

 <b>JOHNS HOPKINS</b> HEALTH PLANS	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS16.02
	<i>Subject</i> <b>Treatment for Skin Conditions</b>	<i>Effective Date</i>	08/21/2023
		<i>Approval Date</i>	05/16/2023
		<i>Supersedes Date</i>	11/01/2022
		<i>Page</i>	1 of 25

This document applies to the following Participating Organizations:

Advantage MD

EHP

Priority Partners

US Family Health Plan

**Keywords:** Laser treatment, Phototherapy, Psoralens and ultraviolet A (PUVA), Skin conditions

Table of Contents	Page Number
<b>I. <a href="#">ACTION</a></b>	<b>1</b>
<b>II. <a href="#">POLICY DISCLAIMER</a></b>	<b>1</b>
<b>III. <a href="#">POLICY</a></b>	<b>1</b>
<b>IV. <a href="#">POLICY CRITERIA</a></b>	<b>2</b>
<b>V. <a href="#">DEFINITIONS</a></b>	<b>7</b>
<b>VI. <a href="#">BACKGROUND</a></b>	<b>12</b>
<b>VII. <a href="#">CODING DISCLAIMER</a></b>	<b>13</b>
<b>VIII. <a href="#">CODING INFORMATION</a></b>	<b>14</b>
<b>IX. <a href="#">REFERENCE STATEMENT</a></b>	<b>18</b>
<b>X. <a href="#">REFERENCES</a></b>	<b>18</b>
<b>XI. <a href="#">APPROVALS</a></b>	<b>25</b>

## **I. ACTION**

	New Policy	
X	Revising Policy Number	CMS16.02
	Superseding Policy Number	
	Retiring Policy Number	

## **II. POLICY DISCLAIMER**

Johns Hopkins Health Plans (JHHP) provides a full spectrum of health care products and services for Advantage MD, Employer Health Programs, Johns Hopkins Health Plan of Virginia Inc., Priority Partners, and US Family Health Plan. Each line of business possesses its own unique contract, benefits, regulations, and regulators' clinical guidelines that supersede the information outlined in this policy.

## **III. POLICY**

For Advantage MD refer to: [Medicare Coverage Database](#)

- Local Coverage Determination (LCD) L34938 Removal of Benign Skin Lesions
- Local Coverage Determination (LCD) L35498 Removal of Benign Skin Lesions
- Local Coverage Determination (LCD) L35090 Cosmetic and Reconstructive Surgery
- Local Coverage Determination (LCD) L39051 Cosmetic and Reconstructive Surgery
- National Coverage Determination (NCD) 250.4 Treatment of Actinic Keratosis
- National Coverage Determination (NCD) 250.1 Treatment of Psoriasis

For Employer Health Programs (EHP) refer to:

	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS16.02	
		<i>Effective Date</i>	08/21/2023	
		<i>Approval Date</i>	05/16/2023	
	<i>Subject</i>	<b>Treatment for Skin Conditions</b>	<i>Supersedes Date</i>	11/01/2022
			<i>Page</i>	2 of 25

- Plan specific Summary Plan Descriptions (SPD's)

For Johns Hopkins Health Plan of Virginia LLC (JHPVA) refer to: [Medicare Coverage Database](#) (Effective 1/1/2024):

- Local Coverage Determination (LCD) L33428 Cosmetic and Reconstructive Surgery
- Local Coverage Determination (LCD) L39051 Cosmetic and Reconstructive Surgery
- Local Coverage Determination (LCD) L33445 Removal of Benign and Malignant Skin Lesions
- Local Coverage Determination (LCD) L35498 Removal of Benign Skin Lesion

For Priority Partners (PPMCO) refer to: [Code of Maryland Regulations](#)

- No specific information located in COMAR 10.67.01 – 10.67.13 (Accessed 4/26/2023)

For US Family Health Plan refer to: [TRICARE Policy Manuals](#)

- TRICARE Policy Manual 6010.63-M, April 1, 2021, Chapter 4, Section 2.1 Cosmetic, Reconstructive, and Plastic Surgery - General Guidelines
- TRICARE Policy Manual 6010.63-M, April 1, 2021, Chapter 4, Section 3.1 Laser Surgery
- TRICARE Policy Manual 6010.63-M, April 1, 2021, Chapter 4, Section 9.2 Photopheresis
- TRICARE Policy Manual 6010.63-M, April 1, 2021, Chapter 7, Section 17.1 Dermatological Procedures - General

## IV. POLICY CRITERIA

### A. General Considerations

- When benefits are provided under the member's contract, JHHP considers whether treatments for skin conditions are cosmetic, medically necessary, or investigational. See [CMS01.00 Medical Policy Introduction](#)
  - To be approved for coverage, the service must be considered medically necessary based on current, high-quality medical evidence.
  - Unless benefits are provided under the member's contract, requested treatments must meet Technology Evaluation Criteria (TEC) as defined in CMS01.00 Medical Policy Introduction.
  - In the absence of functional impairment or symptoms, treatment of skin conditions may be considered when there is significant variation from normal related to accidental injury, disease, trauma, or treatment of a disease or congenital defect (*Medical Director review required*).
- When there is a requirement for conventional or first-line therapies that have been optimized and failed, documentation should specify the type of treatment, duration, and adherence to therapy.
- Treatment and procedures meeting regulatory definitions of cosmetic are not covered (*See Definitions*).

