

Clinical Policy: Tisotumab Vedotin-tftv (Tivdak)

Reference Number: PA.CP.PHAR.561

Effective Date: 10/2022

Last Review Date: 11/2023

Description

Tisotumab vedotin-tftv (Tivdak™) is a tissue factor directed antibody and microtubule inhibitor conjugate.

FDA Approved Indication(s)

Tivdak is indicated for the treatment of adult patients with recurrent or metastatic cervical cancer with disease progression on or after chemotherapy.

This indication is approved under accelerated approval based on tumor response rate and durability of response. Continued approval for this indication may be contingent upon verification and description of clinical benefit in confirmatory trials.

Policy/Criteria

It is the policy of PA Health & Wellness® that Tivdak is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Cervical Cancer (must meet all):

1. Diagnosis of cervical cancer;
2. Disease is recurrent or metastatic;
3. Prescribed by or in consultation with an oncologist;
4. Age \geq 18 years;
5. Failure of single-agent or combination chemotherapy regimen (*see Appendix B for examples*);
6. Prescribed as single-agent therapy;
7. Documentation of member's current weight in kilograms;
8. Request meets one of the following (a or b):
 - a. Dose does not exceed 2 mg/kg (up to a maximum dose of 200 mg for members \geq 100 kg) every 3 weeks;
 - b. 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. Other diagnoses/indications

1. Refer to the off-label use policy if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): PA.CP.PMN.53.

II. Continued Therapy

A. Cervical Cancer (must meet all):

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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.LTSS.PHAR.01) applies;
2. Member is responding positively to therapy;
3. Prescribed as single-agent therapy;
4. Member is receiving at least 0.9 mg/kg every 3 weeks;
5. Documentation of member’s current weight in kilograms;
6. If request is for a dose increase, request meets one of the following (a or b):
 - a. New dose does not exceed 2 mg/kg (up to a maximum dose of 200 mg for patients ≥ 100 kg) every 3 weeks;
 - 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

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.LTSS.PHAR.01) applies.
Approval duration: Duration of request or 6 months (whichever is less); or
2. Refer to the off-label use policy if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): PA.CP.PMN.53

III. Diagnoses/Indications for which coverage is NOT authorized:

- A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policy – PA.CP.PMN.53 or evidence of coverage documents

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

FDA: Food and Drug Administration

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 for all relevant lines of business and may require prior authorization.

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
paclitaxel/cisplatin ± bevacizumab (Avastin [®] , Mvasi [®] , Zirabev [™])	<ul style="list-style-type: none"> • Paclitaxel: 135 mg/m² or 175 mg/m² IV on Day 1 • Cisplatin: 50 mg/m² IV on Day 1 or 2 • With or without bevacizumab: 15 mg/kg IV on day <p>Repeat every 3 weeks until disease progression or unacceptable toxicity</p>	Varies

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
paclitaxel/carboplatin ± bevacizumab (Avastin [®] , Mvasi [®] , Zirabev [™])	<ul style="list-style-type: none"> • Paclitaxel 135 mg/m² IV over 3 hours • Carboplatin target AUC 5 IV • With or without bevacizumab: 15 mg/kg IV on day Repeat every 3 weeks until disease progression or unacceptable toxicity	Varies
topotecan (Hycamtin [®]) /paclitaxel ± bevacizumab (Avastin [®] , Mvasi [®] , Zirabev [™])	<ul style="list-style-type: none"> • Paclitaxel: 175 mg/m² on day 1 • Topotecan: 0.75 mg/m² on days 1,2, and 3 • With or without bevacizumab: 15 mg/kg IV on day Repeat every 3 weeks until disease progression or unacceptable toxicity	Varies
paclitaxel/cisplatin	<ul style="list-style-type: none"> • Paclitaxel: 135 mg/m² over 24 hours • Cisplatin: 50 mg/m² on day 1 Repeat every 3 weeks for a maximum of 6 cycles in non-responders or until disease progression or unacceptable toxicity	Varies
paclitaxel/carboplatin	<ul style="list-style-type: none"> • Paclitaxel 135 mg/m² IV over 3 hours on day 1 until disease progression or unacceptable toxicity • Carboplatin: Target AUC 5 IV every 3 weeks for 6 to 9 cycles 	Varies
cisplatin/topotecan (Hycamtin [®])	<ul style="list-style-type: none"> • Cisplatin: 50 mg/m² IV on day 1 • Topotecan: 0.75 mg/m²/day IV for days 1,2, and 3 Repeat every 3 weeks for a maximum of 6 cycles in nonresponders or until disease progression or unacceptable toxicity	Varies
paclitaxel/topotecan (Hycamtin [®])	<ul style="list-style-type: none"> • Paclitaxel: 175 mg/m² on day 1 • Topotecan: 0.75 mg/m² on days 1,2, and 3 Repeat every 3 weeks until disease progression or unacceptable toxicity	Varies
Keytruda [®] (pembrolizumab) + paclitaxel/cisplatin ± bevacizumab (Avastin [®] ,	Varies	Varies

