

Trastuzumab:

Herceptin®; Ogivri®; Kanjinti™; Trazimera™; Herzuma®; Ontruzant® (Intravenous)

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I. Length of Authorization ¹⁻⁸

Coverage is provided for 6 months and may be renewed (unless otherwise specified).

- Neoadjuvant and adjuvant treatment in Breast Cancer may be authorized up to a maximum of fifty-two (52) weeks of treatment [18 cycles].

II. Dosing Limits

A. Quantity Limit (max daily dose) [NDC Unit]:

- 150 mg single-dose vial: 6 vials day 1, then 5 vials every 21 days thereafter
- 420 mg multiple-dose vial: 3 vials day 1, then 2 vials every 21 days thereafter

B. Max Units (per dose and over time) [HCPCS Unit]:

	Indication	Load (1-time)	Load Billable Units (1-time)	Maintenance	Maintenance Billable Units	Interval (Days)
Herceptin (150 mg SDV)	Breast Cancer, Colorectal Cancer, Appendiceal Adenocarcinoma	4 mg/kg	45	2 mg/kg	30	7
		8 mg/kg	90	6 mg/kg	75	21
	Gastric, Esophageal, GEJ Cancer	6 mg/kg	75	4 mg/kg	45	14
		8 mg/kg	90	6 mg/kg	75	21
	CNS metastases from Breast Cancer (in combination with capecitabine and tucatinib), Uterine Cancer, Head and Neck Cancer, Hepatobiliary Cancers	8 mg/kg	90	6 mg/kg	75	21
	CNS metastases from Breast Cancer (in combination with pertuzumab)	N/A	N/A	6 mg/kg	75	7
	Leptomeningeal Metastases from Breast Cancer	N/A	N/A	100 mg	15	7

	Indication	Load (1-time)	Load Billable Units (1-time)	Maintenance	Maintenance Billable Units	Interval (Days)
Ogivri, Kanjinti, Trazimera, Herzuma, Ontruzant (420 mg MDV)	Breast Cancer, Colorectal Cancer, Appendiceal Adenocarcinoma	4 mg/kg	46	2 mg/kg	23	7
		8 mg/kg	92	6 mg/kg	69	21
	Gastric, Esophageal, GEJ Cancer	6 mg/kg	69	4 mg/kg	46	14
		8 mg/kg	92	6 mg/kg	69	21
	CNS metastases from Breast Cancer (in combination with capecitabine and tucatinib), Uterine Cancer, Head and Neck Cancer, Hepatobiliary Cancers	8 mg/kg	92	6 mg/kg	69	21
	CNS metastases from Breast Cancer (in combination with pertuzumab)	N/A	N/A	6 mg/kg	69	7
	Leptomeningeal Metastases from Breast Cancer	N/A	N/A	100 mg	10	7

III. Initial Approval Criteria ¹⁻⁶

Coverage is provided in the following conditions:

- Patient must have tried and failed treatment with Trazimera (trastuzumab-qyyp) or a contraindication exists; **AND**

- Patient is at least 18 years of age; **AND**

Universal Criteria ¹⁻⁶

- Left ventricular ejection fraction (LVEF) is within normal limits prior to initiating therapy and will be assessed at regular intervals (e.g., every 3 months) during treatment; **AND**
- Patient has human epidermal growth factor receptor 2 (HER2)-positive* disease as determined by an FDA-approved or CLIA-compliant test[‡]; **AND**
- Therapy will not be substituted with or for ado-trastuzumab emtansine (Kadcyla) or fam-trastuzumab deruxtecan-nxki (Enhertu); **AND**
- Therapy will not be used in combination with trastuzumab and hyaluronidase-oysk (Herceptin Hylecta) or pertuzumab/trastuzumab and hyaluronidase-zzxf (Phesgo); **AND**

Breast Cancer † ‡ ^{1-8,10-16,35-38,43,44}

- Used as adjuvant therapy; **AND**
 - Patient has locally advanced, node positive, or inflammatory disease; **AND**
 - Used in combination with a taxane-based regimen (e.g., docetaxel, paclitaxel, etc.) with or without pertuzumab; **OR**
 - Used as a single agent; **OR**

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- Used in combination with pertuzumab; **OR**
- Used as neoadjuvant or preoperative therapy; **AND**
 - Patient has locally advanced, node positive, or inflammatory disease; **AND**
 - Used in combination with a taxane-based regimen (e.g., docetaxel, paclitaxel, etc.) with or without pertuzumab; **OR**
- Used for recurrent unresectable or metastatic disease **OR** inflammatory breast cancer; **AND**
 - Used as a single agent in patients who have received one or more prior chemotherapy regimens for metastatic disease †; **OR**
 - Used in combination with one of the following:
 - Paclitaxel as first-line therapy for metastatic disease †
 - Endocrine therapy (e.g., tamoxifen, fulvestrant, or aromatase inhibition with or without lapatinib) in patients with hormone-receptor positive disease; **AND**
 - Patient is post-menopausal; **OR**
 - Patient is pre-menopausal and is treated with ovarian ablation/suppression; **OR**
 - Patient is a male (sex assigned at birth)
 - Pertuzumab and a taxane (e.g., docetaxel, paclitaxel) as first-line therapy
 - Capecitabine and tucatinib as second-line therapy and beyond
 - Cytotoxic chemotherapy as third-line therapy and beyond
 - Lapatinib (without cytotoxic therapy) as third-line therapy and beyond
 - Pertuzumab with or without cytotoxic therapy as subsequent therapy in patients previously treated with chemotherapy and trastuzumab (without pertuzumab)

