Medical Policy
Dermatologic Applications of Photodynamic Therapy

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Policy Number: 463
BCBSA Reference Number: 2.01.44
NCD/LCD: N/A

Related Policies
- Oncologic Applications of Photodynamic Therapy, Including Barrett’s Esophagus, #454
- Photodynamic Therapy for Choroidal Neovascularization, #599

Policy
Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity
Medicare HMO BlueSM and Medicare PPO BlueSM Members

Photodynamic therapy may be considered MEDICALLY NECESSARY as a treatment of:

- Nonhyperkeratotic actinic keratoses of the face and scalp.
- Low-risk (e.g., superficial and nodular) basal cell skin cancer only when surgery and radiation are contraindicated.
- Bowen disease (squamous cell carcinoma in situ) only when surgery and radiation are contraindicated.

Photodynamic therapy is considered INVESTIGATIONAL for other dermatologic applications, including, but not limited to, acne vulgaris, high-risk basal cell carcinomas, hidradenitis suppurativa and mycoses.

Photodynamic therapy as a technique of skin rejuvenation, hair removal, or other cosmetic indications is considered NOT MEDICALLY NECESSARY.

Prior Authorization Information

Inpatient
- For services described in this policy, precertification/preauthorization IS REQUIRED if the procedure is performed inpatient.

Outpatient
- For services described in this policy, see below for situations where prior authorization might be required if the procedure is performed outpatient.
Outpatient

<table>
<thead>
<tr>
<th>Plan Type</th>
<th>Prior Authorization</th>
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<tbody>
<tr>
<td>Commercial Managed Care (HMO and POS)</td>
<td>not required</td>
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<tr>
<td>Commercial PPO and Indemnity</td>
<td>not required</td>
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<tr>
<td>Medicare HMO BlueSM</td>
<td>not required</td>
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<tr>
<td>Medicare PPO BlueSM</td>
<td>not required</td>
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</tbody>
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**CPT Codes / HCPCS Codes / ICD Codes**

_Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member’s contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member._

_Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable._

_The following codes are included below for informational purposes only; this is not an all-inclusive list._

_The above medical necessity criteria MUST be met for the following codes to be covered for Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:_

**CPT Codes**

<table>
<thead>
<tr>
<th>CPT codes:</th>
<th>Code Description</th>
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<tbody>
<tr>
<td>96567</td>
<td>Photodynamic therapy by external application of light to destroy premalignant lesions of the skin and adjacent mucosa with application and illumination/activation of photosensitive drug(s), per day</td>
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<tr>
<td>96573</td>
<td>Photodynamic therapy by external application of light to destroy premalignant lesions of the skin and adjacent mucosa with application and illumination/activation of photosensitizing drug(s) provided by a physician or other qualified health care professional, per day</td>
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<tr>
<td>96574</td>
<td>Debridement of premalignant hyperkeratotic lesion(s) (ie, targeted curettage, abrasion) followed with photodynamic therapy by external application of light to destroy premalignant lesions of the skin and adjacent mucosa with application and illumination/activation of photosensitizing drug(s) provided by a physician or other qualified health care professional, per day</td>
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**HCPCS Codes**

<table>
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<tr>
<th>HCPCS codes:</th>
<th>Code Description</th>
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<tbody>
<tr>
<td>J7308</td>
<td>Aminolevulinic hydrochloric acid for topical administration, 20%, single unit dosage form (354 mg)</td>
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<tr>
<td>J7309</td>
<td>Methyl aminolevulinate (MAL) for topical administration, 16.8%, 1 gram</td>
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<tr>
<td>J7345</td>
<td>Aminolevulinic acid HCl for topical administration, 10%, gel, 10 mg</td>
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_The following ICD Diagnosis Codes are considered medically necessary when submitted with the CPT and HCPCS codes above if medical necessity criteria are met:_

**ICD-10 Diagnosis Codes**

<table>
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<th>ICD-10-CM Diagnosis codes:</th>
<th>Code Description</th>
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PDT refers to light activation of a photosensitizer to generate highly reactive intermediaries, which ultimately cause tissue injury and necrosis. Two common photosensitizing agents are 5-aminolevulinic acid (5-ALA) and its methyl ester, methyl aminolevulinate (MAL). When applied topically, these agents pass readily through abnormal keratin overlying the lesion and accumulate preferentially in dysplastic cells. 5-ALA and MAL are metabolized by underlying cells to photosensitizing concentrations of...
porphyrins. Subsequent exposure to photoactivation (maximum absorption at 404 to 420 nm and 635 nm, respectively) generates reactive oxygen species that are cytotoxic, ultimately destroying the lesion. PDT can cause erythema, burning, and pain. Healing occurs within 10 to 14 days, with generally acceptable cosmetic results. PDT with topical ALA has been investigated primarily as a treatment of actinic keratoses. It has also been investigated as a treatment of other superficial dermatologic lesions, such as BD, acne vulgaris, mycoses, hidradenitis suppurativa, and superficial and nodular BCC. Potential cosmetic indications include skin rejuvenation and hair removal.

