

## Vectibix® (panitumumab) (Intravenous)

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Document Number: MODA-0389

**Last Review Date: 04/04/2024**

**Date of Origin: 04/03/2019**

**Dates Reviewed: 04/2019, 07/2019, 09/2019, 01/2020, 04/2020, 07/2020, 10/2020, 01/2021, 04/2021, 07/2021, 10/2021, 02/2022, 05/2022, 10/2022, 01/2023, 05/2023, 07/2023, 10/2023, 01/2024, 04/2024**

### I. Length of Authorization

Coverage will be provided for 6 months and may be renewed.

### II. Dosing Limits

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

- Vectibix 100 mg/5 mL solution for injection single-dose vial: 3 vials every 14 days
- Vectibix 400 mg/20 mL solution for injection single-dose vial: 2 vials every 14 days

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

- 70 billable units every 14 days

### III. Initial Approval Criteria <sup>1</sup>

Coverage is provided in the following conditions:

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

#### Colorectal Cancer † ‡ <sup>1,2,6-8,10,11-12,3e,5e,8e,11e,13e-15e</sup>

- Patient has not been previously treated with cetuximab or panitumumab; **AND**
- Will not be used as part of an adjuvant treatment regimen; **AND**
- Will not be used in combination with an anti-VEGF agent (e.g., bevacizumab, ramucirumab); **AND**
  - Patient has both KRAS and NRAS mutation negative (wild-type) and BRAF V600E negative (wild-type) disease as determined by an FDA or CLIA-compliant test❖; **AND**
    - Used as primary treatment for metastatic or unresectable (or medically inoperable) disease §; **AND**
      - Used in combination with FOLFOX †; **OR**
      - Used in combination with CapeOX or FOLFIRI; **AND**

- Patient has proficient mismatch repair/microsatellite-stable (pMMR/MSS) disease; **OR**
- Patient has deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) disease or polymerase epsilon/delta (POLE/POLD1) mutation; **AND**
  - ❖ Patient is not a candidate for or has progressed on checkpoint inhibitor immunotherapy; **OR**
- Used in combination with irinotecan; **AND**
  - ❖ Patient previously received FOLFOX or CapeOX within the past 12 months; **AND**
  - ❖ Patient has proficient mismatch repair/microsatellite-stable (pMMR/MSS) disease; **OR**
- Used as primary treatment for T3, N Any; T1-2, N1-2; T4, N Any rectal cancer; **AND**
  - Used in combination with CapeOX, FOLFOX, or FOLFIRI; **AND**
    - Used if resection is contraindicated following total neoadjuvant therapy; **AND**
      - ❖ Patient has proficient mismatch repair/microsatellite-stable (pMMR/MSS) disease; **OR**
      - ❖ Patient has deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) disease or polymerase epsilon/delta (POLE/POLD1) mutation; **AND**
        - ◆ Patient is not a candidate for or has progressed on checkpoint inhibitor immunotherapy; **OR**
    - Used if resection is contraindicated following neoadjuvant/definitive immunotherapy; **AND**
      - ❖ Patient has deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) disease; **OR**
- Used as subsequent therapy for advanced or metastatic disease; **AND**
  - Used as a single agent; **AND**
    - Patient has fluoropyrimidine-, oxaliplatin-, and irinotecan-refractory disease †; **OR**
    - Patient has irinotecan-intolerant disease §; **AND**
      - ❖ Patient has proficient mismatch repair/microsatellite-stable (pMMR/MSS) disease; **OR**
      - ❖ Patient has deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) disease or polymerase epsilon/delta (POLE/POLD1) mutation; **AND**
        - ◆ Patient is not a candidate for or has progressed on checkpoint inhibitor immunotherapy; **OR**

