Reference number(s)
1891-A

Specialty Guideline Management Avastin and Biosimilars

Products Referenced by this Document

Drugs that are listed in the following table include both brand and generic and all dosage forms and strengths unless otherwise stated. Over-the-counter (OTC) products are not included unless otherwise stated.

Brand Name	Generic Name
Avastin	bevacizumab
Alymsys	bevacizumab-maly
Avzivi	bevacizumab-tnjn
Jobevne	bevacizumab-nwgd
Mvasi	bevacizumab-awwb
Vegzelma	bevacizumab-adcd
Zirabev	bevacizumab-bvzr

Indications

The indications below including FDA-approved indications and compendial uses are considered a covered benefit provided that all the approval criteria are met and the member has no exclusions to the prescribed therapy.

FDA-Approved Indications[1-6,32]

Metastatic Colorectal Cancer (mCRC)

- Avastin, Alymsys, Avzivi, Jobevne, Mvasi, Vegzelma or Zirabev, in combination with intravenous fluorouracil-based chemotherapy, is indicated for the first- or second-line treatment of patients with metastatic colorectal cancer.

- Avastin, Alymsys, Avzivi, Jobevne, Mvasi, Vegzelma or Zirabev, in combination with fluoropyrimidine-irinotecan- or fluoropyrimidine-oxaliplatin-based chemotherapy, is indicated for the second-line treatment of patients with metastatic colorectal cancer who have progressed on a first-line bevacizumab product-containing regimen.

First-Line Non-Squamous Non-Small Cell Lung Cancer (NSCLC)

Avastin, Alymsys, Avzivi, Jobevne, Mvasi, Vegzelma or Zirabev, in combination with carboplatin and paclitaxel, is indicated for the first-line treatment of patients with unresectable, locally advanced, recurrent or metastatic non–squamous non–small cell lung cancer.

Recurrent Glioblastoma (RGM)

Avastin, Alymsys, Avzivi, Jobevne, Mvasi, Vegzelma or Zirabev, is indicated for the treatment of recurrent glioblastoma in adults.

Metastatic Renal Cell Carcinoma (mRCC)

Avastin, Alymsys, Avzivi, Mvasi, Vegzelma or Zirabev, in combination with interferon alfa, is indicated for the treatment of metastatic renal cell carcinoma.

Persistent, Recurrent, or Metastatic Cervical Cancer

Avastin, Alymsys, Avzivi, Jobevne, Mvasi, Vegzelma or Zirabev, in combination with paclitaxel and cisplatin or paclitaxel and topotecan, is indicated for the treatment of patients with persistent, recurrent, or metastatic cervical cancer.

Epithelial Ovarian, Fallopian Tube, or Primary Peritoneal Cancer

- Avastin, Jobevne, Mvasi, Vegzelma or Zirabev, in combination with carboplatin and paclitaxel, followed by Avastin, Jobevne, Mvasi, Vegzelma or Zirabev as a single agent, is indicated for the treatment of patients with stage III or IV epithelial ovarian, fallopian tube, or primary peritoneal cancer following initial surgical resection.
- Avastin, Alymsys, Avzivi, Jobevne, Mvasi, Vegzelma or Zirabev, in combination with paclitaxel, pegylated liposomal doxorubicin, or topotecan, is indicated for the treatment of patients with platinum-resistant recurrent epithelial ovarian, fallopian tube or primary peritoneal cancer who received no more than 2 prior chemotherapy regimens.
- Avastin, Jobevne, Mvasi, Vegzelma or Zirabev, in combination with carboplatin and paclitaxel, or with carboplatin and gemcitabine, followed by Avastin, Jobevne, Mvasi, Vegzelma or Zirabev as a single agent, is indicated for the treatment of patients with platinum-sensitive recurrent epithelial ovarian, fallopian tube, or primary peritoneal cancer.

Hepatocellular Carcinoma

Avastin, in combination with atezolizumab, is indicated for the treatment of patients with unresectable or metastatic hepatocellular carcinoma (HCC) who have not received prior systemic therapy.

