Name of Policy:  
Panitumumab, Vectibix™

Policy #: 369  
Latest Review Date: June 2014
Category: Pharmacology  
Policy Grade: B

Background/Definitions:
As a general rule, benefits are payable under Blue Cross and Blue Shield of Alabama health plans only in cases of medical necessity and only if services or supplies are not investigational, provided the customer group contracts have such coverage.

The following Association Technology Evaluation Criteria must be met for a service/supply to be considered for coverage:

1. The technology must have final approval from the appropriate government regulatory bodies;
2. The scientific evidence must permit conclusions concerning the effect of the technology on health outcomes;
3. The technology must improve the net health outcome;
4. The technology must be as beneficial as any established alternatives;
5. The improvement must be attainable outside the investigational setting.

Medical Necessity means that health care services (e.g., procedures, treatments, supplies, devices, equipment, facilities or drugs) that a physician, exercising prudent clinical judgment, would provide to a patient for the purpose of preventing, evaluating, diagnosing or treating an illness, injury or disease or its symptoms, and that are:

1. In accordance with generally accepted standards of medical practice; and
2. Clinically appropriate in terms of type, frequency, extent, site and duration and considered effective for the patient’s illness, injury or disease; and
3. Not primarily for the convenience of the patient, physician or other health care provider; and
4. Not more costly than an alternative service or sequence of services at least as likely to produce equivalent therapeutic or diagnostic results as to the diagnosis or treatment of that patient’s illness, injury or disease.
**Description of Procedure or Service:**
Panitumumab (Vectibix™; Amgen, Thousand Oaks, CA) is a human IgG2 kappa recombinant, monoclonal antibody that binds specifically to the human epidermal growth factor receptor (EGFR). Thus, panitumumab inhibits the binding of ligands. This prevents the activation of receptor-associated kinases, resulting in the start of apoptosis and inhibition of cell growth. The blockage of the epidermal growth factor results in a decrease in tumor growth.

According to the American Cancer Society (ACS), colorectal cancer is the third most common cancer in men and women. It is estimated during 2008, there will be 108,070 new colon cancer and 40,740 new rectal cancer cases in the United States. Colorectal cancer refers to malignancies originating from the large intestine (colon) or the rectum. The term colorectal cancer does not include anal cancer. Anal cancer refers to malignancies developing from anal tissue (e.g., anus, anal canal or anorectum) which include the opening of the rectum to the outer body. Anal cancer occurs infrequently and represents 4% of all cancers of the lower gastrointestinal tract (National Cancer Institute [NCI], 2009; National Comprehensive Cancer Network®, 2009).

This drug is used following treatment with fluoropyrimidine agents, oxaliplatin (Eloxatin) and irinotecan (Camptosar). A fluoropyrimidine is a type of antimetabolite used to treat cancer. Examples include capecitabine (Xeloda) floxuridine, (FUDR) or fluorouracil (5FU, Adrucil).

**Policy:**
**Effective for dates of service on or after May 23, 2014:**

**Colorectal Cancer**

*Panitumumab meets* Blue Cross and Blue Shield of Alabama’s medical criteria for coverage for the treatment of wild-type KRAS metastatic colorectal cancer as determined and documented by KRAS gene mutation testing for the following indications:

- As monotherapy following disease progression after prior treatment with fluoropyrimidine, oxaliplatin (Eloxatin), and irinotecan (Camptosar) containing chemotherapy; **OR**
- As first-line treatment in combination with FOLFOX
- Patient has not received prior treatment with cetuximab (Erbitux); **AND**
- KRAS gene mutation testing is documented and the tumor is determined to be KRAS wild-type.

*Panitumumab does not meet* Blue Cross and Blue Shield of Alabama’s medical criteria for coverage and is considered investigational for the treatment of KRAS-mutant metastatic colorectal cancer or for patients whom KRAS mutation status is unknown.

**Lung Cancer**

*Panitumumab meets* Blue Cross and Blue Shield of Alabama’s medical criteria for coverage for the treatment of advanced non-small cell lung cancer.
Dosage and frequency of administration should be based on the product label or one of the standard referenced compendia. The medical record should contain the patient’s height, weight, etc. to determine the dosage.

**Effective for dates of service prior to May 23, 2014:**

**Colorectal Cancer**

*Panitumumab meets* Blue Cross and Blue Shield of Alabama’s medical criteria for coverage for the treatment of EGFR-expressing metastatic colorectal cancer as a single agent or as part of an accepted chemotherapy regimen when **all** of the following criteria are met:

- Disease progression on or following fluoropyrimidine, oxaliplatin (Eloxatin), and irinotecan (Camptosar) containing chemotherapy regimens; **AND**
- Patient has not received prior treatment with cetuximab (Erbitux); **AND**
- KRAS gene mutation testing is documented and the tumor is determined to be KRAS wild-type.

*Note:* KRAS mutation analysis is required prior to treatment of EGFR-expressing metastatic colorectal cancer.

**Lung Cancer**

*Panitumumab meets* Blue Cross and Blue Shield of Alabama’s medical criteria for coverage for the treatment of advanced non-small cell lung cancer.

