



Medicare Advantage Medical Utilization Review Policy

Policy:	Oncology (Injectable) – Bevacizumab Products Utilization Management Medical Policy <ul style="list-style-type: none"> • Avastin® (bevacizumab intravenous infusion – Genentech) • Alimta® (bevacizumab-maly intravenous infusion – Amneal) • Mvasi™ (bevacizumab-awwb intravenous infusion – Amgen) • Vegzelma™ (bevacizumab-adcd intravenous infusion – Celltrion) • Zirabev™ (bevacizumab-bvzr intravenous infusion – Pfizer) 	
Date:	03/06/2025	
Applicable Lines of Business:	Medicare Advantage - Medical	
Applicable States:	NGS, J6: Wisconsin, Minnesota, Illinois NGS, JK: New York, Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont	
Applicable NCDs, LCDs, and/or LCAs	L33394, A52370	

SUMMARY OF EVIDENCE

Bevacizumab is a recombinant humanized monoclonal antibody that binds to and inhibits the biologic activity of human vascular endothelial growth factor (VEGF), a key mediator of angiogenesis.¹ Bevacizumab is indicated for the following uses:

- **Cervical cancer** in combination with paclitaxel and cisplatin OR paclitaxel and topotecan for persistent, recurrent, or metastatic disease.
 - **Colorectal cancer**, metastatic:
 - In combination with intravenous fluorouracil-based chemotherapy for first- or second-line treatment.
 - In combination with fluoropyrimidine-irinotecan-based or fluoropyrimidine-oxaliplatin-based chemotherapy for second-line treatment in patients who have progressed on a first-line bevacizumab-containing regimen.
- Limitation of use: Bevacizumab is not indicated for adjuvant treatment of colon cancer.
- **Glioblastoma**, for treatment of recurrent disease in adults.
 - **Hepatocellular carcinoma**, in combination with Tecentriq® (atezolizumab intravenous infusion) for the treatment of unresectable or metastatic disease in patients who have not received prior systemic therapy.
 - **Non-small cell lung cancer (NSCLC)**, for non-squamous disease, in combination with carboplatin and paclitaxel for first-line treatment of unresectable, locally advanced, recurrent, or metastatic disease.
 - **Ovarian (epithelial), fallopian tube, or primary peritoneal cancer:**
 - Recurrent disease that is platinum-resistant in combination with paclitaxel, Doxil® (doxorubicin liposome intravenous infusion), or topotecan, in patients who received no more than two prior chemotherapy regimens.
 - Recurrent disease that is platinum-sensitive in combination with carboplatin and paclitaxel or in combination with carboplatin and gemcitabine, followed by bevacizumab as a single agent.
 - In combination with carboplatin and paclitaxel, followed by bevacizumab as a single agent, for stage III or IV disease in patients following initial surgical resection.
 - **Renal cell carcinoma**, metastatic, in combination with interferon alfa.

ANALYSIS OF EVIDENCE

The information provided in the summary of evidence is supported by labeled indications, CMS-approved compendia, published clinical literature, clinical practice guidelines, and/or applicable National Coverage Determinations (NCDs), Local Coverage Determinations (LCDs), and Local Coverage Articles (LCAs). Refer to the Sources of Information section of this policy for additional information.

POLICY STATEMENT

Prior authorization is recommended for medical benefit coverage of bevacizumab in patients with conditions other than ophthalmic. The intent of this policy is to provide recommendations for uses other than ophthalmic conditions. Approval is recommended for those who meet the Criteria and Dosing for the listed indications. Extended approvals are allowed if the patient continues to meet the Criteria and Dosing. All approvals are provided for the duration noted below.

This policy incorporates Medicare coverage guidance as set forth in National Coverage Determinations (NCDs) and Local Coverage Determinations (LCDs), as well as in companion policy articles and other guidance applicable to the relevant service areas. These documents are cited in the Sources of Information section of this policy. In some cases, this guidance includes specific lists of HCPCS and ICD-10 codes to help inform the coverage determination process. The Articles that include specific lists for billing and coding purposes will be included in the Sources of Information section of this policy. However, to the extent that this policy cites such lists of HCPCS and ICD-10 codes, they should be used for reference purposes only. The presence of a specific HCPCS or ICD-10 code in a chart or companion article to an LCD is not by itself sufficient to approve coverage. Similarly, the absence of such a code does not necessarily mean that the applicable condition or diagnosis is excluded from coverage.

Note: Conditions for coverage outlined in this Medicare Advantage Medical Policy may be less restrictive than those found in applicable National Coverage Determinations, Local Coverage Determinations and/or Local Coverage Articles. Examples of situations where this clinical policy may be less restrictive include, but are not limited to, coverage of additional indications supported by CMS-approved compendia and the exclusion from this policy of additional coverage criteria requirements outlined in applicable National Coverage Determinations, Local Coverage Determinations and/or Local Coverage Articles.