Central Nervous System (CNS) Cancer ‡ 7,18,29,30

- Patient has leptomeningeal metastases from breast cancer; **AND**
 - Trastuzumab will be administered intrathecally; **OR**
- Patient has brain metastases from breast cancer; **AND**
 - Used in combination with one of the following:
 - Pertuzumab
 - Capecitabine and tucatinib in patients previously treated with at least one HER2-directed regimen; **AND**
 - Used in one of the following treatment settings:
 - Used as initial treatment in patients with small asymptomatic brain metastases
 - Patient has recurrent limited brain metastases
 - Patient has recurrent extensive brain metastases with stable systemic disease or reasonable systemic treatment options

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- Patient has relapsed limited brain metastases with either stable systemic disease or reasonable systemic treatment options

Gastric, Esophageal, and Esophagogastric Junction Cancers † ⊕ 1-7,17,32,33

- Patient is not a surgical candidate or has unresectable locally advanced, recurrent, or metastatic adenocarcinoma; **AND**
- Used as first-line therapy in combination with chemotherapy with or without pembrolizumab (*excluding use in combination with DCF [docetaxel, carboplatin, and fluorouracil]*)

Endometrial Carcinoma – Uterine Neoplasms ‡ 7,19,34

- Used in combination with carboplatin and paclitaxel; **AND**
- Patient has stage III/IV or recurrent uterine serous carcinoma

Colorectal Cancer (CRC) ‡ 7,9,31

- Patient has RAS and BRAF wild-type (WT) disease; **AND**
- Used in combination with pertuzumab or lapatinib; **AND**
- Patient has not previously received HER2-directed therapy; **AND**
 - Used as primary treatment for unresectable (or medically inoperable), locally advanced, or metastatic disease if intensive therapy is not recommended; **OR**
 - Used as subsequent therapy for progression of advanced or metastatic disease after at least one prior line of treatment in the advanced or metastatic disease setting

Appendiceal Adenocarcinoma – Colon Cancer ‡ 7,9

- Patient has RAS and BRAF wild-type (WT) disease; **AND**
- Used in combination with pertuzumab or lapatinib; **AND**
- Patient has not previously received HER2-targeted therapy; **AND**
 - Used as initial therapy for advanced or metastatic disease if intensive therapy is not recommended; **OR**
 - Used as subsequent therapy for progression of advanced or metastatic disease after at least one prior line of treatment in the advanced or metastatic disease setting

Head and Neck Cancer ‡ 7,39-42

- Patient has salivary gland tumors; **AND**
- Used as a single agent OR in combination with either docetaxel or pertuzumab; **AND**
- Patient has recurrent disease with one of the following:
 - Distant metastases
 - Unresectable locoregional recurrence with prior radiation therapy (RT)
 - Unresectable second primary with prior RT

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Hepatobiliary Cancers ‡^{7,45,46}

- Patient has gallbladder cancer, extrahepatic cholangiocarcinoma, or intrahepatic cholangiocarcinoma; **AND**
- Used as subsequent treatment for progression on or after systemic treatment for unresectable or metastatic disease; **AND**
- Used in combination with pertuzumab

*HER2-positive overexpression criteria
Breast, CNS, Uterine, Head and Neck, and Hepatobiliary Cancer: ^{8,10}
<ul style="list-style-type: none">• Immunohistochemistry (IHC) assay 3+; OR• Dual-probe in situ hybridization (ISH) assay HER2/CEP17 ratio ≥ 2.0 AND average HER2 copy number ≥ 4.0 signals/cell; OR• Dual-probe in situ hybridization (ISH) assay AND concurrent IHC indicating one of the following:<ul style="list-style-type: none">○ HER2/CEP17 ratio ≥ 2.0 AND average HER2 copy number < 4.0 signals/cell AND concurrent IHC 3+; OR○ HER2/CEP17 ratio < 2.0 AND average HER2 copy number ≥ 6.0 signals/cell AND concurrent IHC 2+ or 3+; OR○ HER2/CEP17 ratio < 2.0 AND average HER2 copy number ≥ 4.0 and < 6.0 signals/cell AND concurrent IHC 3+
Gastric, Esophageal, and Esophagogastric Junction Cancer: ^{32,33,48}
<ul style="list-style-type: none">• Immunohistochemistry (IHC) assay 3+; OR• Fluorescence in situ hybridization (FISH) or in situ hybridization (ISH) assay AND concurrent IHC indicating one of the following:<ul style="list-style-type: none">○ HER2/CEP17 ratio ≥ 2.0 AND concurrent IHC 2+; OR○ Average HER2 copy number ≥ 6.0 signals/cell AND concurrent IHC 2+
Colorectal Cancer and Appendiceal Adenocarcinoma: ^{9,31}
<ul style="list-style-type: none">• Immunohistochemistry (IHC) assay 3+; OR• Fluorescence in situ hybridization (FISH) HER2/CEP17 ratio ≥ 2 AND concurrent IHC 2+; OR• Next-generation sequencing (NGS) panel HER2 amplification

