

## Clinical Policy: Topotecan (Hycamtin)

Reference Number: PA.CP.PHAR.64

Effective Date: 01/2018

Last Review Date: 04/2025

### Description

Topotecan (Hycamtin<sup>®</sup>) is a topoisomerase inhibitor.

### FDA Approved Indication(s)

Hycamtin capsules are indicated for the treatment of relapsed small cell lung cancer in patients with a prior complete or partial response and who are at least 45 days from the end of first-line chemotherapy.

Hycamtin for injection is indicated:

- As a single agent for the treatment of patients with metastatic ovarian cancer after disease progression on or after initial or subsequent chemotherapy
- As a single agent for the treatment of patients with small cell lung cancer with platinum-sensitive disease who progressed at least 60 days after initiation of first line chemotherapy
- In combination with cisplatin for the treatment of patients with Stage IV-B, recurrent, or persistent carcinoma of the cervix not amenable to curative treatment

### Policy/Criteria

*Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria*

It is the policy of health plans affiliated with PA Health & Wellness that topotecan and Hycamtin are **medically necessary** when the following criteria are met:

#### I. Initial Approval Criteria

##### A. Ovarian Cancer (must meet all):

1. Diagnosis of ovarian cancer (including serousepithelial carcinoma, mucinous neoplasms, clear cell carcinoma, endometrioid carcinoma, low-grade serous carcinoma, and carcinosarcoma), fallopian tube cancer, or primary peritoneal cancer;
2. Request is for topotecan for injection;
3. Prescribed by or in consultation with an oncologist;
4. Age  $\geq$  18 years;
5. Disease progression on or after initial or subsequent chemotherapy (*see appendix B*);
6. Prescribed in one of the following ways (a or b):
  - a. As a single agent;
  - b. In combination with bevacizumab or sorafenib (off-label);
7. For Hycamtin injection requests, member must use generic topotecan, unless contraindicated or clinically significant adverse effects are experienced;
8. Request meets one of the following (a or b):
  - a. Dose does not exceed  $1.5 \text{ mg/m}^2$  per day for 5 consecutive days every 21 days;

- b. Requested dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

**Approval duration: 6 months**

**B. Small Cell Lung Cancer (must meet all):**

1. Diagnosis of small cell lung cancer;
2. Prescribed by or in consultation with an oncologist;
3. Age  $\geq 18$  years;
4. Member has received prior chemotherapy (*see appendix B*);
5. For Hycamtin injection requests, member must use generic topotecan, unless contraindicated or clinically significant adverse effects are experienced;
6. Request meets one of the following (a or b):
  - a. Dose does not exceed the following:
    - i. Injection:  $1.5 \text{ mg/m}^2$  per day IV for 5 consecutive days every 21 days;
    - ii. Capsule:  $2.3 \text{ mg/m}^2$  per day orally for 5 consecutive days every 21 days;
  - b. Requested dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

**Approval duration: 6 months**

**C. Cervical Cancer (must meet all):**

1. Diagnosis of cervical cancer;
2. Request is for topotecan for injection;
3. Prescribed by or in consultation with an oncologist;
4. Age  $\geq 18$  years;
5. Prescribed in one of the following ways (a or b):
  - a. In combination with cisplatin or paclitaxel;
  - b. As a single agent as second-line or subsequent therapy;
6. For Hycamtin injection requests, member must use generic topotecan, unless contraindicated or clinically significant adverse effects are experienced;
7. Request meets one of the following (a or b):
  - a. Dose does not exceed  $0.75 \text{ mg/m}^2$  on days 1-3 every 21 days;
  - b. Requested dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

**Approval duration: 6 months**

**D. Additional NCCN Recommended Uses (off-label) (must meet all):**

1. Request meets one of the following (a, b or c):
  - a. Request is for topotecan for injection and one of the following diagnoses (i –viii):
    - i. Ewing sarcoma and prescribed as a second line therapy in combination with cyclophosphamide;
    - ii. Osteosarcoma and prescribed as a second line therapy in combination with cyclophosphamide;
    - iii. Leptomeningeal metastases and route of administration is intrathecal;
    - iv. Non-pleomorphic rhabdomyosarcoma and prescribed as a single agent or in combination with cyclophosphamide;