### B. Treatments for Acne

- When benefits are provided under the member's contract, JHHP considers acne surgery **medically necessary** for the treatment of acne after documented failure of topical and systemic treatment for a minimum of six months.
- Unless specific benefits are provided under the member's contract, JHHP considers the following treatments for acne **cosmetic and therefore, not medically necessary**:
  - Dermabrasion for removal of acne scars;
  - Chemical peels for treatment of acne scarring;
  - Phototherapy or photodynamic therapy for treatment of acne vulgaris;

	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS16.02	
		<i>Effective Date</i>	08/21/2023	
		<i>Approval Date</i>	05/16/2023	
	<i>Subject</i>	<b>Treatment for Skin Conditions</b>	<i>Supersedes Date</i>	11/01/2022
			<i>Page</i>	3 of 25

- d. Laser therapy for treatment of acne vulgaris.
3. Unless specific benefits are provided under the member's contract, JHHP considers the following treatments for acne **experimental and investigational**, as they do not meet the Technology Evaluation Criteria (TEC):
  - a. Dermabrasion and microdermabrasion for treatment of active acne;
  - b. Chemical peels for treatment of active acne;
  - c. Microneedling for treatment of acne scarring;
  - d. Cryotherapy for treatment of acne;
  - e. The use of gold and silver nanoparticles with or without phototherapy for treatment of acne;
  - f. Home-use devices, including those that utilize:
    - i. Heat;
    - ii. Laser therapy;
    - iii. Light therapy;
    - iv. Ultraviolet therapy;
    - v. Suction.
- C. Treatments for Actinic Keratosis
  1. When benefits are provided under the member's contract, JHHP considers either of the following treatments for the destruction of actinic keratosis lesions **medically necessary**:
    - a. Cryosurgery with liquid nitrogen, OR;
    - b. Topical imiquimod, diclofenac sodium gel, or 5-fluorouracil (5-FU) with or without tretinoin cream.
  2. When benefits are provided under the member's contract, JHHP considers the following therapies to be **medically necessary** when destruction of actinic keratosis with cryotherapy, topical imiquimod, diclofenac sodium gel, or 5-fluorouracil (5-FU) has been maximized and failed:
    - a. Chemical peel (chemoexfoliation), OR;
    - b. Dermabrasion, OR;
    - c. Photodynamic therapy (e.g., Ameluz<sup>®</sup> [aminolevulinic acid hydrochloride gel, 10%] in combination with red light photodynamic therapy [PDT] or Levulan Keratick [aminolevulinic acid hydrochloride solution 20%] and blue light), OR;
    - d. Laser therapy.
  3. When benefits are provided under the member's contract, JHHP considers the following methods of removal of actinic keratosis **medically necessary** when squamous cell carcinoma is suspected and submission of a specimen for histological analysis is needed:
    - a. Surgical curettage therapy, OR;
    - b. Excision.
- D. Treatments for Alopecia Areata
  1. When benefits are provided under the member's contract, JHHP considers the following **medically necessary** for the treatment of alopecia areata when medical records demonstrate that conventional therapies have been optimized and failed:
    - a. Psoralens and Ultraviolet A (PUVA);
    - b. Other modalities may be considered on a case-by-case basis (*Medical Director review required*).
  2. Unless specific benefits are provided under the member's contract, JHHP considers the following treatments for alopecia areata **experimental and investigational** as they do not meet the Technology Evaluation Criteria (TEC):
    - a. Excimer laser;
    - b. Photodynamic therapy;
    - c. Platelet-rich plasma.
- E. Treatments for Chronic Eczematous Dermatitis Including Atopic Dermatitis

	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS16.02	
		<i>Effective Date</i>	08/21/2023	
		<i>Approval Date</i>	05/16/2023	
	<i>Subject</i>	<b>Treatment for Skin Conditions</b>	<i>Supersedes Date</i>	11/01/2022
			<i>Page</i>	4 of 25

1. When benefits are provided under the member's contract, JHHP considers the following **medically necessary** for the treatment of chronic eczematous dermatitis including atopic dermatitis when medical records demonstrate that conventional therapies have been optimized and failed:
    - a. Psoralens and Ultraviolet A (PUVA);
    - b. UVA, UVA1, and UVB to include narrowband UVB.
  2. When benefits are provided under the member's contract, JHHP considers the following **medically necessary** for the treatment of chronic eczematous dermatitis including atopic dermatitis when prescribed and supervised by a dermatologist:
    - a. Home phototherapy (UVB) treatment.
- F. Treatments for Chronic Palmoplantar Pustulosis
1. When benefits are provided under the member's contract, JHHP considers the following **medically necessary** for the treatment of chronic palmoplantar pustulosis when medical records demonstrate that conventional therapies have been optimized and failed:
    - a. Psoralens and Ultraviolet A (PUVA);
    - b. Narrowband Ultraviolet B (NB-UVB);
    - c. Excimer laser.
  2. Unless specific benefits are provided under the member's contract, JHHP considers the following treatments for chronic palmoplantar pustulosis **experimental and investigational** as they do not meet the Technology Evaluation Criteria (TEC):
    - a. Photodynamic therapy.
- G. Treatments for Cutaneous T-cell Lymphoma
1. When benefits are provided under the member's contract, JHHP considers the following **medically necessary** for the treatment of cutaneous T-cell lymphoma when medical records demonstrate that conventional therapies have been optimized and failed:
    - a. Psoralens and Ultraviolet A (PUVA);
    - b. Narrowband Ultraviolet B (NB-UVB);
    - c. Extracorporeal photochemotherapy.
  2. When benefits are provided under the member's contract, JHHP considers the following **medically necessary** for the treatment of cutaneous T-cell lymphoma when prescribed and supervised by a dermatologist:
    - a. Home phototherapy (UVB) treatment.
- H. Treatments for Eosinophilic Folliculitis and Other Pruritic Eruptions of HIV Infection
1. When benefits are provided under the member's contract, JHHP considers the following **medically necessary** for the treatment of eosinophilic folliculitis and other pruritic eruptions of HIV infection when medical records demonstrate that conventional therapies have been optimized and failed:
    - a. Psoralens and Ultraviolet A (PUVA);
    - b. Ultraviolet B (UVB) to include narrowband and broadband.
- I. Treatments for Graft versus Host Disease (GvHD)
1. When benefits are provided under the member's contract, JHHP considers the following **medically necessary** for the treatment of graft versus host disease when medical records demonstrate that conventional therapies have been optimized and failed:
    - a. Psoralens and Ultraviolet A (PUVA);
    - b. UVA, UVA1, and UVB to include narrowband UVB;
    - c. Extracorporeal photochemotherapy.
- J. Treatments for Granuloma Annulare
1. When benefits are provided under the member's contract, JHHP considers the following **medically necessary** for the treatment of granuloma annulare when medical records demonstrate that conventional therapies have been optimized and failed:

	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS16.02	
		<i>Effective Date</i>	08/21/2023	
		<i>Approval Date</i>	05/16/2023	
	<i>Subject</i>	<b>Treatment for Skin Conditions</b>	<i>Supersedes Date</i>	11/01/2022
			<i>Page</i>	5 of 25

- a. Psoralens and Ultraviolet A (PUVA);
  - b. UVA, UVA1, and UVB to include narrowband UVB.
- K. Treatments for Hidradenitis
1. When benefits are provided under the member's contract, JHHP considers laser treatment for hidradenitis **medically necessary** when ALL of the following criteria are met:
    - a. Standard medical therapy has been optimized for a minimum of three months (as confirmed through review of pharmacy claims and medical records), AND;
    - b. There is a confirmed diagnosis of hidradenitis refractory to all medical treatment as reported in medical records.
- L. Treatments for Hypertrophic Scars, Keloids, and Scar Contractures
1. When benefits are provided under the member's contract, JHHP considers the following treatments **medically necessary** for the treatment of hypertrophic scars, keloid, and scar contractures when there is documented evidence of symptomatic scars, OR significant functional impairment related to the scar, AND medical records demonstrate that conventional or first-line therapies have been optimized and failed (e.g., silicone gel or sheeting, pressure garments, intralesional steroids):
    - a. Ablative (e.g., fractional CO<sub>2</sub> laser fenestration) and nonablative (e.g., pulsed dye laser) laser treatment;
    - b. Cryotherapy;
    - c. Surgical excision when InterQual<sup>®</sup> criteria are met (*specific to keloids*);
    - d. Radiation therapy as adjunct therapy following surgical excision (*specific to keloids*).
  2. For *Scar Revision*, see Medical Policy [CMS03.12 Cosmetic and Reconstructive Services](#)
- M. Treatments for Ingrown Hairs/Hair in Undesirable Location (Skin Graft or Flap)
1. When benefits are provided under the member's contract, JHHP considers laser hair removal **medically necessary** for the following indications when there is documented evidence of medical necessity and standard medical therapy has been optimized for a minimum of three months:
    - a. Ingrown hair that is recurrent and causing symptomatic (e.g., infected, painful, tender) cysts or skin lesions such as pilonidal cysts and pseudofolliculitis barbae;
    - b. Hair growth in undesirable locations on skin graft or flap.
- N. Treatments for Lichen Planus (including the variant Erythema Dyschromicum Perstans)
1. When benefits are provided under the member's contract, JHHP considers the following **medically necessary** for the treatment of lichen planus when medical records demonstrate that conventional therapies have been optimized and failed:
    - a. Psoralens and Ultraviolet A (PUVA);
    - b. UVA, UVA1, and UVB to include narrowband UVB.
- O. Treatments for Lymphomatoid Papulosis
1. When benefits are provided under the member's contract, JHHP considers the following **medically necessary** for the treatment of lymphomatoid papulosis when medical records demonstrate that conventional therapies have been optimized and failed:
    - a. Psoralens and Ultraviolet A (PUVA);
    - b. UVA, UVA1, and UVB to include narrowband UVB.
- P. Treatments for Morphea (Circumscribed Scleroderma), Scleroderma, and Systemic Sclerosis
1. When benefits are provided under the member's contract, JHHP considers the following **medically necessary** for the treatment of morphea (circumscribed scleroderma), scleroderma, and systemic sclerosis when medical records demonstrate that conventional therapies have been optimized and failed:
    - a. Psoralens and Ultraviolet A (PUVA);
    - b. UVA, UVA1, and UVB to include narrowband UVB.
- Q. Treatments for Necrobiosis Lipoidica

	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS16.02	
		<i>Effective Date</i>	08/21/2023	
		<i>Approval Date</i>	05/16/2023	
	<i>Subject</i>	<b>Treatment for Skin Conditions</b>	<i>Supersedes Date</i>	11/01/2022
			<i>Page</i>	6 of 25

1. When benefits are provided under the member's contract, JHHP considers the following **medically necessary** for the treatment of necrobiosis lipoidica when medical records demonstrate that conventional therapies have been optimized and failed:
  - a. Psoralens and Ultraviolet A (PUVA);
  - b. Other modalities may be considered on a case-by-case basis (*Medical Director review required*).
- R. Treatments for Photodermatoses
  1. When benefits are provided under the member's contract, JHHP considers the following **medically necessary** for the treatment of photodermatoses when medical records demonstrate that conventional therapies have been optimized and failed:
    - a. Psoralens and Ultraviolet A (PUVA);
    - b. UVA, UVA1, and UVB to include narrowband UVB.
- S. Treatment for Pityriasis
  1. When benefits are provided under the member's contract, JHHP considers the following **medically necessary** for the treatment of pityriasis lichenoides, pityriasis rubra pilaris, and pityriasis rosea when medical records demonstrate that conventional therapies have been optimized and failed:
    - a. Psoralens and Ultraviolet A (PUVA);
    - b. UVA, UVA1, and UVB to include narrowband UVB.
- T. Treatments for Port-Wine Stains, Cutaneous Hemangioma, and Other Vascular Lesions
  1. When benefits are provided under the member's contract, JHHP considers laser treatment **medically necessary** for the treatment of port-wine stains, cutaneous hemangioma, and other vascular lesions when:
    - a. Medical records demonstrate that a functional impairment is present, OR the lesion is ulcerated.
- U. Treatments for Prurigo Nodularis, Pruritus of Renal Disease (Uremic Pruritus), and Pruritus of Polycythemia Vera
  1. When benefits are provided under the member's contract, JHHP considers the following **medically necessary** for the treatment of prurigo nodularis, pruritus of renal disease (uremic pruritus), and pruritus of polycythemia vera when medical records demonstrate that conventional therapies have been optimized and failed:
    - a. Psoralens and Ultraviolet A (PUVA);
    - b. UVA, UVA1, and UVB to include narrowband UVB.
- V. Treatments for Psoriasis
  1. When benefits are provided under the member's contract, JHHP considers laser treatment **medically necessary** for the treatment of psoriasis when ALL of the following criteria are met:
    - a. Standard medical therapy has been optimized for a minimum of three months (as confirmed through review of pharmacy claims and medical records), AND;
    - b. There is a confirmed diagnosis of localized plaque psoriasis affecting <10% of total body surface area.  
*Note:* For the treatment of plaque psoriasis, the Psoriasis Area and Severity Index (PASI) score or other objective response measurements to document treatment efficacy is required (*Refer to Definitions*).
  2. When benefits are provided under the member's contract, JHHP considers Psoralens and Ultraviolet A (PUVA) **medically necessary** for the following indications when medical records indicate that therapies have been optimized and failed:
    - a. Moderate to severe psoriasis (i.e., psoriasis involving 7% or more of the body, or severe psoriasis involving the hands, feet, or scalp);
    - b. Parapsoriasis.
  3. When benefits are provided under the member's contract, JHHP considers UVA, UVA1, and UVB to include narrowband UVB **medically necessary** for the following indications when medical records indicate that conventional therapies have been optimized and failed:
    - a. Moderate to severe psoriasis (i.e., psoriasis involving 7% or more of the body, or severe psoriasis involving the hands, feet, or scalp);
    - b. Parapsoriasis.

