#### **CLINICAL GUIDELINES FOR MEDICAL NECESSITY**

#### **MEDICAL POLICY**

# Panitumumab (Vectibix®)

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## Panitumumab (Vectibix®)

Note: For Medicare members/enrollees, to ensure consistency with the Medicare National Coverage Determinations (NCD) and Local Coverage Determinations (LCD), all applicable NCDs, LCDs, and Medicare Coverage Articles should be reviewed prior to applying the criteria set forth in this clinical policy. Please refer to the CMS website at http://www.cms.gov for additional information.

Note: For Medicaid members/enrollees, circumstances when state Medicaid coverage provisions conflict with the coverage provisions within this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

### Panitumumab (Vectibix): Discussion

Panitumumab is a human monoclonal antibody antagonist specific to the epidermal growth factor receptor (EGFR) (also known as EGF receptor, c-erbB-1, and HER1 in humans). EGFR is a transmembrane glycoprotein that is a member of a subfamily of type I receptor tyrosine kinases including HER2, HER3, and HER4. EGFR is constitutively expressed in normal epithelial tissues, including the skin and hair follicles. EGFR is overexpressed in certain human cancers, including colon and rectal cancer. Panitumumab works by binding to the extracellular domain of the EGFR preventing its activation. These results in the halting of the cascade of intracellular signals dependent on this receptor.<sup>1</sup>

Panitumumab is approved by the Food and Drug Administration (FDA) for the treatment of wild-type RAS (defined as wild-type in both KRAS and NRAS as determined by an FDA-approved test for this use) metastatic colorectal cancer (mCRC) in combination with FOLFOX (fluorouracil, leucovorin, and oxaliplatin) for first-line treatment and as monotherapy following disease progression after prior treatment with fluoropyrimidine, oxaliplatin, and irinotecan-containing chemotherapy.<sup>2</sup>

The Mitogen-Activated Protein Kinase (MAPK) pathway of RAS/RAF/MEK/ERK is downstream of EGFR; mutations in components of this pathway are now established to be strong negative predictive markers, essentially precluding the efficacy of these therapies. Patients with known KRAS or NRAS-mutant tumors in colon and rectal cancers should not be treated with either cetuximab or panitumumab, either alone or in combination with other anticancer agents, because they have virtually no chance of benefit. Cetuximab or panitumumab should only be used for left-sided tumors in colon cancer. The panel defines the left side of the colon as splenic flexure to the rectum. Evidence suggests that patients with tumors originating on the right side of the colon (hepatic flexure through the cecum) are unlikely to respond to cetuximab and panitumumab.<sup>3</sup>

Panitumumab is associated with some adverse reactions including dermatologic and soft tissue toxicity, increased tumor progression, increased mortality, or lack of benefit in RAS-mutant



mcrc, electrolyte depletion/monitoring, infusion reactions, acute renal failure in combination with chemotherapy, pulmonary fibrosis/interstitial lung disease (ILD), photosensitivity, ocular toxicities, increased mortality and toxicity with panitumumab in combination with bevacizumab and chemotherapy.<sup>2</sup>

The National Comprehensive Cancer Network (NCCN) and FDA endorse panitumumab in the following cancer types: colon and rectal.<sup>2,3,4</sup>

BRAF wild-type is required for response to panitumumab or cetuximab and could be used to select patients who are eliqible for the treatment.<sup>5</sup>

