the use of HER2-directed therapies in women with brain metastases.

Pre Test

A 54-year-old post-menopausal woman presents with de novo metastatic ER+/PR+/HER2+ disease involving bone and liver. A liver biopsy confirmed the same histology as the primary breast lesion. She is referred to you for treatment. Which of the following treatments would you recommend for her?

- a) Paclitaxel and trastuzumab
- b) Docetaxel, trastuzumab, and pertuzumab**
- c) AI + CDK4/6i
- d) AI + Trastuzumab
- e) AI + Trastuzumab + pertuzumab

The CLEOPATRA study demonstrated that the addition of pertuzumab to trastuzumab and taxane was superior in DFS and OS to trastuzumab and taxane.

Part 1: Tucatinib, trastuzumab, and capecitabine (HER2CLIMB study)

[Watch Video Part 1](#)

Part 2: Fam-trastuzumab deruxtecan-nxki (DESTINY-Breast01 study)

[Watch Video Part 2](#)

Part 3: Neratinib plus capecitabine (NALA study)

[Watch Video Part 3](#)

This is the order in which we treat patients with HER2+ metastatic breast cancer.

1. Trastuzumab, Pertuzumab + Taxane
2. Ado-Trastuzumab Emtansine (TDM1)
3. Fam-Trastuzumab Deruxtecan or Tucatinib/Capecitabine/Trastuzumab
4. Tucatinib/Capecitabine/Trastuzumab or Fam-Trastuzumab Deruxtecan
5. Neratinib + Capecitabine
Trastuzumab + Lapatinib
Trastuzumab + Chemotherapy

References:

Swain SM, Baselga J, Kim SB, et al. Pertuzumab, trastuzumab, and docetaxel in HER2-positive metastatic breast cancer. *N Engl J Med*. 2015;372(8):724-734. doi:10.1056/NEJMoa1413513

Posttest (same as pretest)

A 54-year-old post-menopausal woman presents with de novo metastatic ER+/PR+/HER2+ disease involving bone and liver. A liver biopsy confirmed the same histology as the primary breast lesion. She is referred to you for treatment. Which of the following treatments would you recommend for her?

- a) Paclitaxel and trastuzumab
- b) Docetaxel, trastuzumab, and pertuzumab**
- c) AI + CDK4/6i
- d) AI + Trastuzumab
- e) AI + Trastuzumab + pertuzumab

The CLEOPATRA study demonstrated that the addition of pertuzumab to trastuzumab and taxane was superior in disease-free survival (DFS) and overall survival (OS) to trastuzumab and taxane.

Thank you for completing the 1st Self Study Chapter. You can now move on to Self-Study Chapter 2.