Indications with a ^ below are referenced in both the corresponding Standard Medical Utilization Management Internal Policy AND applicable National Coverage Determinations (NCDs), Local Coverage Determinations (LCDs), and/or Local Coverage Articles (LCAs). Coverage criteria for these indications may be internally developed and/or referenced in applicable NCDs, LCDs, and/or LCAs. For these indications, internally developed coverage criteria is denoted throughout the policy in the following manner: 1) IC-L (internal criteria supported by the labeled indication), 2) IC-COMP (internal criteria supported by CMS-approved compendia), 3) IC-ISGP (internal criteria intended to interpret or supplement general provisions outlined in applicable NCDs, LCDs, and/or LCAs), or 4) IC-EC (internal criteria intended to expand coverage beyond the coverage outlined in applicable NCDs, LCDs, and/or LCAs). For these indications, coverage criteria that is NOT denoted with one of the above indicators is referenced in applicable NCDs, LCDs, and/or LCAs. Additional information supporting the rationale for determination of internal coverage criteria can be found via the Sources of Information section.

Indications with a ® below are referenced in the corresponding Standard Medical Utilization Management Internal Policy, but are NOT directly referenced in applicable National Coverage Determinations (NCDs), Local Coverage Determinations (LCDs), and/or Local Coverage Articles (LCAs). Coverage criteria for



these indications is internally developed. These indications and their respective coverage criteria represent expanded coverage beyond the coverage outlined in applicable NCDs, LCDs, and/or LCAs.

Indications with a # below are supported and referenced in applicable National Coverage Determinations (NCDs), Local Coverage Determinations (LCDs), and/or Local Coverage Articles (LCAs), but are NOT directly referenced in the corresponding Standard Medical Utilization Management Internal Policy. Coverage criteria for these indications is referenced in applicable NCDs, LCDs, and/or LCAs.

RECOMMENDED AUTHORIZATION CRITERIA

I. Coverage of Avastin, AlymSYS, Mvasi, Vegzelma, and Zirabey is recommended in patients who meet the following criteria:

FDA-Approved Indications

1. Cervical Cancer. ^

Criteria. Approve for 1 year if the patient meets the following criteria (A and B):

A) Patient is ≥ 18 years of age; ^{IC-COMP} AND

B) Patient meets ONE of the following (i or ii):

i. Patient has recurrent or metastatic cervical cancer; ^{IC-COMP} OR

ii. Patient has persistent, recurrent, or metastatic small cell neuroendocrine carcinoma of the cervix. ^{IC-COMP}

Dosing. Approve 15 mg per kg administered intravenously not more frequently than once every 3 weeks.

2. Colon, Rectal, or Appendiceal Cancer. ^

Criteria. Approve for 1 year if the patient meets the following criteria (A, B and C):

A) Patient is ≥ 18 years of age; ^{IC-COMP} AND

B) The patient has recurrent, advanced or metastatic colon, rectal, or appendiceal cancer; ^{IC-COMP} AND

C) The medication is used in combination with a chemotherapy regimen. ^{IC-COMP}

Note: Examples of chemotherapy are 5-fluorouracil with leucovorin, and may include one or both of oxaliplatin, irinotecan; capecitabine with or without oxaliplatin; irinotecan with or without oxaliplatin).

Dosing. Approve one of the following dosing regimens (A, B, or C):

A) 5 mg per kg administered intravenously not more frequently than once every 2 weeks; OR

B) 10 mg per kg administered intravenously not more frequently than once every 2 weeks; OR

C) 7.5 mg per kg administered intravenously not more frequently than once every 3 weeks.

3. Central Nervous System Tumors. ^

Note: For pediatric patients see Pediatric Central Nervous System Tumors.



Criteria. Approve for 1 year if the patient meets the following criteria (A, B and C):

A) Patient is ≥ 18 years of age; ^{IC-COMP} AND

B) Patient has tried at least one previous therapy; ^{IC-COMP} AND

Note: Examples are temozolomide capsules or injection, etoposide, carmustine, radiotherapy.

C) Patient has ONE of the following (i, ii, iii, iv, v, vi, vii, viii, or ix):

i. Anaplastic gliomas; ^{IC-COMP} OR

ii. Astrocytoma; ^{IC-COMP} OR

iii. Glioblastoma; ^{IC-COMP} OR

iv. Intracranial and spinal ependymoma (excluding subependymoma); ^{IC-COMP} OR

v. Meningiomas; ^{IC-COMP} OR

vi. Oligodendroglioma; ^{IC-COMP} OR

vii. Medulloblastoma; ^{IC-COMP} OR

viii. Neurofibromatosis type 2 vestibular schwannomas; ^{IC-COMP} OR

ix. Symptoms due to one of the following (a, b, or c):

a) Radiation necrosis; ^{IC-COMP} OR

b) Brain edema; ^{IC-COMP} OR

c) Mass effect. ^{IC-COMP}

Dosing. Approve 10 mg per kg administered intravenously not more frequently than once every 2 weeks.

4. Hepatocellular Carcinoma. ^

Criteria. Approve for 1 year if the patient meets the following criteria (A, B, and C):

A) Patient is ≥ 18 years of age; ^{IC-COMP} AND

B) Patient meets ONE of the following (i or ii):

i. Approve for 1 year (total) if the patient meets ALL of the following (a, b, and c):

a) Patient has undergone resection or ablation therapy; ^{IC-COMP} AND

b) Patient is at high-risk of recurrence; ^{IC-COMP} AND

Note: High-risk is defined as size > 5 cm, > 3 tumors, macrovascular invasion, microvessel invasion on histology, or grade 3/4 histology.

c) Medication is used as adjuvant therapy; ^{IC-COMP} OR

ii. Approve for 1 year if the patient meets BOTH of the following (a and b):

a) Medication is used for first-line therapy; ^{IC-COMP} AND

b) According to the prescriber, the patient has ONE of the following [(1) or (2)]:

(1) Liver-confined, unresectable disease and is deemed ineligible for transplant; ^{IC-COMP} OR

(2) Extrahepatic/metastatic disease and is deemed ineligible for resection, transplant, or locoregional therapy; ^{IC-COMP} AND

C) The medication is used in combination with Tecentriq (atezolizumab intravenous infusion). ^{IC-COMP}

Dosing. Approve 15 mg per kg administered intravenously not more frequently than once every 3 weeks.