#### **Panitumumab: Definitions**

- BRAF gene A gene that encodes a protein belonging to the RAF family of serine/threonine protein kinases. This protein plays a role in regulating the MAP kinase/ERK signaling pathway, which affects cell division, differentiation, and secretion.
- **BRAF V600E mutation positive** A mutation that accounts for 8–10% of metastatic colorectal cancer (mCRC) patients and is an established poor prognostic factor.
- Deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) When the microsatellite DNA segments in cancer cells show changes (mutations), this
  indicates that the tumor cells are deficient in the repair of the mismatch errors. These
  cancers have microsatellite instability (also called MSI-High, MSI-H, or mismatch repair
  deficiency, dMMR).
- Food and Drug Administration (FDA) The FDA is responsible for protecting the
  public health by assuring the safety, efficacy, and security of human and veterinary
  drugs, biological products, medical devices, our nation's food supply, cosmetics, and
  products that emit radiation.
- **KRAS gene** A gene that makes a protein that is involved in cell signaling pathways that control cell growth, cell maturation, and cell death.
- Mitogen-Activated Protein Kinase (MAPK) Pathway A pathway that involves a series of protein kinase cascades that play a critical role in the regulation of cell proliferation.
- National Comprehensive Cancer Network (NCCN) An alliance of more than thirty leading cancer centers devoted to patient care, research, and education. The NCCN guidelines are utilized for Radiation Therapy and Medical Oncology standards. NCCN consensus clinical standards are periodically updated and NantHealth, Inc. reviews these and updates its policies within a timely manner.
- **NRAS gene** A gene that provides instructions for making a protein called N-Ras that is involved primarily in regulating cell division.
- Proficient mismatch repair/microsatellite-stable (pMMR/MMS) When
  microsatellite DNA segments are unchanged (not mutated), the tumor cells are
  considered microsatellite stable (MSS) or have proficient mismatch repair. MSS cancers
  have normal levels of mismatch repair gene and protein expression and is able to
  correct DNA mismatch repair errors proficiently.
- **Wild-type** The natural, unchanged (unmutated) form of the gene.



## **Panitumumab: Policy**

Coverage of panitumumab will be provided for an FDA-approved indication or National Comprehensive Cancer Network (NCCN) guidelines when it is a Category 1, 2A, or 2B recommendation, or when all criteria are met.

Panitumumab will be considered for coverage when the following criteria are met:

#### **Colon Cancer (Adenocarcinoma)**

- 1. At least 18 years of age; AND
- 2. Prescribed by or in consultation with an oncologist; AND

#### For **FDA** required criteria coverage:

- Combination with FOLFOX for first-line treatment; OR
- 4. Monotherapy following disease progression after prior treatment with fluoropyrimidine, oxaliplatin, and irinotecan-containing chemotherapy; OR

**Note:** Limitation of Use: Vectibix is not indicated for the treatment of patients with RAS-mutant mCRC or for whom RAS mutation status is unknown.

#### For **NCCN** required criteria coverage:

- 3. Therapy for KRAS/NRAS/BRAF wild-type gene tumors in combination with FOLFOX (fluorouracil, leucovorin, and oxaliplatin), CapeOx (capecitabine and oxaliplatin), or FOLFIRI (fluorouracil, leucovorin, and irinotecan) regimen if intensive therapy recommended, for one of the following:
  - a) Adjuvant treatment following synchronized or staged resection and/or local therapy for synchronous liver and/or lung metastases that converted from unresectable to resectable disease after primary treatment for proficient mismatch repair/microsatellite-stable (pMMR/MMS), or ineligible for or progression on checkpoint inhibitor immunotherapy for deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) or polymerase epsilon/delta (POLE/POLD1) mutation
  - b) Adjuvant treatment following resection and/or local therapy for resectable metachronous metastases in patients who have received previous chemotherapy for pMMR/MMS, or ineligible for, or progression on checkpoint inhibitor immunotherapy for dMMR/MSI-H or POLE/POLD1 mutation
  - Adjuvant treatment following resection and/or local therapy for resectable metachronous metastases in patients who have received previous immunotherapy for dMMR/MSI-H or POLE/POLD1 mutation
  - d) Adjuvant treatment for unresectable metachronous metastases that converted to resectable disease after initial treatment for pMMR/MMS, or ineligible for or progression on checkpoint inhibitor immunotherapy for dMMR/MSI-H or POLE/POLD1 mutation; OR
- 4. Adjuvant treatment in combination with irinotecan for unresectable metachronous metastases (KRAS/NRAS/BRAF wild-type gene and left-sided only tumors only) for