- Used in combination with irinotecan §; **AND**
  - Patient has oxaliplatin-refractory disease, irinotecan-refractory disease, or oxaliplatin- and irinotecan-refractory disease; **AND**
    - ❖ Patient has proficient mismatch repair/microsatellite-stable (pMMR/MSS) disease; **OR**
    - ❖ Patient has deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) disease or polymerase epsilon/delta (POLE/POLD1) mutation; **AND**
      - ◆ Patient is not a candidate for or has progressed on checkpoint inhibitor immunotherapy; **OR**
- Used in combination with FOLFIRI §; **AND**
  - Patient has oxaliplatin-refractory disease\*\*; **AND**
    - ❖ Patient has proficient mismatch repair/microsatellite-stable (pMMR/MSS) disease; **OR**
    - ❖ Patient has mismatch repair deficient/microsatellite instability-high (dMMR/MSI-H) disease or polymerase epsilon/delta (POLE/POLD1) mutation; **AND**
      - ◆ Patient is not a candidate for or has progressed on checkpoint inhibitor immunotherapy

§Colon cancer patients must have left-sided tumors only.

\*\*May also be used for progression on non-intensive therapy in patients with improvement in functional status (except if received previous fluoropyrimidine).

**Preferred therapies and recommendations are determined by review of clinical evidence. NCCN category of recommendation is taken into account as a component of this review. Regimens deemed equally efficacious (i.e., those having the same NCCN categorization) are considered to be therapeutically equivalent.**

❖ If confirmed using an FDA approved assay – <http://www.fda.gov/companiondiagnostics>

† FDA Approved Indication(s); ‡ Compendia Recommended Indication(s); Ⓞ Orphan Drug

#### IV. **Renewal Criteria** <sup>1,6,11</sup>

Coverage may be renewed based upon the following criteria:

- Patient continues to meet the 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 a 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: dermatologic/soft-tissue toxicity, electrolyte depletion, severe infusion-related reactions, acute renal failure, pulmonary fibrosis/interstitial lung disease (ILD), photosensitivity, ocular toxicities (i.e., keratitis, corneal perforation), etc.

## V. Dosage/Administration <sup>1,6,11-12</sup>

Indication	Dose
Colorectal Cancer	Administer 6 mg/kg intravenously every 14 days until disease progression or unacceptable toxicity.

## VI. Billing Code/Availability Information

### HCPCS Code:

- J9303 – Injection, panitumumab, 10 mg; 1 billable unit = 10 mg

### NDC(s):

- Vectibix 100 mg/5 mL single-dose vial, solution for injection: 55513-0954-xx
- Vectibix 400 mg/20 mL single-dose vial, solution for injection: 55513-0956-xx

## VII. References (STANDARD)

1. Vectibix [package insert]. Thousand Oaks, CA; Amgen, Inc; August 2021. Accessed February 2024.
2. Referenced with permission from the NCCN Drugs & Biologics Compendium (NCCN Compendium®) panitumumab. National Comprehensive Cancer Network, 2024. 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 February 2024.
3. 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.
4. 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](http://www.hoparx.org/images/hopa/advocacy/Issue-Briefs/Drug_Waste_2019.pdf)
5. Bach PB, Conti RM, Muller RJ, et al. Overspending driven by oversized single dose vials of cancer drugs. *BMJ.* 2016 Feb 29;352:i788.
6. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) Colon Cancer Version 1.2024. National Comprehensive Cancer Network, 2024. 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 NCCN Guidelines, go online to NCCN.org. Accessed February 2024.

7. Van Cutsem E, Peeters M, Siena S, et al. Open-label phase III trial of panitumumab plus best supportive care compared with best supportive care alone in patients with chemotherapy-refractory metastatic colorectal cancer. *J Clin Oncol*. 2007 May 1;25(13):1658-64.
8. Price TJ, Peeters M, Kim TW, et al. Panitumumab versus cetuximab in patients with chemotherapy-refractory wild-type KRAS exon 2 metastatic colorectal cancer (ASPECCT): a randomised, multicentre, open-label, non-inferiority phase 3 study. *Lancet Oncol*. 2014 May;15(6):569-79. doi: 10.1016/S1470-2045(14)70118-4. Epub 2014 Apr 14.
9. Kim TW, Elme A, Kusic Z, et al. A phase 3 trial evaluating panitumumab plus best supportive care vs best supportive care in chemorefractory wild-type KRAS or RAS metastatic colorectal cancer. *Br J Cancer*. 2016 Nov 8;115(10):1206-1214. doi: 10.1038/bjc.2016.309. Epub 2016 Oct 13.
10. Douillard JY, Siena S, Cassidy J, et al. Final results from PRIME: randomized phase III study of panitumumab with FOLFOX4 for first-line treatment of metastatic colorectal cancer. *Ann Oncol*. 2014 Jul;25(7):1346-55. doi: 10.1093/annonc/mdu141. Epub 2014 Apr 8.
11. Referenced with permission from the NCCN Drugs & Biologics Compendium (NCCN Compendium®) Rectal Cancer. Version 1.2024. National Comprehensive Cancer Network, 2024. 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 February 2024.
12. Kuboki Y, Yaeger R, Fakih MG, et al. Sotorasib in combination with panitumumab in refractory KRAS G12C-mutated colorectal cancer: Safety and efficacy for phase Ib full expansion cohort. *Ann Oncol* 2022;33:S136-S196