5. Non-Small Cell Lung Cancer. ^

Criteria. Approve for 1 year if the patient meets the following criteria (A, B, and C):

A) Patient is ≥ 18 years of age; ^{IC-COMP} AND

B) Patient does not have a history of recent hemoptysis; ^{IC-COMP} AND

C) Patient has recurrent, advanced, or metastatic non-squamous non-small cell lung cancer (NSCLC) and meets ONE of the following criteria (i, ii, iii, iv, or v): ^{IC-COMP}

Note: Non-squamous NSCLC includes adenocarcinoma, large cell, or NSCLC not otherwise specified.

i. The NSCLC tumor is negative or unknown for actionable mutations and the patient meets ONE of the following criteria (a, b, or c): ^{IC-COMP}

Note: Examples of actionable mutations include sensitizing epidermal growth factor receptor (*EGFR*) mutation, anaplastic lymphoma kinase (*ALK*) fusions, *RET* rearrangement positive, *MET* exon 14 skipping, *NTRK* gene fusion positive, *BRAF V600E* mutation positive, *NRG1*, and ROS proto-oncogene 1 (*ROS1*) rearrangement positive. The tumor may be *KRAS G12C* mutation positive.

a. The medication is used as initial therapy in combination with other systemic therapies; ^{IC-COMP} OR

Note: Examples of systemic therapies are cisplatin, carboplatin, Tecentriq (atezolizumab intravenous infusion), pemetrexed, paclitaxel.

b. The medication is used as continuation maintenance therapy and meets ONE of the following [(1), (2), or (3)]: ^{IC-COMP}

(1) The medication is used as a single agent; ^{IC-COMP} OR

(2) The medication is used in combination with Tecentriq, if Tecentriq was used in combination with bevacizumab for first-line therapy; ^{IC-COMP} OR

(3) The medication is used in combination with pemetrexed, if pemetrexed was used in combination with bevacizumab for first-line therapy; ^{IC-COMP} OR

c. The medication is used as subsequent therapy in combination with other systemic therapies; ^{IC-COMP} OR

Note: Examples of systemic therapies are cisplatin, carboplatin, pemetrexed, paclitaxel.

ii. The tumor is positive for (*EGFR*) exon 19 deletion or exon 21 *L858R* mutations and the patient meets ONE of the following (a or b): ^{IC-COMP}

a. The medication is used as first-line or continuation maintenance therapy in combination with erlotinib; ^{IC-COMP} OR

b. The medication is used as subsequent therapy following prior targeted therapy; ^{IC-COMP} OR

Note: Examples of targeted therapy include Gilotrif (afatinib tablet), Tagrisso (osimertinib tablet), erlotinib, Iressa (gefitinib tablet), Vizimpro (dacomitinib tablet).

iii. Patient meets all of the following (a, b, and c):

a. The medication is used first-line; ^{IC-COMP} AND

b. The medication is used in combination with other systemic therapies; ^{IC-COMP} AND

Note: Examples include carboplatin plus paclitaxel or pemetrexed; cisplatin plus pemetrexed; and Tecentriq plus carboplatin and paclitaxel.

c. The tumor is positive for ONE of the following mutations [(1), (2), or (3)]:

(1) *EGFR* exon 20 mutation; ^{IC-COMP} OR

(2) *ERBB2* (HER2) mutation; ^{IC-COMP} OR

(3) *NRG1* gene fusion; ^{IC-COMP} OR

iv. Patient meets all of the following (a, b, and c):

a. The medication is used as first-line or subsequent therapy; ^{IC-COMP} AND

- b. The medication is used in combination with other systemic therapies; ^{IC-COMP} AND
Note: Examples include carboplatin plus paclitaxel or pemetrexed; cisplatin plus pemetrexed; and Tecentriq plus carboplatin and paclitaxel.
- c. The tumor is positive for ONE of the following mutations [(1), (2), or (3)]:
 - (1) *BRAF V600E* mutation; ^{IC-COMP} OR
 - (2) *NTRK1/2/3* gene fusion positive; ^{IC-COMP} OR
 - (3) *MET* exon 14 skipping mutation; ^{IC-COMP} OR
- v. Patient meets all of the following (a, b, c, and d):
 - a. The medication is used as subsequent therapy; ^{IC-COMP} AND
 - b. The medication is used in combination with other systemic therapies; ^{IC-COMP} AND
Note: Examples include carboplatin plus paclitaxel or pemetrexed; cisplatin plus pemetrexed; and Tecentriq plus carboplatin and paclitaxel.
 - c. The tumor is positive for ONE of the following mutations [(1), (2), (3), or (4)]
 - (1) *EGFR S768I, L861Q*, and/or *G719X* mutation; ^{IC-COMP} OR
 - (2) *ALK* rearrangement positive; ^{IC-COMP} OR
 - (3) *ROS1* rearrangement positive; ^{IC-COMP} OR
 - (4) *RET* rearrangement; ^{IC-COMP} AND
 - d. Patient has previously received targeted drug therapy for the specific mutation. ^{IC-COMP}
Note: Examples of targeted drug therapy include Gilotrif (afatinib tablets), Tagrisso (osimertinib tablets), erlotinib, Iressa (gefitinib tablets), Vizimpro (dacomitinib tablets), Xalkori (crizotinib capsules), Rozlytrek (entrectinib capsules), Zykadia (ceritinib tablets), Gavreto (pralsetinib capsules), Retevmo (selpercatinib capsules and tablets), and Cometriq (cabozantinib capsules and tablets).

