Clinical Policy: Pertuzumab (Perjeta)

Reference Number: PA.CP.PHAR.227
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 pertuzumab (Perjeta®).

FDA Approved Indication(s)
Perjeta is indicated for:

- Use in combination with trastuzumab and docetaxel for the treatment of patients with HER2-positive metastatic breast cancer who have not received prior anti-HER2 therapy or chemotherapy for metastatic disease.
- Use in combination with trastuzumab and chemotherapy as:
  - Neoadjuvant treatment of patients with HER2-positive, locally advanced, inflammatory, or early stage breast cancer (either greater than 2 cm in diameter or node positive) as part of a complete treatment regimen for early breast cancer;
  - Adjuvant treatment of patients with HER2-positive early breast cancer at high risk of recurrence.

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

I. Initial Approval Criteria

A. Breast Cancer (must meet all):

1. Diagnosis of HER2-positive breast cancer;
2. Prescribed by or in consultation with an oncologist;
3. Age ≥ 18 years;
4. Prescribed as combination regimen;
5. Dose does not exceed the following:
   a. Initial dose: 840 mg;
   b. Maintenance dose: 420 mg every 3 weeks.

Approval duration: 6 months

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

II. Continued Approval

A. Breast Cancer (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;
3. Dose does not exceed 420 mg every 3 weeks;

Approval duration: 12 months
(Up to 18 total cycles if breast cancer is non-metastatic)

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:
Pertuzumab is a recombinant humanized monoclonal antibody produced by recombinant DNA technology in a mammalian cell (Chinese Hamster Ovary) culture containing the antibiotic gentamicin. Gentamicin is not detectable in the final product. Pertuzumab targets the extracellular dimerization domain (Subdomain II) of HER2 and, thereby, blocks ligand-dependent heterodimerization of HER2 with other HER family members, including EGFR, HER3, and HER4. As a result, pertuzumab inhibits ligand-initiated intracellular signaling through two major signal pathways, mitogen-activated protein (MAP) kinase, and phosphoinositide 3-kinase (PI3K). Inhibition of these signaling pathways can result in cell growth arrest and apoptosis, respectively. In addition, pertuzumab mediates antibody-dependent cell-mediated cytotoxicity (ADCC). While pertuzumab alone inhibited the proliferation of human tumor cells, the combination of pertuzumab and trastuzumab augmented anti-tumor activity in HER2-overexpressing xenograft models.

Formulations:
Perjeta is a sterile, clear to slightly opalescent, colorless to pale brown liquid for intravenous infusion. Each single use vial contains 420 mg of pertuzumab at a concentration of 30 mg/mL in 20 mM L-histidine acetate (pH 6.0), 120 mM sucrose, and 0.02% polysorbate 20.

FDA Approved Indications:
Perjeta (pertuzumab) is a HER2/neu receptor antagonist/formulation for intravenous infusion indicated for:
- Use in combination with trastuzumab and docetaxel for the treatment of patients with HER2-positive metastatic breast cancer who have not received prior anti-HER2 therapy or chemotherapy for metastatic disease.
- Use in combination with trastuzumab and docetaxel for the neoadjuvant treatment of patients with HER2-positive, locally advanced, inflammatory, or early stage breast cancer (either greater than 2 cm in diameter or node positive) as part of a complete treatment regimen for early breast cancer. This indication is based on demonstration of an improvement in pathological complete response rate. No data are available demonstrating improvement in event-free survival or overall survival.

Limitations of use:

- The safety of Perjeta as part of a doxorubicin-containing regimen has not been established.
- The safety of Perjeta administered for greater than 6 cycles for early breast cancer has not been established.

Appendices

Appendix A: Abbreviation Key

AC: doxorubicin and cyclophosphamide
FDA: Food and Drug Administration
FEC: fluorouracil, epirubicin, and cyclophosphamide
HER2: human epidermal growth factor receptor 2 protein
NCCN: National Comprehensive Cancer Network
TCH: docetaxel, carboplatin, and trastuzumab

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; references reviewed and updated.	04.07.18	

References

1. Perjeta Prescribing Information. South San Francisco, CA: Genentech, Inc.; March 2016. Available at http://www.gene.com/download/pdf/perjeta_prescribing.pdf. Accessed February 2018.
2. Pertuzumab. In: National Comprehensive Cancer Network Drugs and Biologics Compendium. Available at NCCN.org. Accessed February 2018.
3. Breast cancer (Version 3.2017). In: National Comprehensive Cancer Network Guidelines. Available at NCCN.org. Accessed February 2018.