## VIII. References (ENHANCED)

- 1e. Douillard JY, Oliner KS, Siena S, et al. Panitumumab–FOLFOX4 Treatment and RAS Mutations in Colorectal Cancer. *N Engl J Med* 2013; 369:1023-1034.
- 2e. Hurwitz H, Fehrenbacher L, Novotny W, et al. Bevacizumab plus Irinotecan, Fluorouracil, and Leucovorin for Metastatic Colorectal Cancer. *N Engl J Med* 2004; 350:2335-2342.
- 3e. Van Cutsem E, Kohne CH, Hitre E, et al. Cetuximab and Chemotherapy as Initial Treatment for Metastatic Colorectal Cancer. *N Engl J Med* 2009; 360:1408-1417.
- 4e. Van Cutsem E, Köhne CH, Láng I, et al. Cetuximab Plus Irinotecan, Fluorouracil, and Leucovorin As First-Line Treatment for Metastatic Colorectal Cancer: Updated Analysis of Overall Survival According to Tumor KRAS and BRAF Mutation Status. *Journal of Clinical Oncology* 2011 29:15, 2011-2019.
- 5e. Qin S, Li J, Wang L, et al. Efficacy and Tolerability of First-Line Cetuximab Plus Leucovorin, Fluorouracil, and Oxaliplatin (FOLFOX-4) Versus FOLFOX-4 in Patients With RAS Wild-Type

Metastatic Colorectal Cancer: The Open-Label, Randomized, Phase III TAILOR Trial[published online ahead of print, 2018 Sep 10]. *J Clin Oncol*. 2018;36(30):JCO2018783183. doi:10.1200/JCO.2018.78.3183

