

PRIOR AUTHORIZATION POLICY

- POLICY:** Oncology (Injectable) – Topotecan Products Prior Authorization Policy
- Hycamtin® (topotecan capsule – Novartis)
 - Topotecan injection for intravenous use (Hycamtin® – Novartis, generics)

REVIEW DATE: 12/16/2020

OVERVIEW

Topotecan injection, a topoisomerase inhibitor, is indicated for the treatment of patients with:

- **Cervical cancer**, stage IV-B, recurrent, or persistent disease which is not amenable to curative treatment, in combination with cisplatin.
- **Metastatic ovarian cancer**, after disease progression on or after initial or subsequent chemotherapy, as a single agent.
- **Small cell lung cancer (SCLC)**, platinum-sensitive disease who progressed at least 60 days after initiation of first-line chemotherapy, as a single agent.¹

Guidelines

Topotecan is included in a variety of National Comprehensive Cancer Network (NCCN) guidelines:

- The NCCN **bone cancer** (Version 1.2021 – November 20, 2020) clinical practice guidelines recommend topotecan in combination with cyclophosphamide, as second-line therapy for patients with relapsed/refractory, or metastatic osteosarcoma and Ewing sarcoma (both category 2A), and dedifferentiated chondrosarcoma, high-grade undifferentiated pleomorphic sarcoma, and mesenchymal chondrosarcoma (category 2B).^{2,7}
- The NCCN **central nervous system cancers** (Version 3.2020 – September 11, 2020) clinical practice guidelines recommend topotecan as a single agent for the treatment of brain metastases in patients with small cell lung cancer.^{2,8} In addition, the guidelines recommend intra-cerebrospinal fluid topotecan for the treatment of leptomeningeal metastases.
- The NCCN **cervical cancer** (Version 1.2021 – October 2, 2020) clinical practice guidelines recommend topotecan as first- or second-line therapy for patients with local/regional recurrence, stage IV-B disease, or distant metastases and as second-line therapy for patients with persistent, recurrent, or metastatic small cell neuroendocrine carcinoma of the cervix.^{2,5} Topotecan can be used in combination with paclitaxel with or without bevacizumab, in combination with cisplatin, or as a single agent for second-line therapy (category 2B recommendation).
- The NCCN **Merkel cell carcinoma** (Version 1.2020 – October 2, 2019) clinical practice guidelines recommend topotecan as a treatment option for patients with distant metastatic disease who have contraindications to checkpoint immunotherapy (Bavencio® [avelumab injection for intravenous use], Keytruda® [injection for intravenous use], and Opdivo® [injection for intravenous use]).^{2,9}
- The NCCN **ovarian cancer** (Version 1.2020 – March 11, 2020) clinical practice guidelines recommend topotecan, as a single agent or in combination with bevacizumab or Nexavar® (sorafenib tablet), for the treatment of recurrent or persistent platinum-resistant epithelial ovarian cancer, fallopian tube cancer, and peritoneal cancer.^{2,3} Treatment of clinical relapse is a category 2A recommendation and immediate treatment of biochemical relapse is category 2B recommendation.
- The NCCN **soft tissue sarcoma** (Version 1.2021 – October 30, 2020) clinical practice guidelines recommend topotecan as a single agent or in combination with cyclophosphamide for the treatment of non-pleomorphic rhabdomyosarcoma.^{2,10}

- The NCCN **SCLC** (Version 1.2021 – August 11, 2020) clinical practice guidelines recommend topotecan as a single agent for patients with a performance status of 0-2 and relapse within 6 months following complete or partial response, or stable disease with initial treatment; or for primary progressive disease.^{2,4}
- The NCCN **uterine cancer** (Version 1.2021 – October 20, 2020) clinical practice guidelines recommend topotecan as a single agent for the treatment of recurrent, metastatic, or high-risk endometrial carcinoma.^{2,6}

POLICY STATEMENT

Prior authorization is recommended for prescription benefit coverage of topotecan. All approvals are provided for the duration noted below.

Because of the specialized skills required for evaluation and diagnosis of patients treated with topotecan as well as the monitoring required for adverse events and long-term efficacy, approval requires topotecan to be prescribed by or in consultation with a physician who specializes in the condition being treated.

Automation: None.

RECOMMENDED AUTHORIZATION CRITERIA

Coverage of topotecan is recommended in those who meet the following criteria:

FDA-Approved Indications

- 1. Cervical Cancer.** Approve for 1 year if the patient meets the following criteria (A and B):
 - A) Patient meets one of the following (i or ii):
 - i. Patient has persistent or recurrent disease; OR
 - ii. Patient has metastatic disease; AND
 - B) Topotecan is prescribed by or in consultation with an oncologist.
- 2. Ovarian, Fallopian Tube, and Primary Peritoneal Cancer.** Approve for 1 year if the patient meets the following criteria (A, B, and C):
 - A) Patient has persistent or recurrent disease; AND
 - B) The cancer is platinum-resistant; AND
 - C) Topotecan is prescribed by or in consultation with an oncologist.
- 3. Small Cell Lung Cancer.** Approve for 1 year if the patient meets the following criteria (A, B, and C):
 - A) Patient meets one of the following (i or ii):
 - i. Patient has relapsed disease; OR
 - ii. Patient has primary progressive disease; AND
 - B) Topotecan will be used as a single agent; AND
 - C) Topotecan is prescribed by or in consultation with an oncologist.