❖ *If confirmed using an immunotherapy assay* <http://www.fda.gov/companiondiagnostics>

† FDA Approved Indication(s); ‡ Compendia recommended Indication(s); Ⓢ Orphan Drug

IV. Renewal Criteria¹⁻⁶

Coverage may be renewed based upon the following criteria:

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- Patient continues to meet the universal and other indication-specific relevant criteria such as concomitant therapy requirements (not including prerequisite therapy), performance status, etc. identified in section III; **AND**
- Disease response with treatment as defined by stabilization of disease or decrease in size of tumor or tumor spread; **AND**
- Absence of unacceptable toxicity from the drug. Examples of unacceptable toxicity include: cardiotoxicity (e.g., left ventricular dysfunction, cardiomyopathy, etc.), pulmonary toxicity (e.g., dyspnea, interstitial pneumonitis, etc.), severe or febrile neutropenia, severe infusion-related reactions, etc.; **AND**
- Left ventricular ejection fraction (LVEF) obtained within the previous 3 months as follows:
 - LVEF is within the institutional normal limits, and has not had an absolute decrease of $\geq 16\%$ from pre-treatment baseline; **OR**
 - LVEF is below the institutional lower limits of normal, and has not had an absolute decrease of $\geq 10\%$ from pre-treatment baseline

Breast Cancer (neoadjuvant and adjuvant therapy)

- Patient has not exceeded a maximum of fifty-two (52) weeks of treatment (total 18 cycles)

V. Dosage/Administration [1-6,8,9,18,19,29,31-33,40-42,45,49](#)

Indication	Dose
Breast Cancer	<p><u>Neoadjuvant/Adjuvant Therapy</u></p> <p><u>Combination Therapy</u></p> <p>–Administer an initial dose of 4 mg/kg intravenously followed by 2 mg/kg intravenously weekly during chemotherapy for up to 18 weeks.</p> <p>–One week following the last weekly dose of trastuzumab, administer 6 mg/kg intravenously every three weeks.</p> <p>OR</p> <p>–Administer an initial dose of 4 mg/kg intravenously followed by 2 mg/kg intravenously weekly.</p> <p>OR</p> <p>–Administer an initial dose at 8 mg/kg intravenously followed by 6 mg/kg intravenously every three weeks.</p> <p><u>Single-Agent Therapy (following chemotherapy)</u></p> <p>–Administer an initial dose at 8 mg/kg intravenously, followed by subsequent doses at 6 mg/kg intravenously every three weeks.</p> <p><i>Note: Use for neoadjuvant and adjuvant treatment is limited to a total of 52 weeks of treatment (total of 18 cycles).</i></p> <p><u>Recurrent or Metastatic Disease (alone or in combination with chemotherapy)</u></p> <p>Loading dose: 4 mg/kg intravenously x 1 for every 7-day dosing schedule</p> <p>Maintenance dose: 2 mg/kg intravenously every 7 days</p> <p>OR</p>

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	<p>Loading dose: 8 mg/kg intravenously x 1 for every 21-day dosing schedule</p> <p>Maintenance dose: 6 mg/kg every 21 days</p> <p><i>Note: Treat until disease progression or intolerable toxicity.</i></p>
Gastric, Esophageal, and Esophagogastric Junction Cancers	<p>Loading dose: 8 mg/kg intravenously x 1 for every 21-day dosing schedule</p> <p>Maintenance dose: 6 mg/kg intravenously every 21 days</p> <p>OR</p> <p>Loading dose: 6 mg/kg intravenously x 1 for every 14-day dosing schedule</p> <p>Maintenance dose: 4 mg/kg intravenously every 14 days</p> <p><i>Note: Treat until disease progression or intolerable toxicity.</i></p>
Colorectal Cancer & Appendiceal Adenocarcinoma	<p>Loading dose: 8 mg/kg intravenously x 1 for every 21-day dosing schedule</p> <p>Maintenance dose: 6 mg/kg intravenously every 21 days</p> <p>OR</p> <p>Loading dose: 4 mg/kg intravenously x 1 for every 7-day dosing schedule</p> <p>Maintenance dose: 2 mg/kg intravenously every 7 days</p> <p><i>Note: Treat until disease progression or intolerable toxicity.</i></p>
CNS Cancer	<p><u>Leptomeningeal Metastases from Breast Cancer</u></p> <p>Escalating doses up to 100 mg intrathecally weekly*</p> <p><i>*Dosing is highly variable and should be individualized.</i></p> <p><u>Limited or Extensive Brain Metastases from Breast Cancer</u></p> <p><u>Combination Therapy with pertuzumab</u></p> <p>–Administer 6 mg/kg intravenously every 7 days</p> <p><u>Combination Therapy with capecitabine and tucatinib</u></p> <p>–Administer an initial dose at 8 mg/kg intravenously followed by 6 mg/kg intravenously every 21 days</p> <p><i>Note: Treat until disease progression or intolerable toxicity.</i></p>
All other indications	<p>Loading dose: 8 mg/kg intravenously x 1 for every 21-day dosing schedule</p> <p>Maintenance dose: 6 mg/kg intravenously every 21 days</p> <p><i>Note: Treat until disease progression or intolerable toxicity.</i></p>