Actinic keratoses are rough, scaly, or warty premalignant growths on sun-exposed skin that are very common in older people with fair complexions, with a prevalence of greater than 80% in fair-skinned people older than 60 years of age. In some cases, actinic keratosis may progress to squamous cell carcinoma (SCC). Available treatments for actinic keratoses can generally be divided into surgical and nonsurgical methods. Surgical treatments used to treat 1 or a small number of dispersed individual lesions include excision, curettage (either alone or combined with electrodessication), and laser surgery. Nonsurgical treatments include cryotherapy, topical chemotherapy (5-FU or masoprocol creams), chemexfoliation (also known as chemical peels), and dermabrasion. Topical treatments are generally used in patients with multiple lesions and the involvement of extensive areas of skin. Under some circumstances, combinations of different treatment methods may be used.

Nonmelanoma skin cancers are the most common malignancies in the white population. BCC is most often found in light-skinned people and is the most common of the cutaneous malignancies. Although BCC tumors rarely metastasize, they can be locally invasive if left untreated, leading to significant local destruction and disfigurement. The most prevalent forms of BCC are nodular BCC and superficial BCC.

BD is an SCC in situ with the potential for significant lateral spread. Metastases are rare, with less than 5% of cases advancing to invasive SCC. Lesions may appear on sun-exposed or covered skin. Excision surgery is the preferred treatment for smaller nonmelanoma skin lesions and those not in problematic areas, such as the face and digits. Other established treatments include topical 5-FU, imiquimod, and cryotherapy. Poor cosmesis resulting from surgical procedures and skin irritation induced by topical agents can be significant problems.

Summary
Photodynamic therapy (PDT) refers to light activation of a photosensitizer to generate highly reactive intermediaries, which ultimately cause tissue injury and necrosis. Photosensitizing agents, administered orally or intravenously, have been used in nondermatologic applications and are being proposed for use with dermatologic conditions such as actinic keratoses and nonmelanoma skin cancers.

There is evidence from randomized controlled trials (RCTs) that PDT is an effective treatment for selected patients with actinic keratoses of the face and scalp compared with placebo or cryotherapy. The evidence to date suggests that PDT is less effective than surgery and radiotherapy and of similar efficacy to cryotherapy for treating low-risk basal cell carcinoma (BCC) (eg, superficial and nodular). Moreover, the evidence suggests that cosmetic outcomes are better after PDT compared with surgery and cryotherapy.

Evidence from RCTs suggests that, in patients with Bowen disease (BD), PDT has similar or higher efficacy compared with cryotherapy and 5-fluorouracil (5-FU), and better cosmetic outcomes. Thus, PDT may be considered medically necessary for treating nonhypertonic actinic keratoses of the face and scalp and for treating low-risk BCC and BD when surgery and radiation are contraindicated.

There is insufficient evidence that PDT improves the net health outcome for other dermatologic conditions compared with accepted treatments, and therefore they are considered investigational.

Policy History

<table>
<thead>
<tr>
<th>Date</th>
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<tbody>
<tr>
<td>10/2018</td>
<td>Clarified coding information.</td>
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5/2018 Clarified coding information.
3/2018 New references added from BCBSA National medical policy.
1/2018 Clarified coding information.
1/2017 New references added from BCBSA National medical policy.
6/2015 BCBSA National medical policy review.
    Superficial basal cell carcinoma changed to low-risk (ie superficial or nodular) basal cell carcinoma. Non-superficial basal cell carcinoma changed to high-risk basal cell carcinoma. Dermatologic Applications of Photodynamic Therapy transferred from policy #068, Plastic Surgery. Effective 6/1/2015.

Information Pertaining to All Blue Cross Blue Shield Medical Policies
Click on any of the following terms to access the relevant information:
Medical Policy Terms of Use
Managed Care Guidelines
Indemnity/PPO Guidelines
Clinical Exception Process
Medical Technology Assessment Guidelines

References
10. Yazdanyar S, Zarchi K, Jemec GBE. Pain during topical photodynamic therapy - comparing methyl aminolaevulinate (Metvix(R)) to aminolaevulinic acid (Ameluz(R)); an intra-individual clinical study. *Photodiagnosis Photodyn Ther.* Aug 02 2017. PMID 28780136