Compendial Uses[7-31]

- Central Nervous System (CNS) Cancers
    - Circumscribed glioma
    - Diffuse high grade and high grade gliomas
    - Glioblastoma
    - IDH mutant astrocytoma (WHO Grade 2, 3, or 4)
    - Oligodendroglioma (WHO Grade 2 or 3)
    - Intracranial and Spinal Ependymoma (excluding subependymoma)
    - Medulloblastoma
    - Primary Central Nervous System Lymphoma
    - Meningiomas
    - Limited and Extensive Brain Metastases
    - Metastatic Spine Tumors
    - Primary Spinal Cord Tumors
- Pleural Mesothelioma, Peritoneal Mesothelioma, Pericardial Mesothelioma, Tunica Vaginalis Testis Mesothelioma
- Ovarian Cancer, Fallopian Tube Cancer, Primary Peritoneal Cancer
- Soft Tissue Sarcoma
    - Angiosarcoma
    - Solitary Fibrous Tumor/Hemangiopericytoma
- Uterine Neoplasms/Endometrial Carcinoma
- Vulvar Carcinoma
- Vaginal Cancer
- Cervical Cancer
- Small Bowel Adenocarcinoma
- Ampullary Adenocarcinoma
- Appendiceal Adenocarcinoma
- Anal Adenocarcinoma
- Renal Cell Carcinoma
- Hepatocellular Carcinoma
- Ophthalmic Disorders
    - Diabetic Macular Edema
    - Neovascular (wet) Age-Related Macular Degeneration
    - Macular Edema following Retinal Vein Occlusion
    - Proliferative Diabetic Retinopathy
    - Choroidal Neovascularization
    - Neovascular Glaucoma
    - Retinopathy of Prematurity
    - Polypoidal Choroidal Vasculopathy

All other indications are considered experimental/investigational and not medically necessary.

Coverage Criteria

Ophthalmic Disorders[8-26,30]

Authorization of 6 months may be granted for treatment of the following retinal disorders:

- Diabetic Macular Edema
- Neovascular (wet) Age-Related Macular Degeneration
- Macular Edema following Retinal Vein Occlusion
- Proliferative Diabetic Retinopathy
- Choroidal Neovascularization (including myopic choroidal neovascularization, angioid streaks, choroiditis [including choroiditis secondary to ocular histoplasmosis], idiopathic degenerative myopia, retinal dystrophies, rubeosis iridis, pseudoxanthoma elasticum, and trauma)
- Neovascular Glaucoma
- Retinopathy of Prematurity
- Polypoidal Choroidal Vasculopathy

Colorectal Cancer (CRC)[1-8,27,28,29,32]

Authorization of 12 months may be granted for treatment of colorectal cancer, including appendiceal adenocarcinoma and anal adenocarcinoma.

Small Bowel Adenocarcinoma[7]

Authorization of 12 months may be granted for treatment of small bowel adenocarcinoma.

Ampullary Adenocarcinoma[7]

Authorization of 12 months may be granted for treatment of intestinal-type ampullary adenocarcinoma that is progressive, unresectable, or metastatic.

Non-Small Cell Lung Cancer (NSCLC)[1-7,32]

Authorization of 12 months may be granted for treatment of recurrent, unresectable, advanced, or metastatic non-squamous NSCLC.

CNS Cancer[1-7,32]

Authorization of 12 months may be granted for treatment of the following types of CNS cancer:

- Circumscribed glioma
- Diffuse high grade and high grade gliomas
- Glioblastoma

- IDH mutant astrocytoma (WHO Grade 2, 3 or 4)
- Oligodendroglioma (WHO Grade 2 or 3)
- Intracranial and Spinal Ependymoma (excludes subependymoma)
- Medulloblastoma
- Primary Central Nervous System Lymphoma
- Meningiomas
- Limited and Extensive Brain Metastases
- Metastatic Spine Tumors
- Primary Spinal Cord Tumors

Ovarian Cancer/Fallopian Tube Cancer/Primary Peritoneal Cancer[1-7,31]

Authorization of 12 months may be granted for treatment of epithelial ovarian cancer, fallopian tube cancer, primary peritoneal cancer, and malignant sex cord stromal tumors.