VI. Billing Code/Availability Information

Brand Name	HCPCS	HCPCS Description	1 BU	Vial Size & Type	NDCs
Herceptin	J9355	Injection, trastuzumab, excludes biosimilar, 10 mg	10 mg	150 mg SDV	50242-0132-xx
				420 mg MDV (discontinued)	50242-0333-xx (discontinued)
Ogivri	Q5114	Injection, Trastuzumab-dkst, biosimilar, (Ogivri), 10 mg	10 mg	150 mg SDV	67457-0991-xx
				420 mg MDV (with diluent)	67457-0847-xx
				420 mg MDV (no diluent)	67457-0845-xx
Kanjinti	Q5117	Injection, trastuzumab-anns, biosimilar, (Kanjinti), 10 mg	10 mg	150 mg SDV	55513-0141-xx
				420 mg MDV (with diluent)	55513-0164-xx

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Brand Name	HCPCS	HCPCS Description	1 BU	Vial Size & Type	NDCs
				420 mg MDV (no diluent)	55513-0132-xx
Trazimera	Q5116	Injection, trastuzumab-qyyp, biosimilar, (Trazimera), 10 mg	10 mg	150 mg SDV	00069-0308-xx
				420 mg MDV	00069-0305-xx
Herzuma	Q5113	Injection, Trastuzumab-pkrb, biosimilar, (Herzuma), 10 mg	10 mg	150 mg SDV	63459-0303-xx
				420 mg MDV	63459-0305-xx
Ontruzant	Q5112	Injection, Trastuzumab-dttb, biosimilar, (Ontruzant), 10 mg	10 mg	150 mg SDV	78206-0147-xx
				420 mg MDV	78206-0148-xx
Notes: <ul style="list-style-type: none"> Herceptin is only available as a single-dose vial; therefore, the JW modifier is allowed Ogivri, Kanjinti, Trazimera, Herzuma, & Ontruzant are available as both single-dose and multi-dose vials. Approvals are based upon use of the MDV; therefore, the JW modifier is not allowed 					

VII. References

1. Herceptin [package insert]. South San Francisco, CA; Genentech, Inc.; February 2021. Accessed October 2022.
2. Ogivri [package insert]. Morgantown, WV; Mylan Pharmaceuticals, Inc.; February 2021. Accessed October 2022.
3. Kanjinti [package insert]. Thousand Oaks, CA; Amgen, Inc.; October 2022. Accessed October 2022.
4. Trazimera [package insert]. Cork, Ireland; Pfizer Ireland Pharmaceuticals; November 2020. Accessed October 2022.
5. Herzuma [package insert]. Yeonsu-gu, Incheon, Republic of Korea; Celltrion, Inc.; May 2019. Accessed October 2022.
6. Ontruzant [package insert]. Yeonsu-gu, Incheon, Republic of Korea; Samsung Bioepis Co., Ltd.; June 2021. Accessed October 2022.
7. Referenced with permission from the NCCN Drugs & Biologics Compendium (NCCN Compendium®) Trastuzumab. National Comprehensive Cancer Network, 2022. The NCCN Compendium® is a derivative work of the NCCN Guidelines®. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Compendium, go online to NCCN.org. Accessed October 2022.
8. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Breast Cancer, Version 4.2022. National Comprehensive Cancer Network, 2022. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Guidelines, go online to NCCN.org. Accessed October 2022.
9. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Colon Cancer, Version 1.2022. National Comprehensive Cancer