- proficient mismatch repair/microsatellite-stable (pMMR/MMS) only, or ineligible for, or progression on checkpoint inhibitor immunotherapy for deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) that converted to resectable disease after initial treatment; OR
- 5. Adjuvant treatment in combination with encorafenib for unresectable metachronous metastases (BRAF V600E mutation-positive) for proficient mismatch repair/microsatellitestable (pMMR/MMS) only, or ineligible for, or progression on checkpoint inhibitor immunotherapy for deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) that converted to resectable disease after initial treatment; OR
- 6. Adjuvant treatment in combination with sotorasib or adagrasib for unresectable metachronous metastases (KRAS G12C mutation positive) (proficient mismatch repair/microsatellite-stable [pMMR/MSS] only or ineligible for or progressed on checkpoint inhibitor immunotherapy for deficient mismatch repair/microsatellite instability-high [dMMR/MSI-H] or polymerase epsilon/delta [POLE/POLD1] mutation) that converted to resectable disease after initial treatment; OR
- 7. Therapy for KRAS/NRAS/BRAF wild-type gene tumors as a single agent for one of the following if intensive therapy is not recommended:
  - a) Adjuvant treatment following synchronized or staged resection and/or local therapy for synchronous liver and/or lung metastases that converted from unresectable to resectable disease after primary treatment for proficient mismatch repair/microsatellite-stable (pMMR/MMS), or ineligible for, or progression on checkpoint inhibitor immunotherapy for deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) or polymerase epsilon/delta (POLE/POLD1) mutation
  - Adjuvant treatment following resection and/or local therapy for resectable metachronous metastases in patients who have received previous chemotherapy for pMMR/MMS, or ineligible for, or progression on checkpoint inhibitor immunotherapy for dMMR/MSI-H
  - Adjuvant treatment following resection and/or local therapy for resectable metachronous metastases in patients who have received previous immunotherapy for dMMR/MSI-H
  - Adjuvant treatment for unresectable metachronous metastases that converted to resectable disease after initial treatment for pMMR/MMS, or ineligible for, or progression on checkpoint inhibitor immunotherapy for dMMR/MSI-H; OR
- 8. Therapy for KRAS/NRAS/BRAF wild-type gene and left-sided only tumors in combination with FOLFOX (fluorouracil, leucovorin, and oxaliplatin), CapeOx (capecitabine and oxaliplatin), or FOLFIRI (fluorouracil, leucovorin, and irinotecan) regimen for proficient mismatch repair/microsatellite-stable (pMMR/MMS), or ineligible for or progression on checkpoint inhibitor immunotherapy for deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) for one of the following if intensive therapy is recommended:
  - a) Primary treatment for locally unresectable or medically inoperable disease
  - b) Primary treatment for synchronous abdominal/peritoneal metastases that are nonobstructing, or following local therapy for patients with existing or imminent obstruction
  - c) For synchronous unresectable metastases of other sites
  - d) Initial treatment for unresectable metachronous metastases in patients who have not received previous therapy with FOLFOX or CapeOX within the past 12 months,