	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS16.02	
		<i>Effective Date</i>	08/21/2023	
		<i>Approval Date</i>	05/16/2023	
	<i>Subject</i>	<b>Treatment for Skin Conditions</b>	<i>Supersedes Date</i>	11/01/2022
			<i>Page</i>	7 of 25

4. When benefits are provided under the member's contract, JHHP considers home phototherapy (UVB) treatment **medically necessary** for the following indications when prescribed and supervised by a dermatologist:
  - a. Severe psoriasis with a history of frequent flares when the member is unable to attend onsite therapy;
  - b. Severe psoriasis requiring immediate therapy in order to suppress flares.

W. Treatments for Urticaria Pigmentosa

1. When benefits are provided under the member's contract, JHHP considers the following **medically necessary** for the treatment of urticaria pigmentosa when medical records demonstrate that conventional therapies have been optimized and failed:
  - a. Psoralens and Ultraviolet A (PUVA).

X. Treatments for Vitiligo

1. When benefits are provided under the member's contract, JHHP considers the following **medically necessary** for the treatment of vitiligo when medical records demonstrate that conventional therapies have been optimized and failed:
  - a. Psoralens and Ultraviolet A (PUVA);
  - b. Narrowband Ultraviolet B (NB-UVB).
2. When benefits are provided under the member's contract, JHHP considers the following **medically necessary** for the treatment of vitiligo when prescribed and supervised by a dermatologist:
  - a. Home phototherapy (UVB) treatment.
3. When benefits are provided under the member's contract, JHHP considers laser treatment (including excimer laser) **medically necessary** for the treatment of vitiligo when ALL of the following criteria are met:
  - a. Standard medical therapy has been optimized for a minimum of three months (as confirmed through review of pharmacy claims and medical records), AND;
  - b. There is a confirmed diagnosis of vitiligo.

## V. DEFINITIONS

Acne Vulgaris: The formation of comedones, papules, pustules, nodules, and/or cysts as a result of obstruction and inflammation of pilosebaceous units (hair follicles and their accompanying sebaceous gland). Diagnosis is made by examination and treatment is based on severity, which can involve a variety of topical and systemic agents directed at reducing sebum production, comedone formation, inflammation, and bacterial counts and at normalizing keratinization (Keri, 2022).

Actinic Keratosis: (Also known as AKs or solar keratosis) Typically occurs on the face, lips, ears, bald scalp, shoulders, neck and back of the hands and forearms. The size ranges from a tiny spot to as much as an inch in diameter, actinic keratosis usually appear as small crusty or scaly bumps or "horns." The base can be dark or light skin-colored and may have additional colors such as tan, pink, and red (The Skin Cancer Foundation, 2022).

Alopecia Areata: A relatively common nonscarring hairloss disease characterized by an autoimmune response to anagen hair follicles (Fukuyama, 2021).

Atopic Dermatitis: (Commonly referred to as eczema) Chronic, relapsing inflammatory skin disorder with a complex pathogenesis involving genetic susceptibility, immunologic and epidermal barrier dysfunction, and environmental factors. Pruritus is a primary symptom; skin lesions range from mild erythema to severe lichenification to erythroderma (Ruenger, 2023).

Body Disfigurement: an objective defect of appearance related to a congenital malformation, physical injury, or any disease process that modifies the physical integrity of the individual (APA, 2023).

Chemical Peel: A procedure in which a topically applied wounding agent creates smooth, rejuvenated skin by way of a wound repair process, collagen remodeling and exfoliation. This procedure is usually performed on the face. It allows a new layer of skin regeneration (Berman, 2022).

 <b>JOHNS HOPKINS</b> HEALTH PLANS	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i> CMS16.02
		<i>Effective Date</i> 08/21/2023
		<i>Approval Date</i> 05/16/2023
	<i>Subject</i> <b>Treatment for Skin Conditions</b>	<i>Supersedes Date</i> 11/01/2022
		<i>Page</i> 8 of 25

Cosmetic:

- COMAR 10.67.06.27 Benefits — Limitations: Cosmetic surgery when performed solely to maintain normal physical appearance or enhance beyond average level toward an aesthetic ideal.
- TRICARE Policy Manual 6010.63-M, April 2021, Chapter 4, Section 2.1 Cosmetic, Reconstructive, and Plastic Surgery – General Guidelines: Cosmetic, reconstructive, and/or plastic surgery is defined as surgery or treatments (including procedures, drugs, and devices) which can be expected primarily to improve the physical appearance of a beneficiary, and/or which is performed primarily for psychological purposes, and/or which restores form, but does not correct or materially improve a bodily function.
- CMS IOM Publication 100-02, Medicare Benefit Policy Manual, Chapter 16, Section 120 Cosmetic Surgery: Cosmetic surgery or expenses incurred in connection with such surgery are not covered. Cosmetic surgery includes any surgical procedure directed at improving appearance, except when required for the prompt (i.e., as soon as medically feasible) repair of accidental injury or for the improvement of the functioning of a malformed body member. For example, this exclusion does not apply to surgery in connection with treatment of severe burns or repair of the face following a serious automobile accident, or to surgery for therapeutic purposes which coincidentally also serves some cosmetic purpose.

