

Medical Policy Manual **Approved Rev: Do Not Implement until 4/2/25**

Bevacizumab Products (Avastin®; Mvasi® ; Zirabev™; Alymsys®; Vegzelma™, Avzivi®)

Some agents on this policy may require step therapy See “Step Therapy Requirements for Provider Administered Specialty Medications” Document at:

https://www.bcbst.com/docs/providers/Comm_BC_PAD_Step_Therapy_Guide.pdf

IMPORTANT REMINDER

We develop Medical Policies to provide guidance to Members and Providers. This Medical Policy relates only to the services or supplies described in it. The existence of a Medical Policy is not an authorization, certification, explanation of benefits or a contract for the service (or supply) that is referenced in the Medical Policy. For a determination of the benefits that a Member is entitled to receive under his or her health plan, the Member's health plan must be reviewed. If there is a conflict between the medical policy and a health plan or government program (e.g., TennCare), the express terms of the health plan or government program will govern.

POLICY

I. 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.

A. FDA-Approved Indications

1. **Metastatic Colorectal Cancer (mCRC)**
 - a. Avastin, Alymsys, Avzivi, 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.
 - b. Avastin, Alymsys, Avzivi, 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.
2. **First-Line Non-Squamous Non-Small Cell Lung Cancer (NSCLC)**
Avastin, Alymsys, Avzivi, 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.
3. **Recurrent Glioblastoma (RGM)**
Avastin, Alymsys, Avzivi, Mvasi, Vegzelma or Zirabev, is indicated for the treatment of recurrent glioblastoma in adults.
4. **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.
5. **Persistent, Recurrent, or Metastatic Cervical Cancer**
Avastin, Alymsys, Avzivi, 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.
6. **Epithelial Ovarian, Fallopian Tube, or Primary Peritoneal Cancer**
 - a. Avastin, Mvasi, Vegzelma or Zirabev, in combination with carboplatin and paclitaxel, followed by Avastin, 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.



Medical Policy Manual **Approved Rev: Do Not Implement until 4/2/25**

- b. Avastin, Alymsys, Avzivi, 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.
- c. Avastin, Mvasi, Vegzelma or Zirabev, in combination with carboplatin and paclitaxel, or with carboplatin and gemcitabine, followed by Avastin, 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.
7. 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.

B. Compendial Uses

1. Breast Cancer
2. Central Nervous System (CNS) Cancers
 - a. Circumscribed Glioma
 - b. Diffuse high grade gliomas
 - c. Glioblastoma
 - d. IDH mutant astrocytoma (WHO Grade 2, 3, or 4)
 - e. Oligodendroglioma (WHO Grade 2 or 3)
 - f. Intracranial and Spinal Ependymoma (excluding subependymoma)
 - g. Medulloblastoma
 - h. Primary Central Nervous System Lymphoma
 - i. Meningiomas
 - j. Limited and Extensive Brain Metastases
 - k. Metastatic Spine Tumors
 - l. Neurofibromatosis type 2 vestibular schwannomas
3. Pleural Mesothelioma, Peritoneal Mesothelioma, Pericardial Mesothelioma, Tunica Vaginalis Testis Mesothelioma
4. Ovarian Cancer, Fallopian Tube Cancer, Primary Peritoneal Cancer
5. Soft Tissue Sarcoma
 - a. Angiosarcoma
 - b. Solitary Fibrous Tumor/Hemangiopericytoma
6. Uterine Neoplasms/Endometrial Carcinoma
7. Vulvar Carcinoma
8. Small Bowel Adenocarcinoma
9. Ampullary Adenocarcinoma
10. Appendiceal Adenocarcinoma
11. Anal Adenocarcinoma
12. Renal Cell Carcinoma
13. Hepatocellular Carcinoma
14. Ophthalmic Disorders
 - a. Diabetic Macular Edema
 - b. Neovascular (wet) Age-Related Macular Degeneration
 - c. Macular Edema following Retinal Vein Occlusion
 - d. Proliferative Diabetic Retinopathy
 - e. Choroidal Neovascularization
 - f. Neovascular Glaucoma
 - g. Retinopathy of Prematurity
 - h. Polypoidal Choroidal Vasculopathy