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10. Wolff AC, Hammond EH, Allison KH, et al. Human epidermal growth factor receptor 2 testing in breast cancer: American Society of Clinical Oncology/College of American Pathologists Clinical Practice Guideline Focused Update. *J Clin Oncol* 2018;36:2105-2122.
11. Romond EH, Perez EA, Bryant J, et al. Trastuzumab plus adjuvant chemotherapy for operable HER2-positive breast cancer. *N Engl J Med*. 2005;353:1673-1684 and supplementary appendix.
12. Piccart-Gebhart MJ, Procter M, Leyland-Jones B, et al. Trastuzumab after adjuvant chemotherapy in HER2-positive breast cancer. *N Engl J Med*. 2005;353:1659-1672.
13. Cameron D, Piccart-Gebhart MJ, Gelber RD et al. 11 years' follow-up of trastuzumab after adjuvant chemotherapy in HER2-positive early breast cancer: final analysis of the HERceptin Adjuvant (HERA) trial. *Lancet*. 2017 Mar 25;389(10075):1195-1205.
14. Vogel CL, Cobleigh MA, Tripathy D, et al. Efficacy and safety of trastuzumab as a single agent in first-line treatment of HER2-overexpressing metastatic breast cancer. *J Clin Oncol*. 2002 Feb 1;20(3):719-26.
15. Seidman AD, Berry D, Cirincione C, et al. Randomized phase III trial of weekly compared with every-3-weeks paclitaxel for metastatic breast cancer, with trastuzumab for all HER-2 overexpressors and random assignment to trastuzumab or not in HER-2 nonoverexpressors: final results of Cancer and Leukemia Group B protocol 9840. *J Clin Oncol*. 2008 Apr 1;26(10):1642-9.
16. Robert N, Leyland-Jones B, Asmar L, et al. Randomized phase III study of trastuzumab, paclitaxel, and carboplatin compared with trastuzumab and paclitaxel in women with HER-2-overexpressing metastatic breast cancer.
17. Bang YJ, Van Cutsem E, Feyereislova A, et al. Trastuzumab in combination with chemotherapy versus chemotherapy alone for treatment of HER2-positive advanced gastric or gastro-esophageal junction cancer (ToGA): a phase 3, open-label, randomised controlled trial. *Lancet*. 2010 Aug 28;376(9742):687-97. *J Clin Oncol*. 2006 Jun 20;24(18):2786-92.
18. Zagouri F, Sergentanis TN, Bartsch R, et al. Intrathecal administration of trastuzumab for the treatment of meningeal carcinomatosis in HER2-positive metastatic breast cancer: a systematic review and pooled analysis. *Breast Cancer Res Treat* 2013; 139:13-22.
19. Fader AN, Roque DM, Siegel E, et al. Randomized Phase II Trial of Carboplatin-Paclitaxel Versus Carboplatin-Paclitaxel-Trastuzumab in Uterine Serous Carcinomas That Overexpress Human Epidermal Growth Factor Receptor 2/neu. *J Clin Oncol*. 2018 Jul 10;36(20):2044-2051. doi: 10.1200/JCO.2017.76.5966. Epub 2018 Mar 27.
20. Hainsworth JD, Meric-Bernstam F, Swanton C, et al. Targeted Therapy for Advanced Solid Tumors on the Basis of Molecular Profiles: Results From MyPathway, an Open-Label, Phase IIa Multiple Basket Study. *Clin Oncol*. 2018 Feb 20;36(6):536-542.

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21. Fahrenbruch R, Kintzel P, Bott AM, et al. Dose Rounding of Biologic and Cytotoxic Anticancer Agents: A Position Statement of the Hematology/Oncology Pharmacy Association. *J Oncol Pract.* 2018 Mar;14(3):e130-e136.
22. Hematology/Oncology Pharmacy Association (2019). *Intravenous Cancer Drug Waste Issue Brief.* Retrieved from http://www.hoparx.org/images/hopa/advocacy/Issue-Briefs/Drug_Waste_2019.pdf
23. Bach PB, Conti RM, Muller RJ, et al. Overspending driven by oversized single dose vials of cancer drugs. *BMJ.* 2016 Feb 29;352:i788.
24. von Minckwitz G, Colleoni M, Kolberg HC, et al. Efficacy and safety of ABP 980 compared with reference trastuzumab in women with HER2-positive early breast cancer (LILAC study): a randomised, double-blind, phase 3 trial. *Lancet Oncol.* 2018;19:987-998.
25. Rugo HS, Barve A, Waller CF, et al. Effect of a proposed trastuzumab biosimilar compared with trastuzumab on overall response rate in patients with ERBB2 (HER2)-positive metastatic breast cancer: a randomized clinical trial. *JAMA.* 2017;317:37–47.
26. Pivot X, Bondarenko I, Nowecki Z, et al. Phase III, randomized, double-blind study comparing the efficacy, safety, and immunogenicity of SB3 (trastuzumab biosimilar) and reference trastuzumab in patients treated with neoadjuvant therapy for human epidermal growth factor receptor 2-positive early breast cancer. *J Clin Oncol.* 2018;36:968-974.
27. Pegram MD, Bondarenko I, Zorzetto MMC, et al. PF-05280014 (a trastuzumab biosimilar) plus paclitaxel compared with reference trastuzumab plus paclitaxel for HER2-positive metastatic breast cancer: a randomised, double-blind study. *Br J Cancer.* 2019;120:172-182.
28. Esteva FJ, Baranau YV, Baryash V, et al. Efficacy and safety of CT-P6 versus reference trastuzumab in HER2-positive early breast cancer: updated results of a randomised phase 3 trial. *Cancer Chemother Pharmacol.* 2019 Oct;84(4):839-847.
29. Murthy RK, Loi S, Okines A, et al. Tucatinib, trastuzumab, and capecitabine for HER2-positive metastatic breast cancer. *N Engl J Med.* 2020;382:597-609.
30. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Central Nervous System Cancers, Version 2.2022. National Comprehensive Cancer Network, 2022. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Guidelines, go online to NCCN.org. Accessed October 2022.
31. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Rectal Cancer, Version 2.2022. National Comprehensive Cancer Network, 2022. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Guidelines, go online to NCCN.org. Accessed October 2022.
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33. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Esophageal and Esophagogastric Junction Cancers, Version 4.2022. National Comprehensive Cancer Network, 2022. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Guidelines, go online to NCCN.org. Accessed October 2022.
34. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Uterine Neoplasms, Version 1.2022. National Comprehensive Cancer Network, 2022. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Guidelines, go online to NCCN.org. Accessed October 2022.
35. Perez EA, Romond EH, Suman VJ, et al. Trastuzumab plus adjuvant chemotherapy for human epidermal growth factor receptor 2-positive breast cancer: planned joint analysis of overall survival from NSABP B-31 and NCCTG N9831. *J Clin Oncol*. 2014;32(33):3744-3752.
36. Slamon D, Eiermann W, Robert N, et al. Adjuvant trastuzumab in HER2-positive breast cancer. *N Engl J Med*. 2011;365(14):1273-1283.
37. Eiermann W; International Herceptin Study Group. Trastuzumab combined with chemotherapy for the treatment of HER2-positive metastatic breast cancer: pivotal trial data. *Ann Oncol*. 2001;12 Suppl 1:S57-S62.
38. Cobleigh MA, Vogel CL, Tripathy D, et al. Multinational study of the efficacy and safety of humanized anti-HER2 monoclonal antibody in women who have HER2-overexpressing metastatic breast cancer that has progressed after chemotherapy for metastatic disease. *J Clin Oncol*. 1999;17(9):2639-2648.
39. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Head and Neck Cancers, Version 2.2022. National Comprehensive Cancer Network, 2022. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Guidelines, go online to NCCN.org. Accessed October 2022.
40. Thorpe L, Schrock A, Erlich R, et al. Significant and durable clinical benefit from trastuzumab in 2 patients with HER2-amplified salivary gland cancer and a review of the literature. *Head Neck* 2017 Mar;39(3):E40-E44. doi: 10.1002/hed.24634. Epub 2016 Dec 22.
41. Kurzrock R, Bowles D, Kang H, et al. Targeted therapy for advanced salivary gland carcinoma based on molecular profiling: results from MyPathway, a phase IIa multiple basket study. *Annals of Oncology*, Volume 31, Issue 3, 412 – 421