Cutaneous T-cell Lymphoma: (CTCL) A rare, persistent, very slow-growing type of non-Hodgkin lymphoma. CTCLs originate from mature T lymphocytes and are most commonly developed in patients older than 50. CTCLs are insidious in onset and patients may initially present with a chronic, pruritic rash that is difficult to diagnose even with biopsies. The most common types of CTCL are mycosis fungoides and Sézary syndrome (Martin & Leonard, 2022).

Dermabrasion: Involves the use of tools (e.g., high-speed brush, diamond cylinder, fraise or silicon carbide sandpaper) to remove the epidermis or epidermis and part of the dermis. One advantage of the procedure is that it allows the clinician to etch scar edges precisely without thermal injury. In addition, dermabrasion procedure requires meticulous intraoperative assistance, and has the potential for postoperative scarring, dyspigmentation, and milia formation (Saedi, 2022).

Eosinophilic Folliculitis: A skin disorder characterized by recurring itchy, red or skin-colored bumps and pustules. Skin biopsies of this disorder find eosinophils around hair follicles. The pustules mostly appear on the face, scalp, neck and trunk and may persist for weeks or months (NIH Genetic and Rare Diseases Information Center, 2023).

Erythema Dyschromicum Perstans (EDP): also called ashy dermatosis or dermatosis cenicienta, is an uncommon, slowly progressive dermatosis characterized by hyperpigmented macules of variable size and shape of an ashen-gray color. The majority of patients with this disorder are from Latin America. EDP is usually seen in young adults, but it may also occur in children. The etiology of EDP is unknown. EDP presents with slate-gray to blue-brown, oval, circular, or irregularly shaped macules and patches that develop gradually in a symmetric distribution. Early lesions may have a thin, raised, and erythematous border. Lesions typically involve the trunk, but they may spread to the neck, upper extremities, and face (Vashi & Kundu, 2022).

Excimer Laser: A targeted phototherapy laser used to treat a variety of skin conditions that emits a coherent and monochromatic beam of light at 308nm (Post, 2022).

Extracorporeal Photochemotherapy: (Also called extracorporeal photopheresis or ECP) A leukapheresis-based therapy which was initially used in patients with cutaneous T-cell lymphoma (CTCL). During ECP, the whole blood of the patient is collected via a cubital vein or a permanently implanted catheter for separation of leukocytes from plasma and non-nucleated cells. With a specifically constructed device for this procedure, collected leukocytes are then exposed to ultraviolet A (UVA) irradiation in the presence of a photosensitizing agent, 8-methoxypsoralen prior to reinfusion to the patient (Cho et al., 2018).



 <b>JOHNS HOPKINS</b> HEALTH PLANS	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS16.02	
		<i>Effective Date</i>	08/21/2023	
		<i>Approval Date</i>	05/16/2023	
	<i>Subject</i>	<b>Treatment for Skin Conditions</b>	<i>Supersedes Date</i>	11/01/2022
			<i>Page</i>	9 of 25

**Graft versus Host Disease (GvHD):** A common fatal complication of hematopoietic stem cell transplantation (HSCT). During HSCT, transplanted immunocompetent lymphocytes can extensively recognize recipient antigens. These immune responses develop in a proinflammatory microenvironment resulting in clinical manifestations of GvHD, including rashes, elevated serum bilirubin levels, and diarrhea (Li et al., 2022).

**Grannuloma Annulare:** A chronic, idiopathic condition characterized by papules or nodules that expand peripherally to form a ring around normal or slightly depressed skin (Benedetti, 2022).

**Hidradenitis:** Inflammation of the hair follicles in the skin under the arms, in the groin, and around the nipples and anus, resulting in scarring, inflammation, and painful accumulations of pus under the skin (Keri, 2022).

**Home Phototherapy:** A narrowband ultraviolet B (NB-UVB) therapy conducted in a home setting and typically considered appropriate for patients with photoresponsive skin conditions who have access barriers (scheduling, transportation, cost, etc.) to outpatient treatment (Ontario, 2020).

**Hypertrophic Scars and Keloids:** Fibroproliferative disorders that result from aberrant wound healing in predisposed individuals following trauma, inflammation, surgery, or burns. While hypertrophic scars do not exceed the margins of the original wound, keloid are characterized by continuous growth and invasion into the adjacent, healthy skin beyond the original wound boundary. Keloids are often associated with pain and itch, can be disfiguring, and impair function and quality of life. Keloids also have a marked tendency to recur when surgically excised (Huang et al., 2020).

**Laser Therapy:** Uses an intense, narrow beam of light to remove or destroy abnormal tissue. It is often used to treat precancers on the surface of the body, such as actinic keratosis, and may be used to treat some types of skin cancer (NCI, 2020).

**Lichen Planus:** A recurrent, pruritic, inflammatory eruption characterized by small, discrete, polygonal, flat-topped, violaceous papules that may coalesce into rough scaly plaques, often accompanied by oral and/or genital lesions (Das, 2022).

**Lymphomatoid Papulosis:** A non-contagious, chronic skin condition characterized by the eruption of recurring, self-healing lesions on the skin. The lesions typically begin small and then become larger, and they may bleed or ulcerate before becoming scaly and crusty. They often develop a red-brown color. Symptoms associated with lesions may include itching and/or pain, which may be debilitating (NIH Genetic and Rare Diseases Information Center, 2023).