Medical Policy Manual **Approved Rev: Do Not Implement until 4/2/25**

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

II. CRITERIA FOR INITIAL APPROVAL

A. Ophthalmic Disorders

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

1. Diabetic Macular Edema
2. Neovascular (wet) Age-Related Macular Degeneration
3. Macular Edema following Retinal Vein Occlusion
4. Proliferative Diabetic Retinopathy
5. 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)
6. Neovascular Glaucoma
7. Retinopathy of Prematurity
8. Polypoidal Choroidal Vasculopathy

B. Colorectal Cancer (CRC)

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

C. Small Bowel Adenocarcinoma

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

D. Ampullary Adenocarcinoma

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

E. Non-Small Cell Lung Cancer (NSCLC)

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

F. CNS Cancer

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

1. Circumscribed Glioma
2. Diffuse high grade gliomas
3. Glioblastoma
4. IDH mutant astrocytoma (WHO Grade 2, 3 or 4)
5. Oligodendroglioma (WHO Grade 2 or 3)
6. Intracranial and Spinal Ependymoma (excludes subependymoma)
7. Medulloblastoma
8. Primary Central Nervous System Lymphoma
9. Meningiomas
10. Limited and Extensive Brain Metastases
11. Metastatic Spine Tumors
12. Neurofibromatosis type 2 vestibular schwannomas

G. Ovarian Cancer/Fallopian Tube Cancer/Primary Peritoneal Cancer

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.



Medical Policy Manual **Approved Rev: Do Not Implement until 4/2/25**

H. Uterine Neoplasms/Endometrial Carcinoma

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

I. Cervical/Vaginal Cancer

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

J. Breast Cancer

Authorization of 12 months may be granted for treatment of metastatic breast cancer.

K. Renal Cell Carcinoma

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

L. Soft Tissue Sarcoma

1. Authorization of 12 months may be granted for treatment of angiosarcoma, as single agent therapy.
2. Authorization of 12 months may be granted for treatment of solitary fibrous tumor or hemangiopericytoma, in combination with temozolomide.

M. Mesothelioma

1. 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:
 - a. As first-line therapy in combination with pemetrexed and either cisplatin or carboplatin, followed by single-agent maintenance bevacizumab
 - b. As subsequent therapy in combination with pemetrexed and either cisplatin or carboplatin if immunotherapy was administered as first-line treatment
2. 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.

N. Vulvar Carcinoma

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

O. Hepatocellular Carcinoma

1. Authorization of 12 months may be granted for treatment of unresectable, inoperable, or metastatic hepatocellular carcinoma, when the requested medication will be used as initial treatment in combination with atezolizumab.
2. 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.

III. CONTINUATION OF THERAPY

A. Ophthalmic Disorders

For ophthalmic disorders, authorization of 12 months may be granted for continued treatment in members requesting reauthorization for an indication listed in Section II when the member has demonstrated a positive clinical response to therapy (e.g., improvement or maintenance in best



Medical Policy Manual **Approved Rev: Do Not Implement until 4/2/25**

corrected visual acuity [BCVA] or visual field, or a reduction in the rate of vision decline or the risk of more severe vision loss).

B. 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 Section II when there is no evidence of unacceptable toxicity or disease progression while on the current regimen.