Dosing. Approve 15 mg per kg administered intravenously not more frequently than once every 3 weeks.

6. Ovarian, Fallopian Tube, or Primary Peritoneal Cancer. ^

Criteria. Approve for 1 year if the patient is ≥ 18 years of age. ^{IC-COMP}

Dosing. Approve one of the following doses (A or B):

- A) Up to 15 mg per kg intravenous infusion not more frequently than once every 3 weeks; OR
- B) 10 mg per kg intravenous infusion not more frequently than once every 2 weeks.

7. Renal Cell Cancer. ^

Criteria. Approve for 1 year if the patient meets the following criteria (A and B):

- A) Patient is ≥ 18 years of age; ^{IC-COMP} AND
- B) Patient has relapsed, metastatic, or Stage IV renal cell cancer. ^{IC-COMP}

Dosing. Approve 10 mg per kg administered intravenously not more frequently than once every 2 weeks.¹

Other Uses with Supportive Evidence

8. Ampullary Adenocarcinoma. ^

Criteria. Approve for 1 year if the patient meets the following criteria (A, B, and C):

- A) Patient is ≥ 18 years of age; ^{IC-COMP} AND
- B) Patient has intestinal type disease; ^{IC-COMP} AND
- C) The medication is used in combination with chemotherapy. ^{IC-COMP}

Note: Examples of chemotherapy include FOLFOX (leucovorin, fluorouracil, oxaliplatin), FOLFIRI (leucovorin, fluorouracil, irinotecan), FOLFIRINOX (leucovorin, fluorouracil, oxaliplatin, irinotecan), and CapeOX (capecitabine, oxaliplatin).

Dosing. Approve 7.5 mg/kg administered intravenously not more frequently than once every 3 weeks.

9. Endometrial Carcinoma. ^

Criteria. Approve for 1 year if the patient meets the following criteria (A and B):

- A) Patient is ≥ 18 years of age; ^{IC-COMP} AND
- B) The patient has recurrent, advanced, or metastatic disease. ^{IC-COMP}

Dosing. Approve up to 15 mg/kg administered intravenously not more frequently than once every 3 weeks.

10. Mesothelioma. ^

Criteria. Approve for 1 year if the patient meets the following criteria (A, B, and C):

- A) Patient is ≥ 18 years of age; ^{IC-COMP} AND
- B) The patient has one of the following (i, ii, iii, or iv):
 - i. Pleural mesothelioma; ^{IC-COMP} OR
 - ii. Peritoneal mesothelioma; ^{IC-COMP} OR
 - iii. Pericardial mesothelioma; ^{IC-COMP} OR
 - iv. Tunica vaginalis testis mesothelioma; ^{IC-COMP} AND
- C) Patient meets ONE of the following (i or ii):
 - i. Bevacizumab will be used in combination with a chemotherapy regimen; ^{IC-COMP} OR
Note: Examples of chemotherapy are pemetrexed, cisplatin, carboplatin.
 - ii. Bevacizumab will be used in combination with Tecentriq (atezolizumab intravenous infusion). ^{IC-COMP}

Dosing. Approve 15 mg per kg administered intravenously not more frequently than once every 3 weeks.

11. Pediatric Central Nervous System Tumors. ^

Criteria. Approve for 1 year if the patient meets the following criteria (A, B and C):

- A) Patient is < 18 years of age; ^{IC-COMP} AND



B) Patient has ONE of the following (i or ii):

i. Patient has pediatric-type diffuse high-grade glioma; ^{IC-COMP} OR

Note: Examples include diffuse hemispheric glioma, diffuse pediatric-type high-grade glioma, infant-type hemispheric glioma, and diffuse midline glioma.

ii. Pediatric medulloblastoma; ^{IC-COMP} AND

C) Patient has recurrent or progressive disease. ^{IC-COMP}

Dosing. Approve 10 mg/kg administered intravenously not more frequently than once every 2 weeks.

12. Small Bowel Adenocarcinoma. ^

Criteria. Approve for 1 year if the patient meets the following criteria (A, B, and C):

A) Patient is ≥ 18 years of age; ^{IC-COMP} AND

B) Patient has advanced or metastatic disease; ^{IC-COMP} AND

C) The medication is used in combination with chemotherapy. ^{IC-COMP}

Note: Examples of chemotherapy are fluorouracil, leucovorin, and oxaliplatin (FOLFOX), capecitabine and oxaliplatin (CapeOX), fluorouracil, leucovorin, oxaliplatin, and irinotecan (FOLFIRINOX).

Dosing. Approve up to 7.5 mg/kg administered intravenously not more frequently than once every 2 weeks.

