

Medical Policy

Phototherapy and Photochemotherapy for Dermatologic Conditions

Policy Number: 043

	Commercial and Connector/Qualified Health Plans	MassHealth	Medicare Advantage
Authorization required Photochemotherapy UVB Excimer Laser Therapy	X	X	X
No Prior Authorization Phototherapy Narrow Band UVB Phototherapy Photodynamic Therapy ¹	X	X	X

Overview

The purpose of this document is to describe the guidelines Mass General Brigham Health Plan utilizes to determine medical appropriateness for phototherapy, photochemotherapy, photochemotherapy excimer laser therapy, and photodynamic therapy. The treating specialist must request prior authorization for photochemotherapy and excimer laser therapy.

Coverage Guidelines

Mass General Brigham Health Plan covers phototherapy, photochemotherapy, excimer laser therapy, and photodynamic therapy¹ for the treatment of certain skin conditions, or cancers, when such treatment is recommended by the member's primary care physician or dermatologist. In addition, photochemotherapy, and excimer laser therapy must meet the medical necessity criteria indicated below.

Photodynamic therapy, UVA, UVB Phototherapy, and Narrow Band UVB Phototherapy are covered without prior authorization as reflected in the table listed above.

UVB Photochemotherapy

Mass General Brigham Health Plan covers medically necessary UVB Photochemotherapy (using petrolatum/mineral oil and generally, narrow band UVB) for the following conditions characterized by thickened plaque or scale:

- Atopic dermatitis (eczema)
- Cutaneous T Cell Lymphoma (CTCL), Mycosis fungoides, Sezary Syndrome
- Lichen planus
- Pityriasis lichenoides chronica
- Pityriasis lichenoids et varioliformis acutae (PLEVA)
- Psoriasis
- Pruritus

When, except for CTCL, both of the following conditions have been met:

1. Either

¹ Only covered for specific conditions for the treatment of an actinic keratosis, a malignant neoplasm of the skin, or a carcinoma in situ of the skin. Photodynamic therapy is not a covered benefit for any other diagnosis. Photodynamic therapy does not require prior authorization when used for the treatment of covered conditions.

- a. Moderate to severe disease with 10% or greater body surface area involvement; or
 - b. In extenuating circumstances: site involvement (scalp, palms, soles)
2. A two-week trial of at least one of the following therapies has failed:
 - a. Topical or oral corticosteroids
 - b. Topical calcipotriene
 - c. Topical calcineurin inhibitors²
 - d. Topical tazarotene¹

Mass General Brigham Health Plan covers initial treatment of up to 36 treatments within 16 weeks. Additionally, Mass General Brigham Health Plan covers maintenance treatments when documentation shows that the skin condition has improved from baseline and requires continued maintenance. Authorization may be granted for no more than 36 treatments at a time, and no more than 12 months at a time, but may be renewed indefinitely as long as new documentation continues to demonstrate the need for ongoing maintenance therapy.

UVA Photochemotherapy or PUVA (the use of psoralen with UVA phototherapy)

Mass General Brigham Health Plan covers medically necessary PUVA for the following conditions:

- Alopecia areata
- Atopic dermatitis (eczema) after failing narrow band UVB therapy
- Cutaneous T-Cell Lymphoma (CTCL) (Mycosis fungoides stage 1 and stage 2)
- Granuloma Annulare – Generalized variant
- Lichen planus after failing narrow band UVB therapy
- Pityriasis lichenoides chronica after failing narrow band UVB therapy
- Pityriasis lichenoides et varioliformis acutae (PLEVA) after failing narrow band UVB phototherapy
- Psoriasis after failing narrow band UVB therapy
- Vitiligo on the face, anterior neck and/or hands after failing narrow band UVB phototherapy
- Urticaria Pigmentosa in conjunction with cromoglycalates, antihistamines, or leukotriene modifying agents
- Parapsoriasis
- Pruritis

When, except for CTCL, both of the following conditions have been met:

1. Either
 - a. Moderate to severe disease with 10% or greater body surface area involvement; or
 - b. In extenuating circumstances: Site involvement (scalp, palms, soles)
2. At least a two-week trial of the following therapies has failed:
 - a. Topical or oral corticosteroids
 - b. Topical calcipotriene
 - c. Topical calcineurin inhibitors¹
 - d. Topical tazarotene¹

Mass General Brigham Health Plan covers initial treatment of up to 36 treatments within 16 weeks. Additionally, Mass General Brigham Health Plan covers maintenance treatments when documentation shows that the skin condition has improved from baseline and requires continued maintenance. Authorization may be granted for no more than 36 treatments at a time, and no more than 12 months at a time, but may be renewed indefinitely as long as new documentation continues to demonstrate the need for ongoing maintenance therapy.

UVB Excimer Laser Therapy

² Medications may be subject to step therapy through the pharmacy program.



Mass General Brigham Health Plan covers medically necessary UVB excimer laser treatment for:

A. **Psoriasis** when both of the following are met:

1. The psoriatic lesions being treated cover less than or equal to 5% of the total body surface area; and
2. A two-month trial of at least two of the following therapies has failed:
 - a. Topical or oral corticosteroids
 - b. Topical calcipotriene
 - c. Topical calcineurin inhibitors²
 - d. Topical tazarotene²

Initial authorization is limited to 15 treatments, and if significant improvement is demonstrated, up to 15 additional treatments may be authorized.

B. **Vitiligo** when:

1. Vitiligo involves less than 5% of the member's body surface area; OR
2. The area being treated for vitiligo cannot be adequately reached during light box therapy (e.g., treatment of the face, fingers, neck, scalp, toes, special sites); OR
3. The member requires treatment for vitiligo but has a contraindication for total body phototherapy.

Exclusions

Mass General Brigham Health Plan does not provide coverage for photochemotherapy, UVB excimer laser treatments, or photodynamic therapy for conditions that do not meet the criteria noted above.

Medicare Variation

Mass General Brigham Health Plan uses guidance from the Centers for Medicare and Medicaid Services (CMS) for coverage determinations for its Medicare Advantage plan members. National Coverage Determinations (NCDs), Local Coverage Determinations (LCDs), Local Coverage Articles (LCAs) and documentation included in the Medicare manuals are the basis for coverage determinations. When there is no guidance from CMS for the requested service, Mass General Brigham Health Plan's medical policies are used for coverage determinations.

At the time of Mass General Brigham Health Plan's most recent policy review, Medicare has an NCD for Treatment of Psoriasis (250.1). For other procedures please follow the Phototherapy and Photochemotherapy for Dermatologic Conditions medical policy.

MassHealth Variation

Mass General Brigham Health Plan uses guidance from MassHealth for coverage determinations for its MassHealth ACO members. **At the time of Mass General Brigham Health Plan's most recent policy review, MassHealth did not have any medical necessity guidelines for phototherapy or photochemotherapy for dermatologic conditions.**

Definitions

Excimer Laser Therapy: Treatment by emitting light of wavelength 308 nm and is thus similar to the 311 nm of the established narrow band (NB) UVB therapy.

Phototherapy: The exposure to nonionizing radiation for therapeutic benefit. It may involve exposure to ultraviolet A, wavelength 320-400 nanometers (UVA), ultraviolet B, wavelength 290-300 nanometers (UVB), narrow band UVB, wavelength 311-313 nanometers (NB UVB), or various combinations of UVA and UVB radiation.

Photochemotherapy: The therapeutic use of radiation in combination with a photosensitizing chemical. Treatment with these modalities may involve partial or whole-body exposure.



Photodynamic Therapy: Targeted therapy, which uses a light-sensitive drug that is activated inside the body by laser light to kill cells.

Related Policies

- [Medicare Advantage Administration Guidelines Medical Policy](#)

Codes

The following codes are included below for informational purposes only; inclusion of a code does not constitute or imply coverage or payment.

The following list of codes applies to commercial and MassHealth plans only.