Uterine Neoplasms/Endometrial Carcinoma[7,30]

Authorization of 12 months may be granted for treatment of progressive, persistent, recurrent, or metastatic uterine neoplasms or endometrial carcinoma.

Cervical Cancer[1-7,32]

Authorization of 12 months may be granted for treatment of persistent, recurrent, or metastatic cervical cancer.

Vaginal Cancer[7]

Authorization of 12 months may be granted for treatment of recurrent or metastatic vaginal cancer.

Renal Cell Carcinoma[1-7,32]

Authorization of 12 months may be granted for treatment of relapsed or stage IV renal cell carcinoma.

Soft Tissue Sarcoma[7,31]

Authorization of 12 months may be granted for treatment of angiosarcoma, as single agent therapy.

Authorization of 12 months may be granted for treatment of solitary fibrous tumor or hemangiopericytoma, in combination with temozolomide.

Mesothelioma[7,8]

Authorization of 12 months may be granted for treatment of pleural mesothelioma, peritoneal mesothelioma, pericardial mesothelioma, or tunica vaginalis testis mesothelioma when any of the following criteria are met:

- As first-line therapy in combination with pemetrexed and either cisplatin or carboplatin, followed by single-agent maintenance bevacizumab
- As subsequent therapy in combination with pemetrexed and either cisplatin or carboplatin if immunotherapy was administered as first-line treatment

Authorization of 12 months may be granted for treatment of peritoneal mesothelioma, pericardial mesothelioma, or tunica vaginalis testis mesothelioma when used in combination with atezolizumab as subsequent therapy.

Vulvar Carcinoma[7]

Authorization of 12 months may be granted for treatment of advanced, recurrent, or metastatic vulvar carcinoma, including squamous cell carcinoma and adenocarcinoma.

Hepatocellular Carcinoma[1,7]

Authorization of 12 months may be granted for treatment of unresectable or extrahepatic/metastatic hepatocellular carcinoma, when the requested medication will be used as initial treatment in combination with atezolizumab.

Authorization of 12 months may be granted for adjuvant treatment of operable hepatocellular carcinoma, when the member is at a high risk of recurrence and the requested medication will be used in combination with atezolizumab.

Continuation of Therapy

Ophthalmic Disorders

For ophthalmic disorders, authorization of 12 months may be granted for continued treatment in members requesting reauthorization for an indication listed in coverage criteria section when the member has demonstrated a positive clinical response to therapy (e.g., improvement or maintenance in best corrected visual acuity [BCVA] or visual field, or a reduction in the rate of vision decline or the risk of more severe vision loss).

All Other Indications

For all other indications, authorization of 12 months may be granted for continued treatment in members requesting reauthorization for an indication listed in coverage criteria section when there is no evidence of unacceptable toxicity or disease progression while on the current regimen.