13. Soft Tissue Sarcoma. ^

Criteria. Approve for 1 year if the patient meets BOTH of the following criteria (A and B):

A) Patient is ≥ 18 years of age; ^{IC-COMP} AND

B) Patient has angiosarcoma or solitary fibrous tumor. ^{IC-COMP}

Dosing. Approve up to 15 mg/kg administered intravenously not more frequently than once every 2 weeks.

14. Vaginal Cancer. ^

Criteria. Approve for 1 year if the patient meets ALL of the following (A and B):

A) Patient is ≥ 18 years of age; ^{IC-COMP} AND

B) Patient has advanced, recurrent, or metastatic disease. ^{IC-COMP}

Dosing. Approve 15 mg/kg administered intravenously not more frequently than once every 3 weeks.

15. Vulvar Cancer. ^

Criteria. Approve for 1 year if the patient meets the following criteria (A and B):

A) Patient is ≥ 18 years of age; ^{IC-COMP} AND

B) Patient has advanced, recurrent, or metastatic disease. ^{IC-COMP}

Dosing. Approve 15 mg/kg administered intravenously not more frequently than once every 3 weeks.

II. Coverage of Avastin is recommended in patients who meet the following criteria:

Other Uses with Supportive Evidence

1. Neovascular or Vascular Ophthalmic Conditions. ^

Note: Examples of neovascular or vascular ophthalmic conditions include diabetic macular edema (includes patients with diabetic retinopathy and diabetic macular edema), macular edema following retinal vein occlusion, myopic choroidal neovascularization, neovascular (wet) age-related macular degeneration, other neovascular diseases of the eye (e.g., neovascular glaucoma, retinopathy of prematurity, sickle cell neovascularization, choroidal neovascular conditions).

Criteria. Approve for 3 years.

CONDITIONS NOT RECOMMENDED FOR APPROVAL

Coverage of bevacizumab products is not recommended in the following situations:

1. Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.

SOURCES OF INFORMATION

1. Avastin® intravenous infusion [prescribing information]. South San Francisco, CA: Genentech. September 2022.
2. The NCCN Cervical Cancer Clinical Practice Guidelines in Oncology (version 3.2025 – February 10, 2025). © 2025 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed on February 20, 2025.
3. The NCCN Colon Cancer Clinical Practice Guidelines in Oncology (version 1.2025 – February 7, 2025). © 2025 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed on February 20, 2025.
4. The NCCN Drugs & Biologics Compendium. © 2025 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed on February 18, 2025. Search term: bevacizumab.
5. The NCCN Rectal Cancer Clinical Practice Guidelines in Oncology (version 1.2025 – February 7, 2025). © 2025 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed on February 20, 2025.
6. The NCCN Central Nervous System Cancers Clinical Practice Guidelines in Oncology (version 4.2024 – January 21, 2025). © 2025 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed on February 19, 2025.
7. The NCCN Non-Small Cell Lung Cancer Clinical Practice Guidelines in Oncology (version 3.2025 – January 14, 2025). © 2025 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed on February 21, 2025.
8. The NCCN Ovarian Cancer Clinical Practice Guidelines in Oncology (version 3.2024 – July 15, 2024). © 2024 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed on February 19, 2025.
9. The NCCN Kidney Cancer Clinical Practice Guidelines in Oncology (version 3.2025 – January 9, 2025). © 2025 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed February 19, 2025.
10. The NCCN Mesothelioma: Pleural Clinical Practice Guidelines in Oncology (version 2.2025 – January 14, 2025). © 2025 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed February 19, 2025.
11. The NCCN Small Bowel Adenocarcinoma Clinical Practice Guidelines in Oncology (version 2.2025 – January 17, 2025). © 2025 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed February 19, 2025.
12. The NCCN Vulvar Cancer Clinical Practice Guidelines in Oncology (version 1.2025 – February 10, 2025). © 2025 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed February 20, 2025.
13. The NCCN Uterine Neoplasms Clinical Practice Guidelines in Oncology (version 2.2025 – January 31, 2025). © 2025 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed February 20, 2025.
14. The NCCN Soft Tissue Sarcoma Clinical Practice Guidelines in Oncology (version 4.2024 – November 21, 2024). © 2024 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed February 19, 2025.