- who have received previous fluorouracil/leucovorin (5-FU/LV) or capecitabine therapy, or who have not received any previous chemotherapy
- e) For progression on non-intensive therapy, unless prior fluoropyrimidine received, with improvement in functional status; OR
- 9. Primary treatment for unresectable synchronous liver and/or lung metastases (KRAS/NRAS/BRAF wild-type gene and left-sided only tumors) in combination with FOLFOX (fluorouracil, leucovorin, and oxaliplatin), or FOLFIRI (fluorouracil, leucovorin, and irinotecan) regimen for proficient mismatch repair/microsatellite-stable (pMMR/MMS) only, or deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) or polymerase epsilon/delta [POLE/POLD1] mutation and the patient is not a candidate for immunotherapy; OR
- 10. Initial treatment for unresectable metachronous metastases (KRAS/NRAS/BRAF wild-type gene and left-sided tumors only) in combination with irinotecan, or FOLFIRI (fluorouracil, leucovorin, and irinotecan) regimen for proficient mismatch repair/microsatellite-stable (pMMR/MMS) only and received previous FOLFOX (fluorouracil, leucovorin, and oxaliplatin) or CapeOX (capecitabine and oxaliplatin) within the past 12 months; OR
- 11. Initial treatment in combination with encorafenib for unresectable metachronous metastases (BRAF V600E mutation-positive) for proficient mismatch repair/microsatellite-stable (pMMR/MMS) only and received previous FOLFOX (fluorouracil, leucovorin, and oxaliplatin) or CapeOX (capecitabine and oxaliplatin) within the past 12 months; OR
- 12. Initial treatment in combination with sotorasib or adagrasib for unresectable metachronous metastases (KRAS G12C mutation positive) (proficient mismatch repair/microsatellite-stable [pMMR/MSS]) and previous FOLFOX (fluorouracil, leucovorin, and oxaliplatin) or CapeOX (capecitabine and oxaliplatin) within the past 12 months; OR
- 13. Therapy for KRAS/NRAS/BRAF wild-type gene and left-sided only tumors for proficient mismatch repair/microsatellite-stable (pMMR/MMS), or ineligible for or progression on checkpoint inhibitor immunotherapy for deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) or polymerase epsilon/delta [POLE/POLD1] mutation as a single agent for one of the following if intensive therapy is not recommended:
  - a) Primary treatment for locally unresectable or medically inoperable disease
  - Primary treatment for synchronous abdominal/peritoneal metastases that are nonobstructing, or following local therapy for patients with existing or imminent obstruction
  - c) For synchronous unresectable metastases of other sites
  - d) Initial treatment for unresectable metachronous metastases in patients who have not received previous therapy with FOLFOX or CapeOX within the past 12 months, who have received previous fluorouracil/leucovorin (5-FU/LV) or capecitabine therapy, or who have not received any previous chemotherapy; OR
- 14. Subsequent therapy for progression of advanced or metastatic disease (KRAS/NRAS/BRAF wild-type and left-sided tumors only) for proficient mismatch repair/microsatellite-stable (pMMR/MMS), or ineligible for, or progression on checkpoint inhibitor immunotherapy for deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) or polymerase epsilon/delta (POLE/POLD1) mutation in combination with one of the following:



- a) Irinotecan, FOLFIRI (fluorouracil, leucovorin, and irinotecan) regimen, or as a single agent for patients who cannot tolerate irinotecan, if previously treated with oxaliplatin-based therapy without irinotecan
- b) Irinotecan, FOLFOX (fluorouracil, leucovorin, and oxaliplatin), CapeOX (capecitabine and oxaliplatin), or as a single agent for patients who cannot tolerate irinotecan, if previously treated with irinotecan-based therapy without oxaliplatin
- c) Irinotecan or as a single agent for patients who cannot tolerate irinotecan if previously treated with oxaliplatin and irinotecan
- d) Irinotecan or as a single agent for patients who cannot tolerate irinotecan if previously treated without irinotecan or oxaliplatin followed by FOLFOX (fluorouracil, leucovorin, and oxaliplatin) or CapeOX (capecitabine and oxaliplatin) with or without bevacizumab; OR
- 15. Subsequent therapy in combination with encorafenib for progression of advanced or metastatic disease (BRAF V600E mutation-positive) for proficient mismatch repair/microsatellite-stable (pMMR/MMS), or ineligible for, or progression on checkpoint inhibitor immunotherapy for deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) or polymerase epsilon/delta [POLE/POLD1] mutation; OR
- 16. Subsequent therapy (biomarker-directed) in combination with adagrasib or sotorasib, if not previously given, for progression of advanced or metastatic disease (KRAS G12C mutation positive) proficient mismatch repair/microsatellite-stable (pMMR/MSS) or ineligible for or progressed on checkpoint inhibitor immunotherapy for deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) or polymerase epsilon/delta (POLE/POLD1) mutation.<sup>3</sup>

## **Rectal Cancer (Adenocarcinoma)**

- 1. At least 18 years of age; AND
- 2. Prescribed by or in consultation with an oncologist; AND

#### For **FDA** required criteria coverage:

- 3. Combination with FOLFOX for first-line treatment; OR
- 4. Monotherapy following disease progression after prior treatment with fluoropyrimidine, oxaliplatin, and irinotecan-containing chemotherapy; OR