MEDICATION QUANTITY LIMITS

Drug Name	Diagnosis	Maximum Dosing Regimen
Avastin (Bevacizumab) Alymsys (Bevacizumab-maly) Mvasi (Bevacizumab-awwb) Vegzelma (Bevacizumab-adcd) Zirabev (Bevacizumab-bvzr)	Ampullary Adenocarcinoma	Route of Administration: Intravenous 5mg/kg every 2 weeks 7.5mg/kg every 3 weeks
Avastin (Bevacizumab) Alymsys (Bevacizumab-maly) Mvasi (Bevacizumab-awwb) Vegzelma (Bevacizumab-adcd) Zirabev (Bevacizumab-bvzr)	Colorectal Cancer, including Appendiceal Adenocarcinoma and Anal Adenocarcinoma	Route of Administration: Intravenous 10mg/kg every 2 weeks
Avastin (Bevacizumab) Alymsys (Bevacizumab-maly) Mvasi (Bevacizumab-awwb) Vegzelma (Bevacizumab-adcd) Zirabev (Bevacizumab-bvzr)	Breast Cancer	Route of Administration: Intravenous 10mg/kg every 2 weeks 15mg/kg every 3 weeks
Avastin (Bevacizumab) Alymsys (Bevacizumab-maly) Mvasi (Bevacizumab-awwb) Vegzelma (Bevacizumab-adcd) Zirabev (Bevacizumab-bvzr)	CNS Cancer, including Glioblastoma	Route of Administration: Intravenous 10mg/kg every 2 weeks 15mg/kg every 3 weeks
Avastin (Bevacizumab) Alymsys (Bevacizumab-maly)	Cervical Cancer, Hepatocellular Carcinoma, Malignant Pleural Mesothelioma, Malignant Peritoneal Mesothelioma, Pericardial Mesothelioma,	Route of Administration: Intravenous 15mg/kg every 3 weeks



Medical Policy Manual **Approved Rev: Do Not Implement until 4/2/25**

Mvasi (Bevacizumab-awwb) Vegzelma (Bevacizumab-adcd)	or Tunica Vaginalis Testis Mesothelioma, Non-Small Cell Lung Cancer, Soft Tissue Sarcoma: Angiosarcoma, Uterine Neoplasms -Endometrial Carcinoma, Vulvar Carcinoma	
Zirabev (Bevacizumab-bvzr)	Cervical Cancer, Hepatocellular Carcinoma, Malignant Pleural Mesothelioma, Malignant Peritoneal Mesothelioma, Pericardial Mesothelioma, or Tunica Vaginalis Testis Mesothelioma, Non-Small Cell Lung Cancer	Route of Administration: Intravenous 15mg/kg every 3 weeks
Avastin (Bevacizumab) Alymsys (Bevacizumab-maly) Mvasi (Bevacizumab-awwb) Vegzelma (Bevacizumab-adcd) Zirabev (Bevacizumab-bvzr)	Diabetic Macular Edema, Proliferative Diabetic Retinopathy, Neovascular Glaucoma (Adjunct)	Route of Administration: Intravitreal ≥18 Year(s) 1.25mg in the affected eye(s) every 4 weeks
Avastin (Bevacizumab)	Macular Edema following Retinal Vein Occlusion	Route of Administration: Intravitreal ≥18 Year(s) 1.25mg in the affected eye(s) once and repeat at 1 to 3 month intervals
Alymsys (Bevacizumab-maly) Mvasi (Bevacizumab-awwb) Vegzelma (Bevacizumab-adcd) Zirabev (Bevacizumab-bvzr)	Macular Edema following Retinal Vein Occlusion	Route of Administration: Intravitreal ≥18 Year(s) 1.25mg in the affected eye(s) once and repeat at 1 to 3 month intervals
Avastin (Bevacizumab)	Neovascular (wet) Age-Related Macular Degeneration (AMD), Choroidal Neovascularization	Route of Administration: Intravitreal ≥18 Year(s) 1.25mg in the affected eye(s) every 4 weeks 2.5mg in the affected eye(s) every 4 weeks for 3 doses
Alymsys (Bevacizumab-maly) Mvasi (Bevacizumab-awwb) Vegzelma (Bevacizumab-adcd) Zirabev (Bevacizumab-bvzr)	Neovascular (wet) Age-Related Macular Degeneration (AMD), Choroidal Neovascularization	Route of Administration: Intravitreal ≥18 Years 1.25mg in the affected eye(s) every 4 weeks 2.5mg in the affected eye(s) every 4 weeks for 3 doses
Avastin (Bevacizumab) Alymsys (Bevacizumab-maly)	Ovarian, Fallopian, Primary Peritoneal Cancer	Route of Administration: Intravenous 10mg/kg every 2 weeks 15mg/kg every 3 weeks