- v. Endometrial carcinoma as second-line or subsequent therapy, and prescribed as a single agent;
    - vi. Neuroblastoma as induction therapy in combination with cyclophosphamide;
    - vii. Pediatric medulloblastoma, and prescribed in combination with temozolomide;
    - viii. Vaginal cancer, and prescribed as a single agent or in combination with paclitaxel or cisplatin;
  - b. Diagnosis of Merkel cell carcinoma and has progressed on checkpoint immunotherapy (e.g., Bavencio<sup>®</sup>, Keytruda<sup>®</sup>, Opdivo<sup>®</sup>), unless contraindicated;
  - c. Meets conditions of a NCCN category 1, 2A, or 2B recommendation;
- 2. Prescribed by or in consultation with an oncologist;
- 3. Age  $\geq$  18 years (all indications except for pediatric medulloblastoma);
- 4. For Hycamtin injection requests, member must use generic topotecan, unless contraindicated or clinically significant adverse effects are experienced;
- 5. Dose is within FDA maximum limit for any FDA approved indication or is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

**Approval duration: 6 months**

**E. Other diagnoses/indications**

- 1. Refer to PA.CP.PMN.53.

**II. Continued Therapy**

**A. All Indications in Section I (must meet all):**

- 1. Currently receiving medication via PA Health & Wellness benefit, or member has previously met all initial approval criteria or the Continuity of Care policy (PA.PHARM.01) applies;
- 2. Member is responding positively to therapy;
- 3. For Hycamtin injection requests, member must use generic topotecan, unless contraindicated or clinically significant adverse effects are experienced;
- 4. If request is for a dose increase, request meets one of the following (a or b):
  - a. New dose does not exceed the following (i, ii, or iii):
    - i. Ovarian cancer: 1.5 mg/m<sup>2</sup>/day IV for 5 consecutive days every 21 days;
    - ii. Small cell lung cancer: 1.5 mg/m<sup>2</sup>/day IV *or* 2.3 mg/m<sup>2</sup>/day orally for 5 consecutive days repeated every 21 days;
    - iii. Cervical cancer: 0.75 mg/m<sup>2</sup> IV on days 1-3 every 21 days;
  - b. New dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

**Approval duration: 12 months**

**B. Other diagnoses/indications (must meet 1 or 2):**

- 1. Currently receiving medication via PA Health & Wellness benefit and documentation supports positive response to therapy or the Continuity of Care policy (PA.PHARM.01) applies; or
- 2. Refer to PA.CP.PMN.53.

### III. Appendices/General Information

#### *Appendix A: Abbreviation/Acronym Key*

FDA: Food and Drug Administration

NCCN: National Comprehensive Cancer Network

#### *Appendix B: Therapeutic Alternatives*

*This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may not be a formulary agent and may require prior authorization.*

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
<b>Examples* of therapies for ovarian cancer:</b> paclitaxel, carboplatin, cisplatin, doxorubicin, ifosfamide, bevacizumab	Varies	Varies
<b>Examples* of therapies for small cell lung cancer:</b> cisplatin, carboplatin, etoposide, atezolizumab, durvalumab, irinotecan	Varies	Varies
<b>Examples* of therapies for cervical cancer:</b> cisplatin, carboplatin, pembrolizumab, bevacizumab, nivolumab, paclitaxel, docetaxel, fluorouracil, gemcitabine, ifosfamide, irinotecan, mitomycin, pemetrexed, vinorelbine, tisotumab vedotin-tftv	Varies	Varies
<b>Examples* of therapies for Ewing sarcoma and osteosarcoma:</b> pembrolizumab, dasatinib, pazopanib, ivosidenib	Varies	Varies

*Therapeutic alternatives are listed as Brand name® (generic) when the drug is available by brand name only and generic (Brand name®) when the drug is available by both brand and generic.*

*\*Examples are not all-inclusive and may be used alone or in various combination regimens; refer to NCCN guidelines for additional detail*

#### *Appendix C: Contraindications/Boxed Warnings*

- Contraindication(s): History of severe hypersensitivity reactions to topotecan
- Boxed warning(s): Myelosuppression

### IV. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
Ovarian cancer	IV infusion dosage: 1.5 mg/m <sup>2</sup> IV over 30 minutes daily for 5 consecutive days, starting on Day 1 of a 21-day course	4 mg/dose if IV infusion, otherwise refer to regimen
Small cell lung cancer	IV infusion dosage: 1.5 mg/m <sup>2</sup> IV over 30 minutes daily for 5 consecutive days, starting on Day 1 of a 21-day course	4 mg/dose if IV infusion, otherwise refer to regimen