15. The NCCN Hepatocellular Carcinoma Clinical Practice Guidelines in Oncology (version 4.2024 – January 10, 2025). © 2025 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed February 20, 2025.
16. The NCCN Mesothelioma: Peritoneal Clinical Practice Guidelines in Oncology (version 2.2025 – January 14, 2025). © 2025 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed February 19, 2025.
17. The NCCN Pediatric Central Nervous System Cancers Clinical Practice Guidelines in Oncology (version 2.2025 – January 17, 2025). © 2025 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed February 20, 2025.
18. The NCCN Ampullary Adenocarcinoma Clinical Practice Guidelines in Oncology (version 2.2025 – January 10, 2025). © 2025 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed February 19, 2025.
19. The NCCN Vaginal Cancer Clinical Practice Guidelines in Oncology (version 4.2025 – January 31, 2025). © 2025 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed February 20, 2025.
20. Vegzelma™ intravenous infusion [prescribing information]. Incheon, South Korea: Celltrion; September 2022.
21. Escudier B, Pluzanska A, Koralewski P, et al; AVOREN Trial investigators. Bevacizumab plus interferon alfa-2a for treatment of metastatic renal cell carcinoma: a randomised, double-blind phase III trial. *Lancet*. 2007;370:2103-2111.
22. Rini BI, Halabi S, Rosenberg JE, et al. Phase III trial of bevacizumab plus interferon alfa versus interferon alfa monotherapy in patients with metastatic renal cell carcinoma: final results of CALGB 90206. *J Clin Oncol*. 2010;28:2137-2143.
23. Ray-Coguard IL, Domont J, Tresch-Bruneel E, et al. Paclitaxel given once per week with or without bevacizumab in patients with advanced angiosarcoma: A randomized Phase II trial. *J Clin Oncol*. 2015;33:2797-2802.
24. Agulnik M, Yarber JL, Okuno SH, et al. An open-label, multicenter, phase II study of bevacizumab for the treatment of angiosarcoma and epithelioid hemangioendotheliomas. *Ann Oncol*. 2013;24:257-263.
25. Park MS, Patel SR, Ludwig JA, et al. Activity of temozolomide and bevacizumab in the treatment of locally advanced, recurrent, and metastatic hemangiopericytoma and malignant solitary fibrous tumor. *Cancer*. 2011;117:4939-4947.
26. Grill J, Massimino M, Boufett E, et al. Phase II, open-label, randomized, multicenter trial (HERBY) of bevacizumab in pediatric patients with newly diagnosed high-grade glioma. *J Clin Oncol*. 2018;36:951-958.
27. Gulhati P, Raghav K, Schroff RT, et al. Bevacizumab combined with capecitabine and oxaliplatin in patients with advanced adenocarcinoma of the small bowel or Ampulla of Vater: A single-center, open-label, phase 2 study. *Cancer*. 2017;123:1011-1017.
28. Raghav K, Liu S, Overman MJ, et al. Efficacy, safety, and biomarker analysis of combined PD-L1 (atezolizumab) and VEGF (bevacizumab) blockage in advanced malignant peritoneal mesothelioma. *Cancer Discov*. 2021;11:2738-2747.
29. Ceresoli GL, Zucali PA, Mencoboni M, et al. Phase II study of pemetrexed and carboplatin plus bevacizumab as first-line therapy in malignant pleural mesothelioma. *Br J Cancer*. 2013;109:552-558.
30. Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of bevacizumab in recurrent or persistent endometrial cancer: A Gynecologic Oncology Group Study. *J Clin Oncol*. 2011;29:2259-2265.
31. Rubinstein M, Dickinson S, Narayan P, et al. Bevacizumab in advanced endometrial cancer. *Gynecol Oncol*. 2021;161:720-726.
32. Centers for Medicare and Medicaid Services, National Government Services, Local Coverage Article: Billing and Coding: Bevacizumab and biosimilars – Related to LCD L33394 (A52370) [original date 10/01/2015; revision effective date 10/1/24]. Accessed on March 4, 2025.
33. Centers for Medicare and Medicaid Services, National Government Services, Inc, Local Coverage Determination (LCD): Drugs and Biologicals, Coverage of, for Label and Off-Label Uses (L33394) [original date 10/01/2015; revision effective date 8/1/24]. Accessed on March 4, 2025.

HISTORY

Type of Revision	Summary of Changes	Date
Policy created	New Medicare Advantage Medical Policy	11/14/18
Policy revision	Reviewed and revised original policy created 11/14/2018 in accordance with Local Coverage Article A52370	10/9/2019
Policy revision	Reviewed and revised original policy created 11/14/2018 in accordance with Local Coverage Article A52370	11/6/2019
Policy revision	Completion of 2019 monthly monitoring process in accordance with Local Coverage Determination L33394, Local Coverage Article A52370	11/29/2019
Policy revision	Non-clinical update to policy to add the statement “This policy incorporates Medicare coverage guidance as set forth in National Coverage Determinations (NCDs) and Local Coverage Determinations (LCDs), as well as in companion policy articles and other guidance	1/30/2020