#### Medical Necessity:

- COMAR 10.67.01.01 – Definitions. "Medically necessary" means that the service or benefit is:
  - Directly related to diagnostic, preventive, curative, palliative, rehabilitative, or ameliorative treatment of an illness, injury, disability, or health condition;
  - Consistent with current accepted standards of good medical practice;
  - The most cost efficient service that can be provided without sacrificing effectiveness or access to care; and
  - Not primarily for the convenience of the consumer, the consumer's family, or the provider.
- TRICARE Operations Manual 6010.63-M, April 2021. Medical Necessity Determination: A review to determine if the recommended health care services are reasonable for the diagnosis and treatment of illness, injury, pregnancy, mental disorders and adequate for well-baby care.
- CMS. Medically necessary: Services or supplies that are proper and needed for the diagnosis or treatment of your medical condition, are provided for the diagnosis, direct care, and treatment of your medical condition, meet the standards of good medical practice in the local area, and aren't mainly for the convenience of you or your doctor.

**Necrobiosis Lipoidica:** A rare skin disorder of collagen degeneration. It is characterized by a rash that occurs on the lower legs. It is more common in women, and there are usually several spots. They are slightly shiny red-brown patches. The centers are

	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS16.02	
		<i>Effective Date</i>	08/21/2023	
		<i>Approval Date</i>	05/16/2023	
	<i>Subject</i>	<b>Treatment for Skin Conditions</b>	<i>Supersedes Date</i>	11/01/2022
			<i>Page</i>	10 of 25

often yellowish and may develop open sores that are slow to heal. Infections can occur but are uncommon. Some patients have itching, pain, or abnormal sensations. It usually occurs more often in people with diabetes or in people with a family history of diabetes or a tendency to get diabetes, but can occur in nondiabetic people (NIH Genetic And Rare Diseases Information Center, 2023).

**Palmoplantar Pustulosis:** A rare and chronic inflammatory condition that primarily affects the palms of the hands and soles of the feet. Signs and symptoms of the condition generally develop during adulthood and include crops of pustules on one or both hands and/or feet that erupt repeatedly over time. Affected individuals may also experience pruritus, pain, or a burning sensation (NIH Genetic and Rare Diseases Information Center, 2023).

**Photodermatoses:** (Also known as photosensitivity disorders) A diverse group of inflammatory skin diseases caused or exacerbated by solar radiation. They comprise (i) immunologically mediated disease, including polymorphic light eruption (PLE), juvenile spring eruption, chronic actinic dermatitis, actinic purrigo and solar urticaria; (ii) genophotodermatoses, including xeroderma pigmentosum, Cockayne syndrome, and trichothiodystrophy, (iii) metabolic disease, including cutaneous porphyrias; and (iv) photoaggravated skin disease, including connective tissue disorders; and (v) drug- or chemical-induced photosensitivity. Patients experience a range of distressing symptoms upon or following sun exposure. The exact manifestations depend on the specific diagnosis, but include severe pruritus, pain, blistering, and scarring. The onset of symptoms may occur within minutes, hours, or days of sun exposure (Burfield et al., 2022).

**Photodynamic Therapy:** (PDT) A noninvasive, nonscarring treatment most frequently used for the treatment of nonmelanoma skin cancer and precancerous lesions. It is a two-step treatment where a light-sensitizing topical agent is applied to the lesions, followed by illumination with visible light to activate the drug and destroy the target tissue. PDT was developed primarily for the treatment of cancer and precancers (Maytin, 2022) .

**Phototherapy:** Or light therapy, involves exposing the skin to ultraviolet light on a regular basis and under medical supervision. Treatments are done in a doctor's office or psoriasis clinic or at home with phototherapy unit (National Psoriasis Foundation, 1996-2021a).

#### **Pityriasis:**

1. **Pityriasis rubra pilaris:** (Also known as PRP) A group of skin conditions that cause constant inflammation and scaling of the skin. People with PRP have reddish, scaly patches that may occur everywhere on the body, or only on certain areas. Some people with PRP also develop thickened skin on the underside of the hands and feet (palmoplantar keratoderma), various nail abnormalities, and/or thinning of the hair. In most cases, PRP is not inherited and the cause is not known (NIH Genetic and Rare Diseases Information Center, 2023).
2. **Pityriasis lichenoides:** (Also known as PL) A skin condition characterized by small, raised pink spots that tend to come together in groups. It is not contagious. There are two main types of PL: an acute form called pityriasis lichenoides et varioliformis acute (PLEVA) and a milder, longer-lasting form called pityriasis lichenoides chronica (PLC). There is also a rare, severe variant of PLEVA called febrile ulceronecrotic PLEVA, associated with high fever and complications that may affect other body systems. In both types of PL, spots usually occur on the trunk, buttox, arms, and legs. PLEVA begins abruptly and may cause itching or burning. PLC may develop over days, is less irritating, and lasts longer than PLEVA. The cause of PL is not known (NIH Genetic and Rare Diseases Information Center, 2023).
3. **Pityriasis rosea:** A disease that causes the formation of many small patches of scaly, rose-colored or tan-colored patches on the skin. The most common symptoms are itching and an initial large, tan-colored or rose-colored circular patch that is followed by multiple patches that appear on the torso (Das, 2022).

**Platelet-Rich Plasma (PRP):** Consists of two elements: plasma and platelets. PRP is essentially blood that contains more platelets than normal. Platelets are well-known for their clotting abilities and also contain growth factors that can trigger cell

 <b>JOHNS HOPKINS</b> HEALTH PLANS	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS16.02	
		<i>Effective Date</i>	08/21/2023	
		<i>Approval Date</i>	05/16/2023	
	<i>Subject</i>	<b>Treatment for Skin Conditions</b>	<i>Supersedes Date</i>	11/01/2022
			<i>Page</i>	11 of 25

reproduction and stimulate tissue regeneration or healing in the treated area. After creating platelet-rich plasma from a patient's blood sample, the PRP solution can be injected into the patient to increase the concentration of growth factors in a specific area in order to accelerate the healing process. However, the mechanism behind PRP injections is not completely understood (Johns Hopkins Medicine).

**Port-Wine Stain:** A birthmark in which swollen blood vessels create a reddish-purplish discoloration of the skin. It is caused by an abnormal formation of tiny blood vessels in the skin. In rare cases, port-wine stains are a sign of Sturge-Weber Syndrome or Klippel-Trenaunay-Weber Syndrome (U.S. National Library of Medicine, 2012a).

