PRIOR AUTHORIZATION POLICY

POLICY: Oncology (Injectable) – Thiotepa Products Prior Authorization Policy
- Tepadina® (thiotepa intravenous, intracavitary, or intravesical injection – Adienne and Amneal, generic)

REVIEW DATE: 12/11/2024

OVERVIEW

Thiotepa is an alkylating agent indicated for:
- **Beta-thalassemia**, to reduce the risk of graft rejection when used in conjunction with high-dose busulfan and cyclophosphamide as a preparative regimen for allogeneic hematopoietic progenitor (stem) cell transplantation for pediatric patients with class 3 disease.[1]
- **Bladder cancer**, for superficial papillary carcinoma of the urinary bladder.[1,2]
- **Breast adenocarcinoma**.[1,2]
- **Neoplastic diseases of various serosal cavities**, for controlling intracavitary effusions secondary to diffuse or localized disease.[1,2]
- **Ovarian adenocarcinoma**.[1,2]

Guidelines

Thiotepa is addressed in National Comprehensive Cancer Network (NCCN) guidelines:
- **Bladder cancer:** Guidelines (version 5.2024 – October 28, 2024) state that intravesical thiotepa does not appear to be effective. NCCN recommends gemcitabine and mitomycin for intravesical chemotherapy.[5]
- **Breast cancer:** Guidelines (version 4.2024 – July 3, 2024) do not provide any recommendations on the use of thiotepa in the management of breast cancer.[3]
- **Central nervous system (CNS) cancers:** Guidelines (version 3.2024 – September 30, 2024) recommend thiotepa, in combination with methotrexate, cytarabine, and rituximab for induction therapy, in combination with other chemotherapy agents for relapsed or refractory disease, or in combination with carmustine or busulfan and cyclophosphamide, with stem cell rescue for consolidation therapy of primary CNS lymphoma.[6] NCCN recommends intra-cerebrospinal fluid thiotepa for the treatment of leptomeningeal metastases.
- **Hematopoietic Cell Transplantation:** Guidelines (version 2.2024 – August 30, 2024) recommend thiotepa as a component of a variety of conditioning regimens for autologous, allogeneic, and umbilical cord blood transplants.[7,8]
- **Neuroblastoma:** Guidelines (version 2.2024 – July 2, 2024) recommend thiotepa as standard consolidation therapy in combination with cyclophosphamide, carboplatin, etoposide, and melphalan with tandem autologous stem cell rescue and radiation therapy following induction therapy for high risk disease.[7,9]
- **Ovarian cancer:** Guidelines (version 3.2024 – July 15, 2024) do not provide any recommendations on the use of thiotepa in the management of ovarian cancer.[4]

POLICY STATEMENT

Prior Authorization is recommended for prescription benefit coverage of thiotepa. All approvals are provided for the duration noted below. In cases where the approval is authorized in months, 1 month is equal to 30 days. Because of the specialized skills required for evaluation and diagnosis of patients treated with thiotepa as well as the monitoring required for adverse events and long-term efficacy, approval

requires thiotepa to be prescribed by or in consultation with a physician who specializes in the condition being treated.

Automation: None.

RECOMMENDED AUTHORIZATION CRITERIA

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

FDA-Approved Indications

1. **Beta-Thalassemia.** Approve for 1 month if the patient meets ALL of the following (A, B, C, D, and E):
   - **A)** Patient is ≤ 18 years of age; AND
   - **B)** Patient has class 3 beta-thalassemia; AND
   - **C)** Thiotepa will be used prior to allogeneic hematopoietic stem cell transplantation; AND
   - **D)** Thiotepa will be used in combination with high-dose busulfan and cyclophosphamide; AND
   - **E)** The medication is prescribed by or in consultation with an oncologist.

2. **Bladder Cancer.** Approve for 1 month if the patient meets ALL of the following (A, B, and C):
   - **A)** Patient is ≥ 18 years of age; AND
   - **B)** Patient has superficial papillary carcinoma of the urinary bladder; AND
   - **C)** The medication is prescribed by or in consultation with an oncologist.

