

PRIOR AUTHORIZATION CRITERIA

DRUG CLASS ANTINEOPLASTIC AGENT/MONOCLONAL ANTIBODY

BRAND NAME/(generic) AVASTIN (bevacizumab)

Type: Initial Prior Authorization

Effective Date:

Review Date: 11/18/19

FDA-APPROVED INDICATIONS/COMPENDIAL USES

FDA-Approved Indications

1. Metastatic colorectal cancer:

- a. In combination with intravenous 5-fluorouracil-based chemotherapy for first- or second-line treatment
- b. In combination with fluoropyrimidine-irinotecan- or fluoropyrimidine-oxaliplatin-based chemotherapy for second-line treatment in patients who have progressed on a first-line Avastin-containing regimen
- 2. Non-squamous non-small cell lung cancer (NSCLC), with carboplatin and paclitaxel for first line treatment of unresectable, locally advanced, recurrent or metastatic disease
- 3. Metastatic renal cell carcinoma with interferon alfa
- 4. Glioblastoma, as a single agent for adult patients with progressive disease following prior therapy
- 5. Cervical cancer, in combination with paclitaxel and cisplatin or paclitaxel and topotecan in persistent, recurrent, or metastatic disease
- 6. Recurrent epithelial ovarian, fallopian tube, or primary peritoneal cancer
 - a. In combination with paclitaxel, pegylated liposomal doxorubicin or topotecan for patients with platinum-resistant disease who received no more than 2 prior chemotherapy regimens
 - b. Either in combination with carboplatin and paclitaxel or in combination with carboplatin and gemcitabine, followed by Avastin as a single agent in patients with platinum-sensitive disease

Compendial Uses

- 1. Breast cancer
- 2. Central nervous system (CNS) cancers
 - a. Adult intracranial and spinal ependymoma
 - b. Anaplastic gliomas
- 3. Cervical cancer
- 4. Colon/rectal cancer
- 5. Endometrial cancer
- 6. Malignant Pleural Mesothelioma
- 7. Non-small cell lung cancer
- 8. Ovarian cancer (Malignant sex cord-stromal tumors)
- 9. Renal cell carcinoma
- 10. Soft tissue sarcoma
- 11. Ophthalmic disorders
 - a. Diabetic macular edema
 - b. Wet age-related macular degeneration (AMD)
 - c. Retinal vein occlusion (RVO) with macular edema
 - d. Proliferative diabetic retinopathy
 - e. Choroidal neovascularization (CNV) Neovascular glaucoma; adjunct

All other indications are considered experimental/investigational and are not a covered benefit.

MECHANISM OF ACTION

Bevacizumab acts by selectively binding circulating VEGF, thereby inhibiting the binding of VEGF to its cell surface receptors. This inhibition leads to a reduction in microvascular growth of tumor blood vessels and thus limits the blood supply to tumor tissues. These effects also lower tissue interstitial pressure, increase vascular permeability, may increase delivery of chemotherapeutic agents, and favor apoptosis of tumor endothelial cells

COVERAGE CRITERIA

Patient has one of the following diagnosis:

A. Ophthalmic disorders

- 1. Diabetic macular edema
- 2. Neovascular (wet) age-related macular degeneration including subtypes:
 - a. Polypoidal choroidopathy
 - b. Retinal angiomatous proliferation
- 3. Macular edema following retinal vein occlusion
- 4. Proliferative diabetic retinopathy
- 5. Choroidal neovascularization
- 6. Neovascular glaucoma
- 7. Retinopathy of prematurity
- B. Colorectal cancer (CRC)
- C. Non-small cell lung cancer (NSCLC)
- D. CNS cancer
 - 1. Glioblastoma
 - 2. Anaplastic glioma
 - 3. Adult intracranial and spinal ependymoma (excludes subependymoma)

E. Ovarian cancer

- 1. Epithelial ovarian cancer
- 2. Fallopian tube cancer
- 3. Primary peritoneal cancer
- 4. Malignant sex cord-stromal tumors
- F. Endometrial cancer
- G. Cervical cancer
- H. Breast cancer
- I. Renal cell carcinoma