Dosage and frequency of administration should be based on the product label or one of the standard referenced compendia. The medical record should contain the patient’s height, weight, etc. to determine the dosage.

*Blue Cross and Blue Shield of Alabama does not approve or deny procedures, services, testing, or equipment for our members. Our decisions concern coverage only. The decision of whether or not to have a certain test, treatment or procedure is one made between the physician and his/her patient. Blue Cross and Blue Shield of Alabama administers benefits based on the member’s contract and corporate medical policies. Physicians should always exercise their best medical judgment in providing the care they feel is most appropriate for their patients. Needed care should not be delayed or refused because of a coverage determination.*

**Key Points:**
This medical criterion for coverage is based on the FDA-labeled indications and/or compendia based accepted off-label indications and/or the National Comprehensive Cancer Network (NCCN) drug compendium.

**Key Words:**
Metastatic colorectal cancer (CRC), KRAS mutation analysis, monoclonal antibody, human epidermal growth factor receptor (EGFR), non small-cell lung cancer
Approved by Governing Bodies:
In September 2006, the U.S. FDA approved panitumumab for the treatment of wild-type KRAS metastatic colorectal cancer.

Benefit Application:
Coverage is subject to member’s specific benefits. Group specific policy will supersede this policy when applicable.
ITS: Home Policy provisions apply
FEP does not consider investigational if FDA approved and will be reviewed for medical necessity.
Lowe’s Precertification Requirement—Effective for dates of service on or after February 1, 2010 please contact Care Continuum at 866-240-4734 or fax the prescription with accompanying clinical information to 877-540-6223 for precertification. (This Blue Cross and Blue Shield of Alabama’s medical policy does not apply for Lowe’s members for dates of service on or after February 1, 2010. This policy was in effect for Lowe’s prior to February 1, 2010).

Current Coding:
CPT codes:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>81275</td>
<td>KRAS (v-Ki-RAS2 Kirsten rat sarcoma viral oncogene) (e.g., carcinoma) gene analysis, variants in codons 12 and 13</td>
</tr>
<tr>
<td>81403</td>
<td>Molecular pathology procedure, Level 4 (e.g., analysis of single exon by DNA sequence analysis, analysis of &gt;10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons) – includes KRAS (v-Ki-ras2 Kirsten rat sarcoma viral oncogene) (e.g. carcinoma) gene analysis, variants on exon 3 (e.g. codon 61) (effective 1/1/13)</td>
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<tr>
<td>81405</td>
<td>Molecular pathology procedure, Level 6 (e.g., analysis of 6-10 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 11-25 exons) – includes KRAS (v-Ki-ras2 Kirsten rat sarcoma viral oncogene homolog) (e.g., Noonan syndrome), full gene sequence (effective 1/1/13)</td>
</tr>
<tr>
<td>88363</td>
<td>Examination and selection of retrieved archival (i.e., previously diagnosed) tissue(s) for molecular analysis (KRAS mutational analysis)</td>
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HCPCS:

<table>
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<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>J9303</td>
<td>Injection, Panitumumab, 10 mg</td>
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Previous Coding:

HCPCS:

<table>
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<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>S3713</td>
<td>KRAS mutation analysis testing (deleted 04/01/2012)</td>
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References:

Policy History:
Medical Policy Group, July 2009 (3)
Medical Policy Administration Committee, August 2009
Available for comment August 10-September 23, 2009
Medical Policy Administration Committee, February 2010
Available for comment February 18-April 7, 2010
Coding update, effective January 1, 2011, December 2010 (1)
Medical Policy Group, August 2011; Update to Policy section
Medical Policy Administration Group, August 2011
Available for comment September 2 through October 17, 2011
Medical Policy Group, December 2011 (3): Coding update effective January 2012-added code 81275 and deleted S3713
Medical Policy Group, August 2012 (1): Update to Policy and References to correspond to FDA labeling for usage; removal of requirement for combination therapy with Vectibix in policy section; addition of use as a single agent or in combination with accepted chemotherapy regimens
Medical Policy Administration Group, August 2012
Available for comment August 9 through September 24, 2012
Medical Policy Group, January 2013 (1): Update to Coding with addition of codes 81403 and 81405 related to KRAS testing; no change in policy statement
Medical Policy Group, June 2014 (1): Update to Policy with addition of new FDA indication for first-line treatment of mCRC in combination with FOLFOX, effective 5/23/2014; clarified need for documentation of KRAS mutation testing as related to coverage
Medical Policy Administration Committee, June 2014
Available for comment June 18 through August 1, 2014

This medical policy is not an authorization, certification, explanation of benefits, or a contract. Eligibility and benefits are determined on a case-by-case basis according to the terms of the member’s plan in effect as of the date services are rendered. All medical policies are based on (i) research of current medical literature and (ii) review of common medical practices in the treatment and diagnosis of disease as of the date hereof. Physicians and other providers are solely responsible for all aspects of medical care and treatment, including the type, quality, and levels of care and treatment.

This policy is intended to be used for adjudication of claims (including pre-admission certification, pre-determinations, and pre-procedure review) in Blue Cross and Blue Shield’s administration of plan contracts.