Indication	Dosing Regimen	Maximum Dose
	Oral dosage: 2.3 mg/m <sup>2</sup> /day orally once daily for 5 consecutive days repeated every 21 days	
Cervical cancer	IV infusion dosage: 0.75 mg/m <sup>2</sup> IV over 30 minutes on Days 1, 2, and 3 repeated every 21 days in combination with cisplatin 50 mg/m <sup>2</sup> on Day 1	4 mg/dose if IV infusion, otherwise refer to regimen

#### V. Product Availability

- Capsules: 0.25 mg, 1 mg
- Lyophilized powder in single use vial for injection: 4-mg (free base)

#### VI. References

1. Hycamtin for Injection Prescribing Information. East Hanover, NJ: Novartis; October 2019. Available at: [https://www.accessdata.fda.gov/drugsatfda\\_docs/label/2019/020671s024lbl.pdf](https://www.accessdata.fda.gov/drugsatfda_docs/label/2019/020671s024lbl.pdf). Accessed January 28, 2025.
2. Hycamtin capsules Prescribing Information. East Hanover, NJ: Novartis; September 2018. Available at: [https://www.accessdata.fda.gov/drugsatfda\\_docs/label/2018/020981s008lbl.pdf](https://www.accessdata.fda.gov/drugsatfda_docs/label/2018/020981s008lbl.pdf). Accessed January 28, 2025.
3. National Comprehensive Cancer Network Drugs and Biologics Compendium. Available at nccn.org. Accessed January 28, 2025.
4. National Comprehensive Cancer Network. Ovarian Cancer/Fallopian Tube Cancer/Primary Peritoneal Cancer Version 3.2024. Available at: [https://www.nccn.org/professionals/physician\\_gls/pdf/ovarian.pdf](https://www.nccn.org/professionals/physician_gls/pdf/ovarian.pdf). Accessed January 28, 2025.
5. National Comprehensive Cancer Network. Small Cell Lung Cancer Version 4.2025. Available at: [https://www.nccn.org/professionals/physician\\_gls/pdf/sccl.pdf](https://www.nccn.org/professionals/physician_gls/pdf/sccl.pdf). Accessed January 28, 2025.
6. National Comprehensive Cancer Network. Cervical Cancer Version 1.2025. Available at: [https://www.nccn.org/professionals/physician\\_gls/pdf/cervical.pdf](https://www.nccn.org/professionals/physician_gls/pdf/cervical.pdf). Accessed January 28, 2025.

#### Coding Implications –

Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

HCPCS Codes	Description
J8705	Topotecan, oral, 0.25 mg
J9351	Injection, topotecan, 0.1 mg

Reviews, Revisions, and Approvals	Date
Policy created	03/2018

<b>Reviews, Revisions, and Approvals</b>	<b>Date</b>
2Q 2019 annual review: capsules added as an option for Merkel cell carcinoma and intrathecal route notated for leptomeningeal metastasis per NCCN; references reviewed and updated.	04/2019
2Q 2020 annual review: references reviewed and updated.	04/2020
2Q 2021 annual review: no significant changes; preferences reviewed and updated.	04/2021
2Q 2022 annual review: revisions made per FDA label and/or NCCN recommendations – for ovarian cancer, expanded coverable diagnoses to include additional types of ovarian cancer as well as fallopian tube and primary peritoneal cancer and added requirement for use as a single agent or in combination with bevacizumab or sorafenib; for cervical cancer, added requirement for use in combination with cisplatin or paclitaxel, or as a single agent as second-line or subsequent therapy; for off-label uses, removed primary CNS lymphoma and added specific requirements for use in Ewing sarcoma, osteosarcoma, endometrial sarcoma, and rhabdomyosarcoma; references reviewed and updated.	04/2022
2Q 2023 annual review: updated off-label criteria for endometrial carcinoma to include “as second line or subsequent therapy” per NCCN compendium; references reviewed and updated.	04/2023
2Q 2024 annual review: for ovarian cancer, revised mucinous carcinoma to mucinous neoplasms per NCCN guideline revisions; for off-label NCCN recommendations, added neuroblastoma indication per NCCN, revised merkel cell carcinoma to include progression of disease on checkpoint immunotherapy per NCCN; for all indications, added redirection to generic topotecan if available; references reviewed and updated.	04/2024
2Q 2025 annual review: for off-label NCCN recommendations, added pediatric medulloblastoma and vaginal cancer criteria; references reviewed and updated.	04/2025