- 6e. Schwartzberg LS, Rivera F, Karthaus M, et al. PEAK: A Randomized, Multicenter Phase II Study of Panitumumab Plus Modified Fluorouracil, Leucovorin, and Oxaliplatin (mFOLFOX6) or Bevacizumab Plus mFOLFOX6 in Patients With Previously Untreated, Unresectable, Wild-Type KRAS Exon 2 Metastatic Colorectal Cancer. *Journal of Clinical Oncology* 2014 32:21, 2240-2247.
- 7e. Holch JW, Ricard I, Stintzing S, et al. The relevance of primary tumour location in patients with metastatic colorectal cancer: A meta-analysis of first-line clinical trials. *Eur J Cancer*. 2017 Jan;70:87-98.
- 8e. Hecht JR, Mitchell E, Chidiac T, et al. A Randomized Phase IIIB Trial of Chemotherapy, Bevacizumab, and Panitumumab Compared With Chemotherapy and Bevacizumab Alone for Metastatic Colorectal Cancer. *Journal of Clinical Oncology* 2009 27:5, 672-680. *N Engl J Med* 2009; 360:563-572.
- 9e. Tol J, Koopman M, Cats A, et al. Chemotherapy, Bevacizumab, and Cetuximab in Metastatic Colorectal Cancer. *N Engl J Med* 2009; 360:563-572.
- 10e. Amado RG, Wolf M, Peeters M, et al. Wild-Type KRAS Is Required for Panitumumab Efficacy in Patients With Metastatic Colorectal Cancer. *Journal of Clinical Oncology* 2008 26:10, 1626-1634.
- 11e. Peeters M, Price TJ, Cervantes A, et al. Randomized Phase III Study of Panitumumab With Fluorouracil, Leucovorin, and Irinotecan (FOLFIRI) Compared With FOLFIRI Alone As Second-Line Treatment in Patients With Metastatic Colorectal Cancer. *Journal of Clinical Oncology* 2010 28:31, 4706-4713.
- 12e. Hochster HS, Catalano PJ, O'Dwyer PJ, et al. Randomized trial of irinotecan and cetuximab (IC) versus irinotecan, cetuximab and ramucirumab (ICR) as 2nd line therapy of advanced colorectal cancer (CRC) following oxaliplatin and bevacizumab based therapy: Result of E7208. *Journal of Clinical Oncology* 2018 36:15\_suppl, 3504-3504.
- 13e. Heinemann V, von Weikersthal LF, Decker T, et al. FOLFIRI plus cetuximab versus FOLFIRI plus bevacizumab as first-line treatment for patients with metastatic colorectal cancer (FIRE-3): a randomised, open-label, phase 3 trial. *Lancet Oncol*. 2014 Sep;15(10):1065-75. doi: 10.1016/S1470-2045(14)70330-4.
- 14e. Venook AP, Niedzwiecki D, Innocenti F, et al. Impact of primary (1<sup>o</sup>) tumor location on overall survival (OS) and progression-free survival (PFS) in patients (pts) with metastatic colorectal cancer (mCRC): Analysis of CALGB/SWOG 80405 (Alliance). *J Clin Oncol* 34, 2016 (suppl; abstr 3504).
- 15e. Carrato A, Abad A, Massuti B, et al. First-line panitumumab plus FOLFOX4 or FOLFIRI in colorectal cancer with multiple or unresectable liver metastases: A randomised, phase II trial (PLANET-TTD). *Eur J Cancer*. 2017 Aug;81:191-202. doi: 10.1016/j.ejca.2017.04.024.

- 16e. Corcoran RB, André T, Atreya CE, et al. Combined BRAF, EGFR, and MEK Inhibition in Patients with BRAFV600E-Mutant Colorectal Cancer. *Cancer Discov.* 2018;8(4):428–443. doi:10.1158/2159-8290.CD-17-1226.
- 17e. Hecht JR, Cohn A, Dakhil S, et al. SPIRITT: A Randomized, Multicenter, Phase II Study of Panitumumab with FOLFIRI and Bevacizumab with FOLFIRI as Second-Line Treatment in Patients with Unresectable Wild Type KRAS Metastatic Colorectal Cancer. *Clin Colorectal Cancer.* 2015 Jun;14(2):72-80.
- 18e. Hirt S, Borg C, Bertaut A, et al. Bevacizumab or cetuximab plus chemotherapy after progression with bevacizumab plus chemotherapy in patients with wtKRAS metastatic colorectal cancer: A randomized phase II study (Prodige 18 –UNICANCER GI). *Journal of Clinical Oncology* 2016 34:15\_suppl, 3514-3514.
- 19e. Prime Therapeutics Management. Vectibix Clinical Literature Review Analysis. Last updated February 2024. Accessed February 2024.

## Appendix 1 – Covered Diagnosis Codes

ICD-10	ICD-10 Description
C18.0	Malignant neoplasm of cecum
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
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
C78.7	Secondary malignant neoplasm of liver and intrahepatic bile duct
Z85.038	Personal history of other malignant neoplasm of large intestine



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

The preceding information is intended for non-Medicare coverage determinations. 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 Determinations (NCDs) and/or Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. Local Coverage Articles (LCAs) may also exist for claims payment purposes or to clarify benefit eligibility under Part B for drugs which may be self-administered. The following link may be used to search for NCD, LCD, or LCA documents: <https://www.cms.gov/medicare-coverage-database/search.aspx>. Additional indications, including any preceding information, may be applied at the discretion of the health plan.

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

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
M (11)	NC, SC, WV, VA (excluding below)	Palmetto GBA
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