#### For **NCCN** required criteria coverage:

- 5. Therapy for KRAS/NRAS/BRAF wild-type gene tumors in combination with FOLFOX (fluorouracil, leucovorin, and oxaliplatin), CapeOx (capecitabine and oxaliplatin), or FOLFIRI (fluorouracil, leucovorin, and irinotecan) regimen if intensive therapy recommended as adjuvant therapy for:
  - a) Following resection and/or local therapy for resectable metachronous metastases in patients who have received previous chemotherapy for proficient mismatch repair/microsatellite-stable (pMMR/MMS) only, or mismatch repair/microsatellite instability-high (dMMR/MSI-H) or ineligible for or progressed on checkpoint inhibitor



- immunotherapy for deficient mismatch repair/microsatellite instability-high [dMMR/MSI-H] or polymerase epsilon/delta (POLE/POLD1) mutation
- Following resection and/or local therapy for resectable metachronous metastases in patients who have received previous immunotherapy or have a contraindication (dMMR/MSI-H or POLE/POLD1 mutation)
- Unresectable metachronous metastases that converted to resectable disease after initial treatment. for pMMR/MMS only, or ineligible for or progression on checkpoint inhibitor immunotherapy for dMMR/MSI-H or POLE/POLD1 mutation; OR
- 6. Adjuvant treatment in combination with encorafenib for unresectable metachronous metastases (BRAF V600E mutation-positive) for proficient mismatch repair/microsatellite-stable (pMMR/MMS) only that converted to resectable disease after initial treatment; OR
- 7. Adjuvant treatment in combination with irinotecan for unresectable metachronous metastases (KRAS/NRAS/BRAF\* wild-type gene) that converted to resectable disease (proficient mismatch repair/microsatellite-stable [pMMR/MSS]) after initial treatment; OR
- Adjuvant treatment in combination with sotorasib or adagrasib for unresectable metachronous metastases (KRAS G12C mutation positive) (proficient mismatch repair/microsatellite-stable [pMMR/MSS]) that converted to resectable disease after initial treatment; OR
- 9. Therapy for KRAS/NRAS/BRAF wild-type gene tumors as a single agent if intensive therapy not recommended as adjuvant treatment for one of the following:
  - a) Following resection and/or local therapy for resectable metachronous metastases in patients who have received previous chemotherapy for proficient mismatch repair/microsatellite-stable (pMMR/MMS) only, or ineligible for, or progression on checkpoint inhibitor immunotherapy for deficient mismatch repair/microsatellite instability- high (dMMR/MSI-H) or polymerase epsilon/delta (POLE/POLD1) mutation
  - Following resection and/or local therapy for resectable metachronous metastases in patients who have received previous immunotherapy or have a contraindication (dMMR/MSI-H or POLE/POLD1 mutation)
  - Unresectable metachronous metastases that converted to resectable disease after initial treatment for pMMR/MMS only, or ineligible for, or progression on checkpoint inhibitor immunotherapy for dMMR/MSI-H or POLE/POLD1 mutation; OR
- 10. Therapy for KRAS/NRAS/BRAF wild-type gene tumors in combination with FOLFOX (fluorouracil, leucovorin, and oxaliplatin), CapeOx (capecitabine and oxaliplatin), or FOLFIRI (fluorouracil, leucovorin, and irinotecan) regimen for proficient mismatch repair/microsatellite-stable (pMMR/MMS), or ineligible for, or progression on checkpoint inhibitor immunotherapy for deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) if intensive therapy recommended for one of the following:
  - a) Primary treatment for synchronous abdominal/peritoneal metastases that are nonobstructing, or following local therapy for patients with existing or imminent obstruction
  - b) Primary treatment for synchronous unresectable metastases of other sites
  - c) Primary treatment for unresectable isolated pelvic/anastomotic recurrence
  - d) Initial treatment for unresectable metachronous metastases in patients who have not received previous therapy with FOLFOX or CapeOX within the past 12 months but received
  - e) Previous fluorouracil/leucovorin (5-FU/LV) or capecitabine therapy, or did not receive any previous chemotherapy
  - f) Progression on non-intensive therapy, unless prior fluoropyrimidine received, with