J. Soft tissue sarcoma

- 1. Angiosarcoma
- 2. Solitary fibrous tumor
- 3. Hemangiopericytoma

K. Malignant Pleural Mesothelioma

AND

Patient does not have the following contraindication/health condition:
Known hypersensitivity to Avastin or any of its excipients

AND

Avastin dosing is in accordance with the FDA approved dosing schedule:

- Metastatic colorectal cancer
 - a. 5mg/kg IV every 2 weeks with bolus-IFL
 - b. 10mg/kg IV every 2 weeks with FOLFOX4
- Non-squamous non-small cell lung cancer
 - a. 15mg/kg IV every 3 weeks with carboplatin/paclitaxel
- Metastatic breast cancer
 - a. 10 mg/kg IV every 2 weeks with paclitaxel
- Glioblastoma
 - a. 10 mg/kg IV every 2 weeks

Approved x 12 months

Renewal Request:

• All initial conditions of coverage have been met

AND

• Documented improvement of the condition

AND

The patient did not experience any adverse effects while on Avastin therapy:

Approved x 12 months

REFERENCES

- 1. Avastin [package insert]. South San Francisco, CA: Genentech, Inc.; December 2016.
- 2. The NCCN Drugs & Biologics Compendium™ © 2017 National Comprehensive Cancer Network, Inc. http://www.nccn.org. Accessed January 9, 2017.
- 3. Micromedex Solutions [database online]. Ann Arbor, MI: Truven Health Analytics Inc. Updated periodically. www.micromedexsolutions.com [available with subscription]. Accessed February 16, 2017.
- 4. Chan WM, Lai TY, Lui DT, et al. Intravitreal bevacizumab (Avastin) for myopic choroidal neovascularization: 1-year results of a prospective pilot study. Br J Ophthalmol.2009;93(2):150-154.
- 5. Gupta B, Elagouz M, Sivaprasad S. Intravitreal bevacizumab for choroidal neovascularization secondary to causes other than age-related macular degeneration. Eye.2010;24:203-213.
- 6. CATT Research Group, Martin DF, Maguire MG, et al. Ranibizumab and bevacizumab for neovascular agerelated macular degeneration. *N Engl J Med.* 2011;364(20):1897-1908.
- 7. Russo V, Barone A, Conte E, et al. Bevacizumab compared with macular laser grid photocoagulation for cystoid macular edema in branch retinal vein occlusion. *Retina*. 2009;29:511-5.
- 8. Michaelides M, Kaines A, Hamilton RD, et al. A prospective randomized trial of intravitreal bevacizumab or laser therapy in the management of diabetic macular edema (BOLT Study) 12-month data: report 2. *Ophthalmology*. 2010;117:1078-1086.
- 9. Mirshahi A, Roohipoor R, Lashay A, et al. Bevacizumab-augmented retinal laser photocoagulation in proliferative diabetic retinopathy: a randomized double-masked clinical trial. *Eur J Ophthalmol.* 2008;18(2):263-269.
- 10. Yazdani S, Hendi K, Pakravan M, et al. Intravitreal bevacizumab for neovascular glaucoma: a randomized controlled trial. *J Glaucoma*.2009;18(8):632-637.
- 11. Mintz-Hittner HA, Kennedy KA, Chuang AZ, et al. Efficacy of intravitreal bevacizumab for stage 3+ retinopathy of prematurity. *N Engl J Med*. 2011;364(7):603-615.
- 12. American Academy of Ophthalmology Retinal/Vitreous Panel. Preferred Practice Pattern Guidelines®. Age-Related Macular Degeneration. San Francisco, CA: American Academy of Ophthalmology; 2015. Available at: www.aao.org/ppp.
- 13. American Academy of Ophthalmology Retinal/Vitreous Panel. Preferred Practice Pattern Guidelines[®]. Diabetic Retinopathy. San Francisco, CA: American Academy of Ophthalmology; 2016. Available at: www.aao.org/ppp.
- 14. VanderVeen DK, Melia M, Yang MB, et al. Anti-vascular endothelial growth factor therapy in primary treatment of type 1 retinopathy of prematurity: a report by the American Academy of Ophthalmology.

Ophthalmology. May 26, 2017.	. 2017 May;124(5):6	19-633. URL: https	s://www.ncbi.nlm.nil	n.gov/pubmed/2834 ²	1474. Accessed