References

1. Avastin [package insert]. South San Francisco, CA: Genentech, Inc.; September 2022.
2. Alymsys [package insert]. Bridgewater, NJ: Amneal Pharmaceuticals LLC; April 2022.
3. Avzivi [package insert]. Guangzhou, Guangdong Province, China: Bio-Thera Solutions, Ltd.; December 2023.
4. Mvasi [package insert]. Thousand Oaks, CA: Amgen Inc.; February 2023.
5. Zirabev [package insert]. New York, NY: Pfizer Inc.; August 2024.
6. Vegzelma [package insert]. Incheon, Republic of Korea: Celltrion, Inc.; February 2023.
7. The NCCN Drugs & Biologics Compendium® © 2024 National Comprehensive Cancer Network, Inc. Available at: https://www.nccn.org. Accessed November 11, 2024.
8. Micromedex Solutions [database online]. Truven Health Analytics, Greenwood Village, CO. Available at: http://www.micromedexsolutions.com. Accessed February 10, 2025.
9. 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.
10. Clinical Consult: CVS Caremark Clinical Programs Review. Focus on Age-Related Macular Degeneration Clinical Programs. April 2011.
11. 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.
12. CATT Research Group, Martin DF, Maguire MG, et al. Ranibizumab and bevacizumab for neovascular age-related macular degeneration. N Engl J Med. 2011;364(20):1897-1908.
13. 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.
14. 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.
15. 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.
16. Yazdani S, Hendi K, Pakravan M, et al. Intravitreal bevacizumab for neovascular glaucoma: a randomized controlled trial. J Glaucoma. 2009;18(8):632-637.
17. 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.
18. American Academy of Ophthalmology Retinal/Vitreous Panel. Preferred Practice Pattern® Guidelines. Age-Related Macular Degeneration. San Francisco, CA: American Academy of Ophthalmology; 2019.

Available at: https://www.aao.org/preferred-practice-pattern/age-related-macular-degeneration-ppp.
19. American Academy of Ophthalmology Retinal/Vitreous Panel. Preferred Practice Pattern® Guidelines. Diabetic Retinopathy. San Francisco, CA: American Academy of Ophthalmology; 2019. Available at: https://www.aao.org/preferred-practice-pattern/diabetic-retinopathy-ppp.
20. American Academy of Ophthalmology Retinal/Vitreous Panel. Preferred Practice Pattern® Guidelines. Retinal Vein Occlusions. San Francisco, CA: American Academy of Ophthalmology; 2019. Available at: https://www.aao.org/preferred-practice-pattern/retinal-vein-occlusions-ppp.
21. 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. 2017. May;124(5):619-633.
22. AHFS DI (Adult and Pediatric) [database online]. Hudson, OH: Lexi-Comp, Inc.; http://online.lexi.com/lco/action/index/dataset/complete_ashp [available with subscription]. Accessed November 12, 2024.
23. Yong M, Zhou M, Deng G. Photodynamic therapy versus anti-vascular endothelial growth factor agents for polypoidal choroidal vasculopathy: A meta-analysis. BMC Ophthalmol. 2015;15:82.
24. Kim JH, Kim JW, Lee TG, Lew YJ. Treatment outcomes in eyes with polypoidal choroidal vasculopathy with poor baseline visual acuity. J Ocul Pharmacol Ther. 2015;31(4):241-247.
25. Oishi A. The evidence for the treatment of polypoidal choroidal vasculopathy. Nippon Ganka Gakkai Zasshi. 2015;119(11):781-786.
26. Chang YS, Kim JH, Kim KM, et al. Long-term outcomes of anti-vascular endothelial growth factor therapy for polypoidal choroidal vasculopathy. J Ocul Pharmacol Ther. 2016;32(4):219-224.
27. National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology: Colon Cancer Version 5.2024. https://www.nccn.org/professionals/physician_gls/pdf/colon.pdf. Accessed November 11, 2024.
28. National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology: Rectal Cancer Version 4.2024. https://www.nccn.org/professionals/physician_gls/pdf/rectal.pdf. Accessed November 11, 2024.
29. National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology: Anal Carcinoma Version 1.2024. https://www.nccn.org/professionals/physician_gls/pdf/anal.pdf. Accessed November 11, 2024.
30. Lexicomp [database online]. Hudson, OH: Lexi-Comp, Inc.; https://online.lexi.com/lco/action/home [available with subscription]. Accessed February 19, 2025.
31. National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology: Soft Tissue Sarcoma Version 3.2024. https://www.nccn.org/professionals/physician_gls/pdf/sarcoma.pdf. Accessed November 19, 2024.
32. Jobevne [package insert]. Cambridge, MA: Biocon Biologics Inc.; April 2025.