3. **Breast Cancer.** Approve for 6 months if the patient meets BOTH of the following (A and B):
   - **A)** The patient is ≥ 18 years of age; AND
   - **B)** The medication is prescribed by or in consultation with an oncologist.

4. **Malignant Effusions.** Approve for 6 months if the patient meets ALL of the following (A, B, and C):
   - **A)** Patient is ≥ 18 years of age; AND
   - **B)** Patient has intracavitary effusions secondary to diffuse or localized neoplastic disease; AND
   - **C)** The medication is prescribed by or in consultation with an oncologist.

5. **Ovarian Cancer.** Approve for 6 months if the patient meets BOTH of the following (A and B):
   - **A)** Patient is ≥ 18 years of age; AND
   - **B)** The medication is prescribed by or in consultation with an oncologist.

Other Uses with Supportive Evidence

6. **Hematopoietic Cell Transplanation.** Approve for 1 month if the patient meets ALL of the following (A and B):
   - **A)** Patient is undergoing ONE of the following (i, ii, or iii):
     - **i.** Autologous transplant; OR
     - **ii.** Allogeneic transplant; OR
     - **iii.** Umbilical cord blood transplant; AND
   - **B)** The medication is prescribed by or in consultation with an oncologist.

7. **Leptomeningeal Metastases.** Approve for 6 months if the patient meets BOTH of the following (A and B):
   - **A)** Patient is ≥ 18 years of age; AND

B) The medication is prescribed by or in consultation with an oncologist.

8. Neuroblastoma. Approve for 1 month if the patient meets ALL of the following (A, B, C, and D):
A) Thiotepa is used for consolidation therapy; AND
B) Patient has high-risk disease; AND
C) Patient will undergo tandem autologous stem cell rescue; AND
D) The medication is prescribed by or in consultation with an oncologist.

9. Primary Central Nervous System Lymphoma. Approve for 3 months if the patient meets ALL of the following (A, B, and C):
A) Patient is ≥ 18 years of age; AND
B) If thiotepa is given as conditioning for hematopoietic stem cell transplantation, it is given prior to transplantation; AND
C) The medication is prescribed by or in consultation with an oncologist.

CONDITIONS NOT RECOMMENDED FOR APPROVAL

Coverage of thiotepa 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. Tepadina® injection [prescribing information]. Lugano, Switzerland and Bridgewater, NJ: Adienne and Amneal; March 2020.
2. Thiotepa for injection [prescribing information]. Schaumberg, IL: Sagent; April 2018.
3. The NCCN Breast Cancer Clinical Practice Guidelines in Oncology (version 4.2024 – July 3, 2024). © 2024 National Comprehensive Cancer Network. Available at: http://www.nccn.org. Accessed December 5, 2024.
4. 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 December 5, 2024.
5. The NCCN Bladder Cancer Clinical Practice Guidelines in Oncology (version 5.2024 – October 28, 2024). © 2024 National Comprehensive Cancer Network. Available at: http://www.nccn.org. Accessed on December 5, 2024.
6. The NCCN Central Nervous System Cancers Clinical Practice Guidelines in Oncology (version 3.2024 – September 30, 2024). © 2024 National Comprehensive Cancer Network. Available at: http://www.nccn.org. Accessed on December 5, 2024.
7. The NCCN Drugs and Biologics Compendium. © 2024 National Comprehensive Cancer Network. Available at: http://www.nccn.org. Accessed on December 5, 2024. Search term: thiotepa.
8. The NCCN Hematopoietic Cell Transplantation (HCT) Clinical Practice Guidelines in Oncology (version 2.2024 – August 30, 2024). © 2024 National Comprehensive Cancer Network. Available at: http://www.nccn.org. Accessed on December 5, 2024.
9. The NCCN Neuroblastoma Clinical Practice Guidelines in Oncology (version 2.2024 – July 2, 2024). © 2024 National Comprehensive Cancer Network. Available at: http://www.nccn.org. Accessed on December 5, 2024.