- g) improvement in functional status; OR
- 11. Primary treatment for T3, Any N; T1-2, N1-2; T4, Any N; or locally unresectable or medically inoperable disease (KRAS/NRAS/BRAF wild-type gene only) if resection is contraindicated following total neoadjuvant therapy for proficient mismatch repair/microsatellite-stable (pMMR/MMS) only, or ineligible for or progression on checkpoint inhibitor immunotherapy for deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) or polymerase epsilon/delta (POLE/POLD1) mutation or neoadjuvant/definitive immunotherapy for (dMMR/MSI-H) only if intensive therapy is recommended in combination with one of the following:
  - a) CapeOx (capecitabine and oxaliplatin) regimen
  - b) FOLFOX (fluorouracil, leucovorin, and oxaliplatin) regimen
  - c) FOLFIRI (fluorouracil, leucovorin, and irinotecan) regimen; OR
- 12. Primary treatment for synchronous liver only and/or lung only metastases (KRAS/NRAS/BRAF wild-type gene only) for proficient mismatch repair/microsatellite-stable (pMMR/MMS) only, or deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) only and not a candidate for immunotherapy that is unresectable or medically inoperable in combination with one of the following:
  - a) FOLFIRI (fluorouracil, leucovorin, and irinotecan)
  - b) FOLFOX (fluorouracil, leucovorin, and oxaliplatin); OR
- 13. Initial treatment for unresectable metachronous metastases (KRAS/NRAS/BRAF wild-type gene only) for proficient mismatch repair/microsatellite-stable (pMMR/MMS) and previous FOLFOX (fluorouracil, leucovorin, and oxaliplatin) or CapeOX (capecitabine and oxaliplatin) within the past 12 months in combination with one of the following:
  - a) Irinotecan
  - b) FOLFIRI (fluorouracil, leucovorin, and irinotecan); OR
- 14. Initial treatment in combination with encorafenib for patients with unresectable metachronous metastases (BRAF V600E mutation positive) for proficient mismatch repair/microsatellite-stable (pMMR/MMS) only and previous FOLFOX (fluorouracil, leucovorin, and oxaliplatin) or CapeOX (capecitabine and oxaliplatin) within the past 12 months; OR
- 15. Initial treatment in combination with sotorasib or adagrasib for patients with unresectable metachronous metastases (KRAS G12C mutation positive) (proficient mismatch repair/microsatellite-stable [pMMR/MSS]) and previous FOLFOX (fluorouracil, leucovorin, and oxaliplatin) or CapeOX (capecitabine and oxaliplatin) within the past 12 months; OR
- 16. Therapy for KRAS/NRAS/BRAF wild-type gene tumors as a single agent if intensive therapy is not recommended for proficient mismatch repair/microsatellite-stable (pMMR/MMS), or ineligible for or progression on checkpoint inhibitor immunotherapy for deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) or polymerase epsilon/delta (POLE/POLD1) mutation for one of the following:
  - a) Primary treatment for synchronous abdominal/peritoneal metastases that are nonobstructing, or following local therapy for patients with existing or imminent obstruction
  - b) Primary treatment for synchronous unresectable metastases of other sites
  - c) Primary treatment for unresectable isolated pelvic/anastomotic recurrence
  - d) Initial treatment for unresectable metachronous metastases in patients who have not received previous therapy with FOLFOX or CapeOX within the past 12 months but received previous fluorouracil/leucovorin (5-FU/LV) or capecitabine therapy, or did not receive any previous chemotherapy; OR