**Prurigo Nodularis:** A skin disease that causes hard, itchy nodules to form on the skin. The pruritus can be intense, causing people to scratch themselves to the point of bleeding or pain. Scratching can cause more skin lesions to appear (NIH Genetic and Rare Diseases Information Center, 2023).

**Pruritus of Polycythemia Vera:** One of the myeloproliferative neoplasms (MPN), a group of hematopoietic stem cell-derived malignancies that are characterized by clonal proliferation of myeloid cells with variable degrees of morphologic maturity. PV is distinguished from other MPNs by the presence of an elevated red blood cell mass (i.e., erythrocytosis), and is associated with an increased risk for thromboembolic events, leukemic transformation, and/or myelofibrosis (Tefferri, 2022).

**Pruritus of Renal Disease (Uremic Pruritus):** (Also known as chronic kidney disease-associated pruritus [CKD-aP]); A common condition affecting patients with chronic kidney disease. This condition manifests as an irritating itch, but also has been associated with increased morbidity and mortality and decreased quality of life (Elhag et al., 2021).

**Psoriasis:** An inflammatory disease that manifests most commonly as well-circumscribed, erythematous papules and plaques covered with silvery scales. Multiple factors contribute, including genetics. Common triggers include trauma, infection, and certain drugs. Symptoms are usually minimal, but mild to severe itching may occur (Das, 2021).

1. **Plaque Psoriasis:** The most common form of the disease and appears as raised, red patches covered with a silvery white buildup of dead skin cells or scale. These patches or plaques most often appear on the scalp, knees, elbows and lower back. They are often itchy and painful, and they can crack and bleed (National Psoriasis Foundation, 1996-2022b).
2. **Guttate:** A form of psoriasis that often starts in childhood or young adulthood and often develops suddenly. It usually appears after an infection, most notably strep throat caused by group A streptococcus (National Psoriasis Foundation, 1996-2022b).
3. **Inverse Psoriasis:** Characterized by skin redness and irritation and occurs in the armpits, groin and in between overlapping skin rather than the elbows and knees (National Psoriasis Foundation, 1996-2022b).
4. **Pustular Psoriasis:** Characterized by white pustules (blisters of noninfectious pus consisting of white blood cells) surrounded by red skin. It is not an infection, nor is it contagious. It may appear only on certain areas of the body, such as the hands and feet or it may cover most of the body (National Psoriasis Foundation, 1996-2022b).
5. **Erythrodermic Psoriasis:** A rare type of psoriasis, affecting about 2 percent of people living with psoriasis. It can cause intense redness and shedding of skin layers in large sheets. It often affects the whole body and can be life-threatening. Symptoms include severe itching, pain, changes in heart rate and temperature, dehydration and nail changes (National Psoriasis Foundation, 1996-2022b).

**Psoriasis Area and Severity Index (PASI):** A measure of overall psoriasis severity and coverage. It is a commonly-used measure in clinical trials for psoriasis treatments. PASI consists of two steps, calculating the BSA (Body Surface Area) covered with lesions and assessment of the severity of lesions. The assessment of lesion severity includes the lesions' erythema, induration, and scaling. All calculations are combined into a single score (PASI Score) in the range of 0 (no psoriasis on the body) and up to 72 (the most severe case of psoriasis). Typically, the PASI would be calculated before, during and after a treatment period in order to determine how well psoriasis responds to the treatment (Das, 2021).

 <b>JOHNS HOPKINS</b> <small>HEALTH PLANS</small>	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS16.02	
		<i>Effective Date</i>	08/21/2023	
		<i>Approval Date</i>	05/16/2023	
	<i>Subject</i>	<b>Treatment for Skin Conditions</b>	<i>Supersedes Date</i>	11/01/2022
			<i>Page</i>	12 of 25

**PUVA:** A combination of psoralen (P) and long-wave ultraviolet radiation (UVA) that is used to treat psoriasis and some other severe skin conditions. Psoralen is a medication taken by mouth that makes the skin disease more sensitive to ultraviolet light. This allows the deeply penetrating UVA band of light to work on the skin (American Osteopathic College of Dermatology, 2020).

**Scleroderma:** Also called systemic sclerosis, is a rare, chronic autoimmune connective tissue disorder characterized by degenerative changes and scarring in the skin, joints, and internal organs and by blood vessel abnormalities (Nevares, 2022).

**Ultraviolet light B (UVB):** An effective treatment for psoriasis. UVB penetrates the skin and slows the growth of affected skin cells. Treatment involves exposing the skin to an artificial UVB light source for a set length of time on a regular schedule. This treatment is administered in a medical setting or at home. There are two types of UVB treatment, broad band and narrowband. Narrow-band UVB light bulbs release a smaller range of ultraviolet light, narrow-band UVB may clear psoriasis faster and produce longer remissions, and narrow-band UVB may require fewer treatments per week. UVB treatment is offered in different ways which include small units for localized areas such as hands and feet, full-body units, or hand-held units. Some UVB units use traditional UV lamps or bulbs and others use LED bulbs (National Psoriasis Foundation, 1996-2022c).

**Urticaria Pigmentosa:** The most common cutaneous mastocytosis (a disorder characterized by mast cell accumulation, commonly in the skin, bone marrow, GI tract, liver, spleen, and lymphatic tissues) in children, and it can form in adults as well. Unlike adult forms of mastocytosis, there is rarely any internal organ involvement in urticaria pigmentosa. Symptoms include small, monomorphic tan to brown macule sort papules distributed mostly on the trunk and classically spares the central face, palms and soles. Some lesions may blister after stroking the skin. Systemic symptoms can occur such as pruritus, flushing, abdominal pain, diarrhea, palpitations, dizziness, and syncope (Macri & Cook, 2021).

**Vitiligo:** Causes white patches on your skin. It can also affect your eyes, mouth, and nose. It occurs when the cells that give your skin its color are destroyed. The reason for the cells being destroyed are not known. It is more common in people with autoimmune diseases, and it might run in families. It usually starts before age 40. The white patches are more common where your skin is exposed to the sun and in some cases, the patches spread. Vitiligo may cause hair loss to premature graying. Treatments for vitiligo include medicines, light therapy, and surgery (U.S. National Library of Medicine, 2012b).