	applicable to the relevant service areas. These documents are cited in the References section of this policy. In some cases, this guidance includes specific lists of HCPCS and ICD-10 codes to help inform the coverage determination process. The Articles that include specific lists for billing and coding purposes will be included in the Reference section of this policy. However, to the extent that this policy cites such lists of HCPCS and ICD-10 codes, they should be used for reference purposes only. The presence of a specific HCPCS or ICD-10 code in a chart or companion article to an LCD is not by itself sufficient to approve coverage. Similarly, the absence of such a code does <u>not</u> necessarily mean that the applicable condition or diagnosis is excluded from coverage.”	
Policy revision	<ul style="list-style-type: none"> • Non-Small Cell Lung Cancer. Added new criteria for bevacizumab use in EGFR mutation-positive NSCLC in combination with erlotinib in first-line setting. • Vulvar Cancer. Changed dosing wording to state “not more frequently than once every 2 weeks.” 	4/2/2020
Policy revision	<ul style="list-style-type: none"> • Added following note: <u>Note:</u> Conditions for coverage outlined in this Medicare Advantage Medical Policy may be less restrictive than those found in applicable National Coverage Determinations, Local Coverage Determinations and/or Local Coverage Articles. Examples of situations where this clinical policy may be less restrictive include, but are not limited to, coverage of additional indications supported by CMS-approved compendia and the exclusion from this policy of additional coverage criteria requirements outlined in applicable National Coverage Determinations, Local Coverage Determinations and/or Local Coverage Articles. • Added new FDA-approval indication for hepatocellular carcinoma. For Dosing, added “not more frequently” for interval durations in all conditions. 	07/01/2020
Policy revision	<ul style="list-style-type: none"> • Central Nervous System Tumors: Moved the subtypes of tumors from indication to criteria. Changed patient has tried “one other therapy” to “one previous therapy”. Added carmustine and etoposide to existing examples in Note. For Intracranial and spinal ependymoma subtype, deleted reference to “adults” and instead added “in patients ≥ 18 years of age”. • Non-Small Cell Lung Cancer: Changed “targetable” mutations to “actionable” mutations. For bevacizumab use in combination with erlotinib, deleted criteria requiring “as first-line therapy”. Modified criteria requiring use of at least one targeted therapy (if positive for actionable mutation), to state “patient has previously received targeted drug therapy for an actionable mutations”. Moved actionable mutations to list as examples in a new Note and added new actionable mutations <i>RET</i> rearrangement positive, <i>MET</i> exon 14 skipping, <i>NTRK</i> gene fusion positive, <i>BRAF V600E</i> mutation positive to the list. Deleted criteria referring to NSCLC tumor that is <i>BRAF V600E</i> mutation-positive and bevacizumab use as either first-line or subsequent therapy. This is not needed due to the modified criteria regarding targeted drug therapy for actionable mutation. For criteria referring to negative or unknown actionable mutations, moved examples to new Note and updated the list of actionable mutations as above. Previous criteria referring to bevacizumab use specifically in combination with “platinum therapies” was deleted and instead criteria was modified to say “with other systemic therapies”. A new Note has been added with examples of systemic therapies. For the other criteria referring to bevacizumab use as subsequent therapy, the criteria referring to “and is used as a single agent or in combination with other agents” was moved to a new Note. 	03/31/2021



	<ul style="list-style-type: none"> • Soft Tissue Sarcoma: Moved the subtypes angiosarcoma and solitary fibrous tumor from indication to criteria. Deleted reference to hemangiopericytoma since it is no longer in guidelines. 	
Policy revision	<ul style="list-style-type: none"> • Neovascular or Vascular Ophthalmic Conditions – updated to specify that only Avastin is covered for this indication 	12/15/2021
Policy revision	<p>Central Nervous System Tumors: Added “Symptoms due to radiation necrosis, poorly controlled vasogenic edema, or mass effect” as additional options for approval.</p> <p>Colon or Rectal Cancer: Added “recurrent” as additional descriptor in “Patient has recurrent, advanced, or metastatic colon or rectal cancer.” Removed requirement that bevacizumab is not used for adjuvant treatment of colon cancer.</p> <p>Non-Small Cell Lung Cancer (NSCLC): Added “recurrent” as additional descriptor in “Patient has recurrent, advanced, or metastatic non-squamous cell NSCLC. Added “exon 19 deletion or L858R” as additional descriptor to “NSCLC tumor is positive for epidermal growth factor receptor (EGFR) exon 19 deletion or L858R mutations.” Added tumor is positive for one of the following mutations: EGFR exon 20 mutation, KRAS G12C mutation, BRAF V600E, NTRK1/2/3 gene fusion, MET exon 14 skipping mutation, and RET rearrangement; and bevacizumab is used in combination other systemic therapies. Added Note with list of examples of systemic therapies.</p> <p>Breast Cancer: Removed breast cancer from Other Uses with Supportive Evidence due to National Comprehensive Cancer Network withdrawing its recommendations for bevacizumab for the treatment of breast cancer.</p> <p>Endometrial Cancer: Removed requirement that the patient has progressed on prior chemotherapy and added requirement that the patient has recurrent, advanced, or metastatic disease.</p> <p>Mesothelioma: Removed Malignant Pleural from the condition of approval. Added malignant peritoneal mesothelioma, pericardial mesothelioma, and tunica vaginalis testis mesothelioma as additional options for approval. Added “bevacizumab will be used in combination with Tecentriq” as an additional option for approval.</p>	03/18/2022
Policy revision	Product: Added Alymsys to the list of bevacizumab products.	6/30/2022
Policy revision	Product: Added Vegzelma to the list of bevacizumab products.	12/14/2022
Policy revision	<p>Central Nervous System Tumors: A requirement was added that the patient is ≥ 18 years of age. A Note was added for pediatric patients to refer to the Pediatric Central Nervous System Tumors criteria. Astrocytoma and oligodendroglioma were added as additional options for approval.</p> <p>Cervical Cancer: A requirement was added that the patient is ≥ 18 years of age. The option of approval was added that the patient has persistent, recurrent, or metastatic small cell neuroendocrine carcinoma of the cervix.</p> <p>Colon, Rectal, or Appendiceal Cancer: Appendiceal was added to the condition of approval. A requirement was added that the patient is ≥ 18 years of age. Appendiceal was added to the requirement that the patient has recurrent, advanced, or metastatic disease.</p> <p>Hepatocellular Carcinoma: A requirement was added that the patient is ≥ 18 years of age. A requirement was added that the patient has Child-Pugh Class A disease. Criteria were added that the patient has unresectable or metastatic hepatocellular carcinoma and according to the prescriber, the patient is not a surgical candidate as options for approval.</p> <p>Non-Small Cell Lung Cancer (NSCLC): A requirement was added that the patient is ≥ 18 years of age. A requirement was added that the patient does NOT have a history of recent hemoptysis. Adenocarcinoma, large cell or NSCLC not otherwise specified were moved to a Note. For NSCLC that is negative for actionable mutations,</p>	04/14/2023