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42. Takahashi H, Tada Y, Saotome T, et al. Phase II Trial of Trastuzumab and Docetaxel in Patients With Human Epidermal Growth Factor Receptor 2-Positive Salivary Duct Carcinoma. *J Clin Oncol* 2019 Jan 10;37(2):125-134. doi: 10.1200/JCO.18.00545. Epub 2018 Nov 19.
43. Korde LA, Somerfield MR, Carey LA, et al. Neoadjuvant Chemotherapy, Endocrine Therapy, and Targeted Therapy for Breast Cancer: ASCO Guideline. *J Clin Oncol*. 2021 May 1;39(13):1485-1505. doi: 10.1200/JCO.20.03399. Epub 2021 Jan 28. PMID: 33507815; PMCID: PMC8274745.
44. Gennari A, André F, Barrios CH, et al.; ESMO Guidelines Committee. Electronic address: clinicalguidelines@esmo.org. ESMO Clinical Practice Guideline for the diagnosis, staging and treatment of patients with metastatic breast cancer. *Ann Oncol*. 2021 Dec;32(12):1475-1495. doi: 10.1016/j.annonc.2021.09.019. Epub 2021 Oct 19. PMID: 34678411.
45. Javle M, Borad MJ, Azad NS, et al. Pertuzumab and trastuzumab for HER2-positive, metastatic biliary tract cancer (MyPathway): a multicentre, open-label, phase 2a, multiple basket study. *Lancet Oncol*. 2021 Sep;22(9):1290-1300. doi: 10.1016/S1470-2045(21)00336-3. Epub 2021 Jul 30.
46. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Hepatobiliary Cancers, Version 3.2022. National Comprehensive Cancer Network, 2022. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Guidelines, go online to NCCN.org. Accessed October 2022.
47. Buza N, English DP, Santin AD, Hui P. Toward standard HER2 testing of endometrial serous carcinoma: 4-year experience at a large academic center and recommendations for clinical practice. *Mod Pathol*. 2013 Dec;26(12):1605-12. doi: 10.1038/modpathol.2013.113.
48. Bartley AN, Washington MK, Colasacco C, et al. HER2 Testing and Clinical Decision Making in Gastroesophageal Adenocarcinoma: Guideline From the College of American Pathologists, American Society for Clinical Pathology, and the American Society of Clinical Oncology. *J Clin Oncol*. 2017 Feb;35(4):446-464. doi: 10.1200/JCO.2016.69.4836.
49. Lin NU, Pegram M, Sahebjam S, et al. Pertuzumab Plus High-Dose Trastuzumab in Patients With Progressive Brain Metastases and HER2-Positive Metastatic Breast Cancer: Primary Analysis of a Phase II Study. *J Clin Oncol*. 2021 Aug 20;39(24):2667-2675. doi: 10.1200/JCO.20.02822.
50. First Coast Service Options, Inc. Local Coverage Article: Billing and Coding: Trastuzumab - Trastuzumab Biologics (A56660). Centers for Medicare & Medicaid Services, Inc. Updated on 10/08/2021 with effective date of 10/01/2021. Accessed October 2022.