Medical Policy Manual **Approved Rev: Do Not Implement until 4/2/25**

Mvasi (Bevacizumab- awwb) Vegzelma (Bevacizumab-adcd) Zirabev (Bevacizumab- bvzr)		
Avastin (Bevacizumab) Alymsys (Bevacizumab- maly) Mvasi (Bevacizumab- awwb) Vegzelma (Bevacizumab-adcd) Zirabev (Bevacizumab- bvzr)	Polypoidal Choroidal Vasculopathy	Route of Administration: Intravitreal 2.5mg in the affected eye(s); frequency should not be more frequent than every 4 weeks
Avastin (Bevacizumab) Alymsys (Bevacizumab- maly) Mvasi (Bevacizumab- awwb) Vegzelma (Bevacizumab-adcd) Zirabev (Bevacizumab- bvzr)	Renal Cell Carcinoma	Route of Administration: Intravenous 10mg/kg every 2 weeks
Avastin (Bevacizumab) Alymsys (Bevacizumab- maly) Mvasi (Bevacizumab- awwb) Vegzelma (Bevacizumab-adcd) Zirabev (Bevacizumab- bvzr)	Retinopathy of Prematurity	Route of Administration: Intravitreal <18 Year(s) 0.625mg in the affected eye(s) for 1 dose
Avastin (Bevacizumab) Alymsys (Bevacizumab- maly) Mvasi (Bevacizumab- awwb) Vegzelma (Bevacizumab-adcd) Zirabev (Bevacizumab- bvzr)	Small Bowel Adenocarcinoma	Route of Administration: Intravenous 5mg/kg every 2 weeks 7.5mg/kg every 3 weeks
Avastin (Bevacizumab) Alymsys (Bevacizumab- maly) Mvasi (Bevacizumab- awwb) Vegzelma (Bevacizumab-adcd)	Soft Tissue Sarcoma: Solitary Fibrous Tumor	Route of Administration: Intravenous 5mg/kg every 2 weeks

Medical Policy Manual **Approved Rev: Do Not Implement until 4/2/25**

APPLICABLE TENNESSEE STATE MANDATE REQUIREMENTS

BlueCross BlueShield of Tennessee's Medical Policy complies with Tennessee Code Annotated Section 56-7-2352 regarding coverage of off-label indications of Food and Drug Administration (FDA) approved drugs when the off-label use is recognized in one of the statutorily recognized standard reference compendia or in the published peer-reviewed medical literature.

ADDITIONAL INFORMATION

For appropriate chemotherapy regimens, dosage information, contraindications, precautions, warnings, and monitoring information, please refer to one of the standard reference compendia (e.g., the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) published by the National Comprehensive Cancer Network®, Drugdex Evaluations of Micromedex Solutions at Truven Health, or The American Hospital Formulary Service Drug Information).

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.; February 2023.
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 June 10, 2024.
8. Micromedex Solutions [database online]. Truven Health Analytics, Greenwood Village, CO. Available at: <http://www.micromedexsolutions.com>. Accessed February 12, 2024.
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. 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.
11. 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.
12. 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.
13. 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.
14. Mirshahi A, Rohipoor 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.
15. Yazdani S, Hendi K, Pakravan M, et al. Intravitreal bevacizumab for neovascular glaucoma: a randomized controlled trial. *J Glaucoma*. 2009;18(8):632-637.
16. 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.
17. 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>.
18. 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>.

Medical Policy Manual **Approved Rev: Do Not Implement until 4/2/25**

19. 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>.
20. 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.
21. 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 February 12, 2024.
22. 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.
23. 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.
24. Oishi A. The evidence for the treatment of polypoidal choroidal vasculopathy. *Nippon Ganka Gakkai Zasshi*. 2015;119(11):781-786.
25. 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.
26. National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology: Colon Cancer Version 3.2023. https://www.nccn.org/professionals/physician_gls/pdf/colon.pdf. Accessed November 7, 2023.
27. National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology: Rectal Cancer Version 5.2023. https://www.nccn.org/professionals/physician_gls/pdf/rectal.pdf. Accessed November 7, 2023.
28. National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology: Anal Carcinoma Version 3.2023. https://www.nccn.org/professionals/physician_gls/pdf/anal.pdf. Accessed November 7, 2023.
29. Lexicomp [database online]. Hudson, OH: Lexi-Comp, Inc.; <https://online.lexi.com/lco/action/home> [available with subscription]. Accessed February 12, 2024.

EFFECTIVE DATE 4/2/2025

ID_CHS