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The Department of Vermont Health Access Clinical Criteria

Subject: Photodynamic Therapy

Last Review: February 22, 2024*

Past Revisions: November 17, 2022, January 8, 2021, June 14, 2017, May 10, 2016, and May 4, 2015

***Please note: Most current content changes will be highlighted in yellow.**

Description of Service or Procedure

Photodynamic therapy (PDT), also known as photoradiation therapy, phototherapy, or photochemotherapy, is a treatment that utilizes a medication, termed a photosensitizer or photosensitizing agent, and a specific wavelength of light, to destroy cancer cells. The interaction between the specific penetrating wavelengths of light and their accompanying photosensitizers kills targeted cells and allows medical professionals to treat specific areas of the body.

The first step of PDT therapy involves injecting a photosensitizing agent into the bloodstream or topical application to the epidermis to allow absorption into the body. Within 24-72 hours post administration, the majority of the photosensitizing agent has left the normal cells but remains in the cancer cells. When cells that have absorbed photosensitizers are exposed to a specific wavelength of light, the photosensitizer produces a form of oxygen, called an oxygen radical, that kills them. Photodynamic therapy may also damage the vascular supply to the tumor, which prevents it from receiving blood to continue growing. Lastly, PDT may trigger the immune system to attack tumor cells, even in other areas of the body.

Light wave penetration is limited to approximately one centimeter below the tissue surface, therefore PDT is typically used on cancer cells on or just below the epidermis or lining of internal organs and cavities. PDT effectiveness is reduced when treating large tumors due to limited light penetration, and generally is not used when cancer cells have metastasized.

Disclaimer

Coverage is limited to that outlined in Medicaid Rule or Health Care Administrative Rules that pertain to the member's aid category. Prior Authorization (PA) is only valid if the member is eligible for the applicable item or service on the date of service.



Medicaid Rule

Medicaid and Health Care Administrative Rules can be found at

<https://humanservices.vermont.gov/rules-policies/health-care-rules/health-care-administrative-rules-hcar/adopted-rules>

- 7102.2 Prior Authorization Determination
- 4.101 Medical Necessity for Covered Services
- 4.104 Medicaid Non-Covered Services
- 4.106 Early and Periodic Screening, Diagnostic and Treatment (EPSDT) Services

Coverage Position

Photodynamic therapy may be covered for members:

- When photodynamic therapy is prescribed by a licensed medical provider enrolled in the Vermont Medicaid program, operating within their scope of practice as described on the Vermont Office of Professional Regulation's website*, Statute, or rule who is knowledgeable in the use of photodynamic therapy and who provides medical care to the member AND
- When the clinical criteria below are met.

* Vermont's Office of Professional Regulation's website: <https://sos.vermont.gov/opr/>

Coverage Criteria

Photodynamic therapy may be covered for members for the following indications:

1. Palliative treatment of obstructing esophageal cancer
2. Palliative treatment of local recurrent esophageal cancer in patients who are not candidates for salvage esophagectomy
3. Barrett's esophagus with high-grade dysplasia in esophagus cells
4. Precancerous lesions in patients with Barrett esophagus
5. Palliative treatment of obstructing endobronchial lesions
 - a) Completely obstructing endobronchial non-small cell lung cancer when the patient is ineligible for surgery and radiation therapy; or
 - b) Early microinvasive endobronchial non-small cell lung cancer, when the patient is ineligible for surgery and radiotherapy; or
 - c) Partially obstructing endobronchial non-small cell lung cancer
6. Treatment of early stage non-small-cell lung cancer in patients who are ineligible for surgery and radiotherapy
7. Bile duct cancer
8. Nonresectable cholangiocarcinoma as an adjunct to stenting
9. Skin cancer:
 - a) Superficial or nodular basal cell carcinoma lesions in adults when the risk of recurrence is low; or
 - b) Refractory actinic keratosis; or
 - c) Advanced cutaneous T-cell lymphoma; or
 - d) Bowen's disease and nevoid basal cell carcinoma syndrome (NBCCS)

10. Malignant tumors- oral cavity, pharynx, the nasal cavity, and the larynx
 - a) Early oral squamous cell carcinoma
11. Ocular photodynamic therapy may be appropriate, as monotherapy, as a treatment of choroidal neovascularization that is visually threatening or visually impairing due to **any one** of the following is covered only when used in conjunction with verteporfin
 - a) age-related macular degeneration (AMD); or
 - b) pathologic myopia; or
 - c) presumed ocular histoplasmosis; or
 - d) chronic central serous chorioretinopathy; or
 - e) choroidal hemangioma
11. Oral leukoplakia, oral lichen planus

Early and Periodic Screening, Diagnostic and Treatment (EPSDT): Vermont Medicaid will provide comprehensive services and furnish all Medicaid coverable, appropriate, and medically necessary services needed to correct and ameliorate health conditions for Medicaid members under age 21.

Please note, Vermont Medicaid Clinical Criteria is reviewed based on available literature, evidence-based guidelines/standards, Medicaid rule and policy, and Medicare coverage determinations that may be appropriate to incorporate when applicable.

Type of service or procedure not covered (this list may not be all inclusive)

Photodynamic therapy will not be covered for:

- Gastric cancer
- Squamous cell carcinoma of the head and neck
- Prostate cancer
- Colon cancer
- Breast cancer
- Brain tumors (e.g. glioma)
- Non-cancer indications
- Cosmetic in nature
- Gynecologic tumors

Coding guidelines

Please see the Medicaid Portal at <http://vtmedicaid.com/#/feeSchedule> for fee schedules, code coverage, and applicable requirements.

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