Authorized CPT/HCPCS Codes	Code Description
96910	Photochemotherapy ; tar and ultraviolet B (Goeckerman treatment) or petrolatum and ultraviolet B
96912	Photochemotherapy ; psoralens and ultraviolet A (PUVA)
96913	Photochemotherapy (Goeckerman and/or PUVA) for severe photoresponsive dermatoses requiring at least 4-8 hours of care under direct supervision of the physician (includes application of medication and dressings)
96920	Laser treatment for inflammatory skin disease (psoriasis); total area less than 250 sq cm
96921	Laser treatment for inflammatory skin disease (psoriasis); 250 sq cm to 500 sq cm
96922	Laser treatment for inflammatory skin disease (psoriasis); over 500 sq cm

Effective

March 2025: Annual Update. Added MassHealth variation language. Extended window of prior authorization for UVB photochemotherapy and PUVA from 3 months to 16 weeks. Relaxed criteria to allow for more frequent maintenance treatments when necessary. Fixed typos in UVB Photochemotherapy and PUVA criteria. Added Pruritis to conditions that can be treated with UVB photochemotherapy.

January 2024: Annual Update. On page 1 under UVB Photochemotherapy, added Mycosis fungoides, Sezary Syndrome next to CTCL. References updated.

February 2023: Annual Update. The following changes were made:

- Page 1. Added Medicare Advantage to table. Added Photodynamic therapy to statement regarding table.
- Page 2: Under UVA Photochemotherapy or PUVA section, added Mycosis fungoides, parapsoriasis, and pruritis. Also added “At least” to statement regarding CTCL trial.
- Page 3: Under UVB Excimer Laser treating Vitiligo, added special sites to treatment area; item B. 2. Added Medicare Variation language. Added statement regarding coding applying to commercial and MassHealth plans only.
- Page 5: References updated.

January 2022: Annual Update.

January 2021: Annual Update. References updated.

January 2020: Annual Update. Added Alopecia areata to conditions under UVA Photochemotherapy or PUVA. Added Vitiligo criteria under UVB Excimer Laser Therapy. References updated.

January 2019: Annual Update. Under UVB Excimer Laser Therapy, changed trial from 3 months to 2 months. References updated.



April 2018: Added procedure codes.

December 2017: Annual Update.

July 2017: Added clarifying sentence on page 1: "UVA and UVB Phototherapy are covered without prior authorization as reflected in the table listed above." Edited two conditions under UVA Photochemotherapy or PUVA to read *after failing narrow band UVB phototherapy*.

April 2017: Annual Update.

April 2016: Annual Update.

April 2015: Annual Update.

April 2014: Annual Update.

April 2013: Annual update, modified coverage conditions, and conventional therapy. Removed Vitiligo as a covered condition.

November 2011: Effective date.

References

American Academy of Dermatology. American Academy of Dermatology issues new guidelines for the management of psoriasis with ultraviolet light therapy. News release October 2009.

American Academy of Dermatology. Guidelines of care for the management of psoriasis and psoriatic arthritis: section 5 guidelines of care for the treatment of psoriasis with phototherapy and photochemotherapy. October 2009.

Castells, & Akin. Clinical manifestations, pathogenesis and classification of mastocytosis (Cutaneous and systemic). Version 18.3. Uptodate.com.

Castells, & Akin. Treatment and prognosis of cutaneous mastocytosis. Version 18.3. Uptodate.com.

Centers for Medicare & Medicaid Services. National Coverage Determination (NCD): Treatment of Psoriasis (250.1). Implementation Date: N/A. Updated: N/A. Available: <https://www.cms.gov/medicare-coverage-database/search.aspx>

Elmets, C. A., Lim, H. W., Stoff, B. et al. (2019). Joint American Academy of Dermatology-National Psoriasis Foundation guidelines of care for the management and treatment of psoriasis with phototherapy. *Journal of the American Academy of Dermatology*, 81(3), 775–804. <https://doi.org/10.1016/j.jaad.2019.04.042>

Fitzpatric. Vitiligo treatments. American Vitiligo Research Foundation.

Feldman. Treatment of psoriasis. Version 18.3. Uptodate.com.

Goldstein, & Goldstein. Pityriasis rosea. Version 18.3. Uptodate.com.

Goldstein, & Goldstein. Vitiligo. Version 18.3. Uptodate.com.