Appendix 1 – Covered Diagnosis Codes

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ICD-10	ICD-10 Description
C06.9	Malignant neoplasm of mouth, unspecified
C07	Malignant neoplasm of parotid gland
C08.0	Malignant neoplasm of submandibular gland
C08.1	Malignant neoplasm of sublingual gland
C08.9	Malignant neoplasm of major salivary gland, unspecified
C15.3	Malignant neoplasm of upper third of esophagus
C15.4	Malignant neoplasm of middle third of esophagus
C15.5	Malignant neoplasm of the lower third of esophagus
C15.8	Malignant neoplasm of overlapping sites of esophagus
C15.9	Malignant neoplasm of esophagus, unspecified
C16.0	Malignant neoplasm of cardia
C16.1	Malignant neoplasm of fundus of stomach
C16.2	Malignant neoplasm of body of stomach
C16.3	Malignant neoplasm of pyloric antrum
C16.4	Malignant neoplasm of pylorus
C16.5	Malignant neoplasm of lesser curvature of stomach, unspecified
C16.6	Malignant neoplasm of greater curvature of stomach, unspecified
C16.8	Malignant neoplasm of overlapping sites of stomach
C16.9	Malignant neoplasm of stomach, unspecified
C18.0	Malignant neoplasm of cecum
C18.1	Malignant neoplasm of appendix
C18.2	Malignant neoplasm of ascending colon
C18.3	Malignant neoplasm of hepatic flexure
C18.4	Malignant neoplasm of transverse colon
C18.5	Malignant neoplasm of splenic flexure
C18.6	Malignant neoplasm of descending colon
C18.7	Malignant neoplasm of sigmoid colon
C18.8	Malignant neoplasm of overlapping sites of large intestines
C18.9	Malignant neoplasm of colon, unspecified
C19	Malignant neoplasm of rectosigmoid junction
C20	Malignant neoplasm of rectum
C21.8	Malignant neoplasm of overlapping sites of rectum, anus and anal canal
C22.1	Intrahepatic bile duct carcinoma
C23	Malignant neoplasm of gallbladder

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ICD-10	ICD-10 Description
C24.0	Malignant neoplasm of extrahepatic bile duct
C24.8	Malignant neoplasm of overlapping sites of biliary tract
C24.9	Malignant neoplasm of biliary tract, unspecified
C50.011	Malignant neoplasm of nipple and areola, right female breast
C50.012	Malignant neoplasm of nipple and areola, left female breast
C50.019	Malignant neoplasm of nipple and areola, unspecified female breast
C50.021	Malignant neoplasm of nipple and areola, right female breast
C50.022	Malignant neoplasm of nipple and areola, left female breast
C50.029	Malignant neoplasm of nipple and areola, unspecified female breast
C50.111	Malignant neoplasm of central portion of right female breast
C50.112	Malignant neoplasm of central portion of left female breast
C50.119	Malignant neoplasm of central portion of unspecified female breast
C50.121	Malignant neoplasm of central portion of right male breast
C50.122	Malignant neoplasm of central portion of left male breast
C50.129	Malignant neoplasm of central portion of unspecified male breast
C50.211	Malignant neoplasm of upper-inner quadrant of right female breast
C50.212	Malignant neoplasm of upper-inner quadrant of left female breast
C50.219	Malignant neoplasm of upper-inner quadrant of unspecified female breast
C50.221	Malignant neoplasm of upper-inner quadrant of right male breast
C50.222	Malignant neoplasm of upper-inner quadrant of left male breast
C50.229	Malignant neoplasm of upper-inner quadrant of unspecified male breast
C50.311	Malignant neoplasm of lower-inner quadrant of right female breast
C50.312	Malignant neoplasm of lower-inner quadrant of left female breast
C50.319	Malignant neoplasm of lower-inner quadrant of unspecified female breast
C50.321	Malignant neoplasm of lower-inner quadrant of right male breast
C50.322	Malignant neoplasm of lower-inner quadrant of left male breast
C50.329	Malignant neoplasm of lower-inner quadrant of unspecified male breast
C50.411	Malignant neoplasm of upper-outer quadrant of right female breast
C50.412	Malignant neoplasm of upper-outer quadrant of left female breast
C50.419	Malignant neoplasm of upper-outer quadrant of unspecified female breast
C50.421	Malignant neoplasm of upper-outer quadrant of right male breast
C50.422	Malignant neoplasm of upper-outer quadrant of left male breast
C50.429	Malignant neoplasm of upper-outer quadrant of unspecified male breast
C50.511	Malignant neoplasm of lower-outer quadrant of right female breast

