

Cetuximab (Erbix®)	
<input checked="" type="checkbox"/> Original	Original Committee Approval: December 3, 2008
<input type="checkbox"/> Revised	Last Committee Approval: December 3, 2008
	Last Review: 12-01-08

Background

Approximately 65 % of human colon carcinomas express the epidermal growth factor receptor (EGFR). In addition, cancer researchers have demonstrated that the majority of head and neck cancers also over-express EGFR. The expression of this receptor in tumors is correlated with more aggressive tumor behavior, resistance to chemotherapy and poor clinical outcomes.

Cetuximab (Erbix®) is a recombinant humanized monoclonal antibody with antineoplastic activity directed against EGFR. This agent binds to the extracellular domain of the EGFR, thereby preventing the activation of this receptor; the decrease in receptor activation may result in anti-proliferative effects. It is believed that this drug inhibits EGFR-dependent primary tumor growth and metastasis.

Cetuximab was first approved by the U.S. Food and Drug Administration in February 2004 in the treatment of metastatic colorectal cancer. Subsequently, favorable clinical trials have led to its approval by the FDA and/or the National Comprehensive Cancer Network (NCCN) for other indications, as specified below.

Indications/Criteria

Cetuximab is considered medically necessary for the following indications:

Metastatic Colorectal Cancer:

(ATTN: The NCCN has recently updated its guidelines regarding metastatic colorectal cancer to require K-ras [a tumor marker] genetic testing prior to using Cetuximab and other anti-EGFR agents. Only those patients whose tumors express the "wild-type" (normal, non-mutated) K-ras variant should receive anti-EGFR therapy.)

- In combination with irinotecan for the treatment of metastatic disease
- As a single agent if patients cannot tolerate irinotecan-based chemotherapy

Squamous cell carcinoma of the head and neck (SCCHN)

- In combination with radiation therapy for the initial treatment of locally or regionally advanced SCCHN.
- As a single agent for the treatment of recurrent or metastatic SCCHN in for which prior platinum-based therapy has failed

Non-small cell lung cancer (NSCLC):

- Treatment of metastatic or recurrent epidermal growth factor receptor (EGFR) positive non-small cell lung cancer

Cetuximab is considered experimental and investigational, or is contraindicated, for the following:

- Treatment of metastatic colorectal cancer that expresses mutant K-ras tumor markers
- Other types of cancers not specified above, including: pancreatic cancer, esophageal adenocarcinoma, breast cancer, cholangiocarcinoma, small bowel cancer, and gastric cancer

Special Considerations

The most serious adverse events associated with Cetuximab across all trials were: cardiopulmonary arrest, pulmonary toxicity, dermatologic toxicity (especially severe acneiform rash), and electrolyte abnormalities (especially hypomagnesemia).

Limitations/Exclusions

Healthy Options:	None; pre-authorization required.
Basic Health Plan:	None; pre-authorization required.
GAU:	None; pre-authorization required.
Medicare Advantage:	None; pre-authorization required.

Required Review and Approvals

Infusions require prior authorization by the CHP Medical Director or his/her designee. Each authorization period will be for six months.

All requests for this IV medication also require referral to CHP Case Management.

References

National Comprehensive Cancer Network, Clinical Practice Guidelines in Oncology™
(www.nccn.org)

National Cancer Institute (www.cancer.gov)

Federal Drug Administration (www.fda.gov)

Facts and Comparisons 4.0 (<http://online.factsandcomparisons.com>)

Hayes, Inc. Online (www.hayesinc.com)

UpToDate Online 16.3 (www.uptodate.com)

Aetna Clinical Policy Bulletin #0684 (rev. 11/21/08)

Karapetis, C, et al. "K-ras Mutations and the Benefit from Cetuximab in Advanced Colorectal Cancer." *New England Journal of Medicine*: 359; 1757-1765; October 23, 2008.