Guidelines of care for phototherapy and photochemotherapy. *Journal of American Academy of Dermatology* 1994; 31:643-648

Gupta, A. K., & Carviel, J. L. Meta-analysis of 308-nm excimer laser therapy for alopecia areata. *The Journal of dermatological treatment*. 2019; 1–4. Advance online publication. <https://doi.org/10.1080/09546634.2019.1687819>

Hayes Comparative Effectiveness Review of Laser and Light Therapies for Rosacea. Winifred Hayes, Inc. 2018 Jan 25. Annual Review 2020 May 6.

Hayes Comparative Effectiveness Review of Laser Therapy for Psoriasis. Winifred Hayes, Inc. 2019 Apr 25.



Hayes Inc. Hayes Evidence Analysis Research Brief Ultraviolet B Light Therapy for Treatment of Skin Conditions Associated with Graft-Versus-Host Disease. Lansdale, PA: Hayes, Inc.; published Nov 27, 2019.

Hayes Health Technology Assessment. Neodymium-Doped Yttrium Aluminum Garnet Laser Treatment For Onychomycosis. Winifred Hayes, Inc. 2017 Apr 27. Annual Review 2019 May 3.

Ibbotson SH. A Perspective on the Use of NB-UVB Phototherapy vs. PUVA Photochemotherapy. *Front Med (Lausanne)*. 2018 Jul 2;5:184. doi: 10.3389/fmed.2018.00184. eCollection 2018. PMID: 30013973

Lebwohl MG, Heymann WR, Berth-Jones J, Coulson I. Treatment of Skin Disease. 5th Edition. *Comprehensive Therapeutic Strategies*. 2018.

Lee JH, Eun SH, Kim SH. Excimer laser/light treatment of alopecia areata: A systematic review and meta-analyses. *Photodermatol Photoimmunol Photomed*. 2020 Nov;36(6):460-469. doi: 10.1111/phpp.12596. Epub 2020 Aug 24. PMID: 32745343.

Lopes C, Trevisani VF, Melnik T. Efficacy and Safety of 308-nm Monochromatic Excimer Lamp vs Other Phototherapy Devices for Vitiligo: A Systematic Review with Meta-Analysis. *American Journal of Clinical Dermatology*. 2016; 17(1):23-32.

Moeron, McKenna & Rhodest. Guidelines for topical photodynamic therapy: update. *British Journal of Dermatology*. 2008; 159 1245-1266

Mpourazanis G, Mpourazanis P, Stogiannidis G, et al. The effectiveness of photodynamic therapy and cryotherapy on patients with basal cell carcinoma: A systematic review and meta-analysis. *Dermatol Ther*. Jun 19 2020: e13881. PMID 32558087

National Institute for Healthcare and Excellence. Psoriasis: assessment and management. Clinical guidelines. Accessed December 3, 2019, at nice.org.uk/guidance/cg153.

National Comprehensive Cancer Network (NCCN), NCCN Clinical Practice Guidelines in Oncology: Squamous Cell Skin Cancer. Version 1.2024.

Reynolds KA, Schlessinger DI, Vasic J, et al. Core Outcome Set for Actinic Keratosis Clinical Trials. *JAMA Dermatol*. Mar 01 2020; 156(3): 326-333. PMID 31939999

Shen JJ, Jemec GBE, Arendrup MC, et al. Photodynamic therapy treatment of superficial fungal infections: A systematic review. *Photodiagnosis Photodyn Ther*. Sep 2020; 31: 101774. PMID 32339671

Weston & Howe. Treatment of atopic dermatitis (eczema). Version 18.3. Uptodate.com.

Whitton ME., et al. Pinart M., Batchelor J., Leonardi-Bee J, González U, Jiyad Z, Eleftheriadou V, Ezzedine K. Interventions for vitiligo. *Cochrane Database Syst Rev*. (2015).

Zhang LC, Yang J, Huang YB, et al. Efficacy of hemoporphin photodynamic therapy for pulsed dye laser-resistant facial port-wine stains in 107 children: A retrospective study. *Indian J Dermatol Venereol Leprol*. Mar-Apr 2022; 88(2): 275. PMID 34672476