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ICD-10	ICD-10 Description
C50.512	Malignant neoplasm of lower-outer quadrant of left female breast
C50.519	Malignant neoplasm of lower-outer quadrant of unspecified female breast
C50.521	Malignant neoplasm of lower-outer quadrant of right male breast
C50.522	Malignant neoplasm of lower-outer quadrant of left male breast
C50.529	Malignant neoplasm of lower-outer quadrant of unspecified male breast
C50.611	Malignant neoplasm of axillary tail of right female breast
C50.612	Malignant neoplasm of axillary tail of left female breast
C50.619	Malignant neoplasm of axillary tail of unspecified female breast
C50.621	Malignant neoplasm of axillary tail of right male breast
C50.622	Malignant neoplasm of axillary tail of left male breast
C50.629	Malignant neoplasm of axillary tail of unspecified male breast
C50.811	Malignant neoplasm of overlapping sites of right female breast
C50.812	Malignant neoplasm of overlapping sites of left female breast
C50.819	Malignant neoplasm of overlapping sites of unspecified female breast
C50.821	Malignant neoplasm of overlapping sites of right male breast
C50.822	Malignant neoplasm of overlapping sites of left male breast
C50.829	Malignant neoplasm of overlapping sites of unspecified male breast
C50.911	Malignant neoplasm of unspecified site of right female breast
C50.912	Malignant neoplasm of unspecified site of left female breast
C50.919	Malignant neoplasm of unspecified site of unspecified female breast
C50.921	Malignant neoplasm of unspecified site of right male breast
C50.922	Malignant neoplasm of unspecified site of left male breast
C50.929	Malignant neoplasm of unspecified site of unspecified male breast
C54.0	Malignant neoplasm of isthmus uteri
C54.1	Malignant neoplasm of endometrium
C54.2	Malignant neoplasm of myometrium
C54.3	Malignant neoplasm of fundus uteri
C54.8	Malignant neoplasm of overlapping sites of corpus uteri
C54.9	Malignant neoplasm of corpus uteri, unspecified
C55	Malignant neoplasm of uterus, part unspecified
C78.00	Secondary malignant neoplasm of unspecified lung
C78.01	Secondary malignant neoplasm of right lung
C78.02	Secondary malignant neoplasm of left lung
C78.6	Secondary malignant neoplasm of retroperitoneum and peritoneum

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ICD-10	ICD-10 Description
C78.7	Secondary malignant neoplasm of liver and intrahepatic bile duct
C79.31	Secondary malignant neoplasm of brain
C79.32	Secondary malignant neoplasm of cerebral meninges
D37.1	Neoplasm of uncertain behavior of stomach
D37.8	Neoplasm of uncertain behavior of other specified digestive organs
D37.9	Neoplasm of uncertain behavior of digestive organ, unspecified
Z85.00	Personal history of malignant neoplasm of unspecified digestive organ
Z85.01	Personal history of malignant neoplasm of esophagus
Z85.028	Personal history of other malignant neoplasm of stomach
Z85.038	Personal history of other malignant neoplasm of large intestine
Z85.3	Personal history of malignant neoplasm of breast

Appendix 2 – Centers for Medicare and Medicaid Services (CMS)

Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determination (NCD), Local Coverage Articles (LCAs), and Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. They can be found at: <https://www.cms.gov/medicare-coverage-database/search.aspx>. Additional indications may be covered at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/LCA/LCD):

Jurisdiction(s): N(9)	NCD/LCD Document (s): A56660
https://www.cms.gov/medicare-coverage-database/new-search/search-results.aspx?keyword=a56660&areaId=all&docType=NCA%2CCAL%2CNCD%2CMEDCAC%2CTA%2CMCD%2C6%2C3%2C5%2C1%2CF%2CP	

Medicare Part B Administrative Contractor (MAC) Jurisdictions		
Jurisdiction	Applicable State/US Territory	Contractor
E (1)	CA, HI, NV, AS, GU, CNMI	Noridian Healthcare Solutions, LLC
F (2 & 3)	AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ	Noridian Healthcare Solutions, LLC
5	KS, NE, IA, MO	Wisconsin Physicians Service Insurance Corp (WPS)
6	MN, WI, IL	National Government Services, Inc. (NGS)
H (4 & 7)	LA, AR, MS, TX, OK, CO, NM	Novitas Solutions, Inc.
8	MI, IN	Wisconsin Physicians Service Insurance Corp (WPS)
N (9)	FL, PR, VI	First Coast Service Options, Inc.
J (10)	TN, GA, AL	Palmetto GBA, LLC

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Medicare Part B Administrative Contractor (MAC) Jurisdictions

Jurisdiction	Applicable State/US Territory	Contractor
M (11)	NC, SC, WV, VA (excluding below)	Palmetto GBA, LLC
L (12)	DE, MD, PA, NJ, DC (includes Arlington & Fairfax counties and the city of Alexandria in VA)	Novitas Solutions, Inc.
K (13 & 14)	NY, CT, MA, RI, VT, ME, NH	National Government Services, Inc. (NGS)
15	KY, OH	CGS Administrators, LLC

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