	<p>continuation maintenance therapy was added as an option of approval. In combination with other systemic therapies was added to the subsequent therapy option for approval. To the epidermal growth factor receptor exon 19 deletion or exon 21 L858R mutations option for approval, exon 21 descriptor was added. As first-line or continuation maintenance therapy was added to the in combination with erlotinib option of approval. The medication is used as subsequent therapy following prior targeted therapy was added as an option of approval. The medication is used for first-line treatment was added as an option of approval. ERBB2 was added as an option of approval for first-line therapy. Requirements for first-line or subsequent therapy (based on genetic markers) were added. Separately, requirements for subsequent therapy (based on genetic markers) were added.</p> <p>Ovarian, Fallopian Tube, or Primary Peritoneal Cancer: A requirement was added that the patient is ≥ 18 years of age. The descriptor “up to” was added to the recommended dose.</p> <p>Renal Cell Carcinoma: A requirement was added that the patient is ≥ 18 years of age. The descriptor of “advanced” was removed from requirement that the patient has relapsed, metastatic, or stage IV disease.</p> <p>Ampullary Adenocarcinoma: This was added as a new condition of approval.</p> <p>Endometrial Carcinoma: A requirement was added that the patient is ≥ 18 years of age. The frequency of dosing was changed from once every 2 weeks to once every 3 weeks.</p> <p>Mesothelioma: A requirement was added that the patient is ≥ 18 years of age. Bevacizumab was removed if used as a single agent for maintenance therapy as an option of approval.</p> <p>Pediatric central Nervous System Tumors: This was added new condition of approval.</p> <p>Small Bowel Adenocarcinoma: A requirement was added that the patient is ≥ 18 years of age. A requirement was added that the patient has advanced or metastatic disease.</p> <p>Soft Tissue Sarcoma: A requirement was added that the patient is ≥ 18 years of age.</p> <p>Vulvar Cancer: Squamous cell carcinoma was removed from the condition of approval. A requirement was added that the patient is ≥ 18 years of age. A requirement was added that the patient has advanced, recurrent, or metastatic disease. The descriptor “up to” was removed from the recommended dosing regimen. The frequency of dosing was changed from once every 2 weeks to once every 3 weeks.</p>	
Policy revision	<p>Hepatocellular Carcinoma: Remove requirement that the patient has unresectable or metastatic hepatocellular carcinoma or according to the prescriber, the patient is not a surgical candidate. Added “or B” to requirement that the patient has Child-Pugh Class A or B disease. Added requirement that the patient has unresectable disease and is not a transplant candidate; OR has liver-confined disease, inoperable by performance status, comorbidity, or with minimal or uncertain extrahepatic disease; OR has metastatic disease or extensive liver tumor burden.</p> <p>Non-Small Cell Lung Cancer: Added <i>KRAS G12C</i> is not considered an actionable mutation (the tumor may be <i>KRAS G12C</i> mutation positive) to requirement that the patient is negative or unknown for actionable mutations. Removed <i>KRAS G12C</i> mutation from requirement that the tumor is positive for one of the following mutations for first-line use.</p> <p>Mesothelioma: Removed “malignant” from malignant pleural mesothelioma and malignant peritoneal mesothelioma.</p> <p>Pediatric Central Nervous System Tumors: Added pediatric medulloblastoma as an option for approval. Removed requirement that the medication is used for palliation.</p>	04/16/2024

Policy review	No criteria changes. Review based on NCD surveillance review.	01/07/2025
Policy revision	<p>Central Nervous System Tumors: Medulloblastoma and neurofibromatosis type 2 vestibular schwannomas added as new options for approval. Removed poorly control vasogenic from brain edema option for approval.</p> <p>Hepatocellular Carcinoma: Changed approval duration from 1 year to duration noted. Patient has Child-Pugh Class A or B disease and patient has not received prior systemic therapy were removed as requirements. Added new option for approval for 1 year (total), if patient has undergone resection or ablation therapy, patient is at high-risk of recurrence, and medication is used as adjuvant therapy. Added option for approval for 1 year if the medication is used for first-line therapy and the patient has liver-confined, unresectable disease and is deemed ineligible for transplant or the patient has extrahepatic/metastatic disease and is deemed ineligible for resection, transplant, or locoregional therapy. Removed liver-confined disease, inoperable by performance status, comorbidity, or with minimal or uncertain extrahepatic disease as an option for approval.</p> <p>Non-Small Cell Lung Cancer: Added <i>NRG1</i> and removed <i>KRAS G12C</i> is not considered an actionable mutation from the Note with examples of actionable mutations. Added <i>NRG1</i> as an option of approval for first-line use. Removed <i>RET</i> rearrangement as an option for approval for first-line or subsequent therapy. Added <i>RET</i> rearrangement as an option for approval for subsequent therapy and added additional targeted drug therapies to the Note.</p> <p>Vaginal Cancer: Added new condition of approval.</p> <p>Vulvar Cancer: Removed bevacizumab is used in combination with a chemotherapy regimen as a requirement.</p> <p>Formatting and notation updates.</p> <p>Revision based on commercial policy criteria changes.</p>	03/06/2025