- 17. Primary treatment as a single agent for T3, Any N; T1-2, N1-2; T4, Any N; or locally unresectable or medically inoperable disease (KRAS/NRAS/BRAF wild-type gene only) if resection is contraindicated following total neoadjuvant therapy for proficient mismatch repair/microsatellite-stable (pMMR/MMS) only, or ineligible for, or progression on checkpoint inhibitor immunotherapy for deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) or neoadjuvant/definitive immunotherapy for (dMMR/MSI-H) or polymerase epsilon/delta (POLE/POLD1) mutation only if intensive therapy is not recommended; OR
- 18. Subsequent therapy for progression of advanced or metastatic disease (KRAS/NRAS/BRAF wild-type gene only) that is proficient mismatch repair/microsatellite-stable (pMMR/MMS), or ineligible for or progression on checkpoint inhibitor immunotherapy for deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) or polymerase epsilon/delta (POLE/POLD1) in combination with one of the following:
  - a) Irinotecan, FOLFIRI (fluorouracil, leucovorin, and irinotecan) regimen, or as a single agent for patients who cannot tolerate irinotecan, if previously treated with oxaliplatin-based therapy without irinotecan
  - b) Irinotecan, FOLFOX (fluorouracil, leucovorin, and oxaliplatin), CapeOX (capecitabine and oxaliplatin), or as a single agent for patients who cannot tolerate irinotecan, if previously treated with irinotecan-based therapy without oxaliplatin
  - c) Irinotecan or as a single agent for patients who cannot tolerate irinotecan if previously treated with oxaliplatin and irinotecan
  - d) Irinotecan or as a single agent for patients who cannot tolerate irinotecan if previously treated without irinotecan or oxaliplatin followed by FOLFOX (fluorouracil, leucovorin, and oxaliplatin) or CapeOX (capecitabine and oxaliplatin) with or without bevacizumab; OR
- 19. Subsequent therapy in combination with encorafenib for progression of advanced or metastatic disease (BRAF V600E mutation-positive) for proficient mismatch repair/microsatellite-stable (pMMR/MMS), or ineligible for or progression on checkpoint inhibitor immunotherapy for deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) in patients previously treated with one of the following:
  - a) Oxaliplatin-based therapy without irinotecan
  - b) Irinotecan-based therapy without oxaliplatin
  - c) With irinotecan and oxaliplatin
  - d) Without irinotecan or oxaliplatin
  - e) Without irinotecan or oxaliplatin followed by FOLFOX (fluorouracil, leucovorin, and oxaliplatin) or CapeOX (capecitabine and oxaliplatin) with or without bevacizumab; OR
- 20. Subsequent therapy (biomarker-directed therapy) in combination with encorafenib, if not previously given, for progression of advanced or metastatic disease BRAF V600E mutation positive proficient mismatch repair/microsatellite-stable (pMMR/MSS) or ineligible for or progressed on checkpoint inhibitor immunotherapy for deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) or polymerase epsilon/delta (POLE/POLD1) mutation; OR
- 21. Subsequent therapy (biomarker-directed therapy) in combination with sotorasib or adagrasib, if not previously given, for progression of advanced or metastatic disease KRAS G12C mutation positive proficient mismatch repair/microsatellite-stable [pMMR/MSS] or ineligible for or progressed on checkpoint inhibitor immunotherapy for



deficient mismatch repair/microsatellite instability-high (dMMR/MSI-H) or polymerase epsilon/delta (POLE/POLD1) mutation.<sup>4</sup>

#### Note:

- 1. Biologic therapy is only appropriate for continuation with a favorable response from conversion therapy.
- 2. The patient should not have received prior treatment with cetuximab or panitumumab.

#### **Authorization Period and Renewal Criteria**

- 1. Initial Authorization Period: 12 months
- 2. Renewal Criteria: No evidence of disease progression or unacceptable toxicity
- 3. Renewal Authorization Period: 12 months

#### **Panitumumab: References**

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# Panitumumab: Coding (CPT®, ICD 10 and HCPCS) \*

\*Procedure codes appearing in medical policy documents are only included as a general reference. This list may not be all-inclusive and is subject to updates. In addition, the codes listed are not a guarantee of payment.

| CODE  | DESCRIPTION                      |
|-------|----------------------------------|
| C18.0 | Malignant neoplasm of the colon  |
| C20   | Malignant neoplasm of the rectum |



| J9303 Panitumumab (Vectibix) |
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# **Panitumumab: Revision and Review History**

| No. | Description                              | Date(s)  |
|-----|--|--|
| 1   | Original Effective Date:                 | 1/1/2024   |
| 2   | Policy Review Dates:                     | 10/22/2024   |
| 3   | Policy Revision Dates:                   | 10/22/2024   |
| 4   | Department Owner:                        | Medical Affairs  |
|     | NH Advisory Committee<br>Approval Dates: | 10/12/2023, 10/29/2024   |
| 6   | Revision Changes:                        | 10/22/2024 - Added adverse reactions, five indications for colon and seven indications for rectal cancer |