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
Mvasi [®] , Zirabev [™]) for PD-L1-positive tumors		
cisplatin	40 mg/m ² over 4 hours to radiation therapy on days 1,8,15,22,29 and 36	Varies
carboplatin	400 mg/m ² on day 1 every 28 days	Varies
paclitaxel	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.

Appendix C: Contraindications/Boxed Warnings

- Contraindication(s): None reported
- Boxed warning(s): Ocular toxicity

V. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
Cervical cancer	2 mg/kg IV over 30 minutes every 3 weeks until disease progression or unacceptable toxicity	2mg/kg, 200 mg for members ≥ 100kg

VI. Product Availability

Intravenous powder for solution, single-dose vial: 40 mg

VII. References

1. Tivdak Prescribing Information. Bothell, WA: Seagen Inc.; January 2022. Available at: <https://www.tivdakhcp.com>. Accessed August 9, 2023.
2. A Trial of Tisotumab Vedotin in Cervical Cancer. ClinicalTrials.gov Identifier: NCT03438396. Available at: <https://clinicaltrials.gov/ct2/show/NCT03438396>. Accessed October 18, 2021.
3. National Comprehensive Cancer Network Drugs and Biologics Compendium. Available at: http://www.nccn.org/professionals/drug_compendium. Accessed August 9, 2023.
4. National Comprehensive Cancer Network. Cervical Cancer Version 1.2022. Available at: https://www.nccn.org/professionals/physician_gls/pdf/cervical.pdf. Accessed August 9, 2023.
5. Kitagwa R, Katsumata N, Shibata T, et al. Paclitaxel Plus Carboplatin Versus Paclitaxel Plus Cisplatin in Metastatic or Recurrent Cervical Cancer: The Open-Label Randomized Phase III Trial. J Clin Oncol 2015; 33(19):2129-2135.
6. Tewari KS, Sill MW, Penson RT, et al. Bevacizumab for advanced cervical cancer: final overall survival and adverse event analysis of a randomised, controlled, open-label, phase 3 trial (Gynecologic Oncology Group 240). Lancet. 2017;390(10103):1654-1663.
7. Monk BJ, Sill MW, McMeekin DS, et al. Phase III trial of four cisplatin-containing doublet combinations in stage IVB, recurrent, or persistent cervical carcinoma: a Gynecologic Oncology Group study. J Clin Oncol. 2009;27(28):4649-4655.

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8. Redondo A, Colombo N, McCormack M, et al. Primary results from CECILIA, a global single-arm phase II study evaluating bevacizumab, carboplatin and paclitaxel for advanced cervical cancer. *Gynecol Oncol.* 2020;159(1):142-149. doi:10.1016/j.ygyno.2020.07.026.
9. Long HJ 3rd, Bundy BN, Grendys EC Jr, et al. Randomized phase III trial of cisplatin with or without topotecan in carcinoma of the uterine cervix: a Gynecologic Oncology Group Study. *J Clin Oncol.* 2005;23(21):4626-4633.
10. Rose PG, Ali S, Watkins E, et al. Long-term follow-up of a randomized trial comparing concurrent single agent cisplatin, cisplatin-based combination chemotherapy, or hydroxyurea during pelvic irradiation for locally advanced cervical cancer: a Gynecologic Oncology Group Study. *J Clin Oncol.* 2007;25(19):2804-2810. doi:10.1200/JCO.2006.09.4532.
11. Weiss GR, Green S, Hannigan EV, et al. A phase II trial of carboplatin for recurrent or metastatic squamous carcinoma of the uterine cervix: a Southwest Oncology Group study. *Gynecol Oncol.* 1990;39(3):332-336.

Coding Implications

HCPCS Codes	Description
J9273	Injection, tisotumab vedotin-tftv, 1 mg

Reviews, Revisions, and Approvals	Date	P&T Approval Date
Policy created	10/2022	
4Q 2023 annual review: no significant changes; references reviewed and updated.	10/2023	