Other Uses with Supportive Evidence

4. **Bone Cancer.** Approve for 1 year if the patient meets the following criteria (A, B, C, D, and E):
 - A) Patient has one of the following (i, ii, iii, iv, or v):
 - i. Osteosarcoma; OR
 - ii. Ewing sarcoma; OR
 - iii. Dedifferentiated chondrosarcoma; OR
 - iv. High-grade undifferentiated pleomorphic sarcoma; OR
 - v. Mesenchymal chondrosarcoma; AND
 - B) Patient has relapsed, refractory, or metastatic disease; AND
 - C) Topotecan is used second-line; AND
 - D) Topotecan is used in combination with cyclophosphamide; AND
 - E) Topotecan is prescribed by or in consultation with an oncologist.

5. **Brain Metastases.** Approve for 1 year if the patient meets the following criteria (A, B, and C):
 - A) Patient has small cell lung cancer; AND
 - B) Topotecan will be used as a single agent; AND
 - C) Topotecan is prescribed by or in consultation with an oncologist.

6. **Endometrial Carcinoma.** Approve for 1 year if the patient meets the following criteria (A, B, and C):
 - A) Patient has recurrent, metastatic, or high-risk disease; AND
 - B) Topotecan will be used as a single agent; AND
 - C) Topotecan is prescribed by or in consultation with an oncologist.

7. **Leptomeningeal and Spinal Metastases.** Approve for 1 year if the patient meets the following criteria (A and B):
 - A) Topotecan will be administered intraventricularly; AND
 - B) Topotecan is prescribed by or in consultation with an oncologist.

8. **Merkel Cell Carcinoma.** Approve for 1 year if the patient meets the following criteria (A, B, and C):
 - A) Patient has distant metastatic disease; AND
 - B) Patient has contraindications to checkpoint immunotherapy; AND
Note: Checkpoint immunotherapy includes Bavencio® (avelumab injection for intravenous use), Keytruda® (injection for intravenous use), and Opdivo® (injection for intravenous use).
 - C) Topotecan is prescribed by or in consultation with an oncologist.

9. **Rhabdomyosarcoma.** Approve for 1 year if the patient meets the following criteria (A and B):
 - A) Patient has non-pleomorphic rhabdomyosarcoma; AND
 - B) Topotecan is prescribed by or in consultation with an oncologist.

CONDITIONS NOT RECOMMENDED FOR APPROVAL

Coverage of topotecan 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.

REFERENCES

1. Hycamtin injection for intravenous use [prescribing information]. East Hanover, NJ: Novartis Pharmaceuticals; October 2019.
2. The NCCN Drugs & Biologics Compendium. © 2020 National Comprehensive Cancer Network, Inc. Available at: <http://www.nccn.org>. Accessed on December 10, 2020. Search term: topotecan.
3. The NCCN Ovarian Cancer Clinical Practice Guidelines (Version 1.2020 – March 11, 2020). © 2020 National Comprehensive Cancer Network, Inc. Available at: <http://www.nccn.org>. Accessed December 10, 2020.
4. The NCCN Small Cell Lung Cancer Clinical Practice Guidelines (Version 1.2021 – August 11, 2020). © 2020 National Comprehensive Cancer Network, Inc. Available at: <http://www.nccn.org>. Accessed December 11, 2020.
5. The NCCN Cervical Cancer Clinical Practice Guidelines (Version 1.2021 – October 2, 2020). © 2020 National Comprehensive Cancer Network, Inc. Available at: <http://www.nccn.org>. Accessed December 10, 2020.
6. The NCCN Uterine Cancer Clinical Practice Guidelines (Version 1.2021 – October 20, 2020). © 2020 National Comprehensive Cancer Network, Inc. Available at: <http://www.nccn.org>. Accessed December 11, 2020.
7. The NCCN Bone Cancer Clinical Practice Guidelines (Version 1.2021 – November 20, 2020). © 2020 National Comprehensive Cancer Network, Inc. Available at: <http://www.nccn.org>. Accessed December 11, 2020.
8. The NCCN Central Nervous System Cancers Clinical Practice Guidelines (Version 3.2020 – September 11, 2020). © 2020 National Comprehensive Cancer Network, Inc. Available at: <http://www.nccn.org>. Accessed December 10, 2020.
9. The NCCN Merkel Cell Carcinoma Clinical Practice Guidelines (Version 1.2020 – October 2, 2019). © 2019 National Comprehensive Cancer Network, Inc. Available at: <http://www.nccn.org>. Accessed November 25, 2019.
10. The NCCN Soft Tissue Sarcoma Clinical Practice Guidelines (Version 1.2021 – October 30, 2020). © 2020 National Comprehensive Cancer Network, Inc. Available at: <http://www.nccn.org>. Accessed December 11, 2020.