Clinical Policy: Ado-Trastuzumab (Kadcyla)

Reference Number: PA.CP.PHAR.229
Effective Date: 01/18
Last Review Date: 04/18 Revision Log

Description
The intent of the criteria is to ensure that patients follow selection elements established by Pennsylvania Health and Wellness® clinical policy for ado-trastuzumab (Kadcyla®).

FDA Approved Indication(s)
Kadcyla is indicated, as a single agent, for the treatment of patients with HER2-positive, metastatic breast cancer who previously received trastuzumab and a taxane, separately or in combination. Patients should have either:

- Received prior therapy for metastatic disease, or
- Developed disease recurrence during or within six months of completing adjuvant therapy.

Policy/Criteria
It is the policy of Pennsylvania Health and Wellness® that Kadcyla is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Breast Cancer (must meet all):

1. Diagnosis recurrent or metastatic HER2-positive breast cancer;
2. Prescribed by or in consultation with an oncologist;
3. Age ≥ 18 years;
4. Dose does not exceed 3.6 mg/kg every 21 days.

Approval duration: 6 months

B. Non-Small Cell Lung Cancer (off-label) (must meet all):

1. Diagnosis of HER2-positive non-small cell lung cancer;
2. Prescribed by or in consultation with an oncologist;
3. Age ≥ 18 years;
4. Request meets one of the following (a or b):
   a. Dose does not exceed 3.6 mg/kg every 21 days;
   b. Requested dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

Approval duration: 6 months

C. Other diagnoses/indications: Refer to PA.CP.PHAR.57 - Global Biopharm Policy.

II. Continued Approval

A. All Indications in Section I (must meet all)**:**

1. Currently receiving medication via Pennsylvania Health and Wellness benefit or member has previously met all initial approval criteria; or the Continuity of Care policy (PA.LTSS.PHAR.01) applies;

2. Documentation of positive response to therapy, including no disease progression;
3. Request meets one of the following (a or b):
   a. Dose does not exceed 3.6 mg/kg every 21 days;
   b. Requested dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

Approval duration: 12 months

B. Other diagnoses/indications (1 or 2)**:**

1. Currently receiving medication via Pennsylvania Health and Wellness benefit and documentation supports positive response to therapy; or the Continuity of Care policy (PA.LTSS.PHAR.01) applies;
   Approval Duration: Duration of request or 6 months (whichever is less); or

2. Refer to PA.CP.PHAR.57 - Global Biopharm Policy.

Background

Description/Mechanism of Action:

Ado-trastuzumab emtansine is a HER2-targeted antibody-drug conjugate. The antibody is the humanized anti-HER2 IgG1, trastuzumab. The small molecule cytotoxin, DM1, is a microtubule inhibitor. Upon binding to sub-domain IV of the HER2 receptor, ado-trastuzumab emtansine undergoes receptor-mediated internalization and subsequent lysosomal degradation, resulting in intracellular release of DM1-containing cytotoxic catabolites. Binding of DM1 to tubulin disrupts microtubule networks in the cell, which results in cell cycle arrest and apoptotic cell death. In addition, *in vitro* studies have shown that similar to trastuzumab, ado-trastuzumab emtansine inhibits HER2 receptor signaling, mediates antibody-dependent cell-mediated cytotoxicity and inhibits shedding of the HER2 extracellular domain in human breast cancer cells that overexpress HER2.

Formulations:

Kadcyla is a sterile, white to off-white preservative free lyophilized powder available in single-use vials. Each vial contains 100 mg or 160 mg ado-trastuzumab emtansine for reconstitution to a concentration of 20 mg/mL.

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Appendices

Appendix A: Abbreviation Key

FDA: Food and Drug Administration
HER2: human epidermal growth factor receptor 2 protein
NCCN: National Comprehensive Cancer Network

Reviews, Revisions, and Approvals	Date	Approval Date
2Q 2018 annual review;; summarized NCCN and FDA approved uses for improved clarity; added specialist involvement in care; off-label NSCLC added; references reviewed and updated.	02.13.18	

References

1. Kadcyla Prescribing Information. South San Francisco, CA: Genentech, Inc.; July 2016. Available at http://www.gene.com/download/pdf/kadcyla_prescribing.pdf. Accessed February 2018.

2. National Comprehensive Cancer Network Drugs and Biologics Compendium. Available at: http://www.nccn.org/professionals/drug_compendium. Accessed February 2018.
3. National Comprehensive Cancer Network. Breast cancer Version 3.2017. Available at: http://www.nccn.org/professionals/physician_gls/pdf/cervical.pdf. Accessed February 2018.
4. National Comprehensive Cancer Network. Non-small cell lung cancer Version 2.2018. Available at: http://www.nccn.org/professionals/physician_gls/pdf/cervical.pdf. Accessed February 2018.