## **VI. BACKGROUND**

The first-line treatment options for a variety of skin conditions and diseases include topical medications, like potent topical corticosteroids, topical fluorouracil, topical imiquimod, and other topical ointments and therapies used to treat conditions such as actinic keratosis, alopecia areata, cutaneous T-cell lymphoma, eosinophilic folliculitis, graft versus host disease, granuloma annulare, hidradenitis, lichen planus, lymphomatoid papulosis, necrobiosis lipoidica, palmoplantar pustulosis, pityriasis, prurigo nodularis, and scleroderma (Brodell, 2023; Berman, 2023; Brunasso & Massone, 2023; Feldman, 2023; Hoppe, 2023; Ingram, 2023; Messenger, 2023; Wanat et al, 2023; Zeiser, 2023; Musiek, 2022; Rajendran et al, 2022; Watsky, 2022; Goldsten et al, 2021; Jacobe, 2020).

There are also numerous types of light (phototherapy) and laser treatments available to treat a wide range of skin conditions.

Phototherapy is a well-established and effective treatment modality for several dermatologic conditions. This therapy involves targeted administration of non-ionizing radiation to affected areas of the skin with ultraviolet light, commonly including ultraviolet A (UVA), ultraviolet A-1 (UVA-1), UVA spectrum with a psoralen sensitizer (PUVA), and both broadband and narrowband ultraviolet B (UVB) (Rathod et al, 2023; Feldman, 2022). The controlled delivery of UV light can be performed with both laser and nonlaser devices. The UV radiation penetrates the skin and is absorbed by skin chromophores like nuclear deoxyribonucleic acid (DNA) and other UV-absorbing compounds, which then induce a cascade of events which can lead to a variety of therapeutic effects, including cell cycle arrest, apoptosis, or the release of proinflammatory and immunomodulatory cells (Feldman, 2022).

 <b>JOHNS HOPKINS</b> HEALTH PLANS	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS16.02
	<i>Subject</i> <b>Treatment for Skin Conditions</b>	<i>Effective Date</i>	08/21/2023
		<i>Approval Date</i>	05/16/2023
		<i>Supersedes Date</i>	11/01/2022
		<i>Page</i>	13 of 25

The mechanism of action and therapeutic effects of phototherapy largely depend on the type of treatment used. For example, when UVB light is absorbed, it acts on cytoplasm and cell membrane components and catalyzes a variety of therapeutic responses, such as anti-inflammatory immunosuppression, release of histamine and basophils from mast cells, and apoptosis-mediated decrease in skin cell proliferation (Rathod et al, 2023; Feldman, 2022). These therapeutic benefits as well as others have established UVB phototherapy as an effective treatment modality in skin conditions such as psoriasis, eczema, cutaneous T-cell lymphoma, and vitiligo (Feldman, 2023; Berger, 2023; Hoppe, 2023; Grimes, 2022).

UVA rays penetrate deeper into the skin than UVB radiation and thus UVA phototherapy is particularly effective in treating diseases of the dermis. UVA phototherapy has a variety of therapeutic properties including tissue remodeling, anti-inflammation immunomodulation, and apoptosis induction (Vieyra-Garcia, 2021) and is a clinically useful therapy for skin conditions such as scleroderma, psoriasis, eczema, granuloma annulare, urticaria pigmentosa, and vitiligo (Brodell, 2021; Berger, 2023; Rajendran et al, 2023; Krutmann et al, 2021).

Psoralens plus ultraviolet A (PUVA) photochemotherapy combines the administration of psoralens with exposure to ultraviolet A radiation (UVA) (Richard, 2022). Psoralens are phototoxic plant-derived compounds that induce temporary sensitivity of the skin to UVA radiation by absorbing light photons in the cell and causing a photochemical reaction that alters DNA function and other cell components (Richard, 2022). With the addition of UVA radiation, psoralen is activated and exerts a therapeutic effect through a variety of mechanisms, including DNA crosslinking, DNA replication inhibition, inhibition of cell proliferation, immunosuppression, and melanogenesis (Rathod, 2023; Richard, 2022). PUVA has shown to be an effective treatment for dermatologic conditions including cutaneous T-cell lymphoma, eosinophilic folliculitis, eczema, vitiligo, and psoriasis (Rathod, 2023; Rajendran, 2023; Richard, 2022).

There are also many other laser devices used for targeted phototherapy in the treatment of skin conditions utilizing varying wavelengths, pulse duration, and energy levels. One of the most common lasers used in dermatology is the excimer laser which operates in the UV wavelength range between 193 and 351 nm (Feldman, 2022). This laser uses excited dimers (which are a combination of a noble gas like argon/krypton/xenon as well as a reactive halogen gas like fluoride or chloride) to deliver 308-nm light and facilitate delivery of high doses of UV to localized areas of the skin (Krenitksy et al, 2020; Colt, 2022). This creates UV radiation that breaks molecular chemical bonds but remains relatively stable thermally (Colt, 2022). The most common type of excimer laser in the dermatologic setting is the 308 nm xenon-chloride laser (Feldman, 2022). Excimer lasers are used to treat skin conditions such as vitiligo and psoriasis (Grimes, 2022; Feldman, 2023).

Fractional ablative lasers work by creating zones of ablation at variable depths of the skin and subsequently inducing wound healing and collagen remodeling (Waibel et al, 2013). This treatment both thins the epidermis and heats the underlying dermis. As the epidermis heals and regrows, the skin texture improves (Mayo Clinic, 2023). The two main types of ablative lasers used in dermatology are carbon dioxide (fCO<sub>2</sub> 10,600 nm) and erbium:yttrium aluminum garnet (Er:YAG) 2940 nm ablative laser systems. Mechanistically, fractional laser treatment exerts a variety of changes at the molecular level, including fibroblast apoptosis, upregulation of matrix metalloproteinases, and downregulation of transforming growth factors. Fractional ablative laser fenestration is an effective treatment for a variety of skin conditions including hypertrophic burn scars (Hultman et al, 2022).

## VII. CODING DISCLAIMER

CPT<sup>®</sup> Copyright 2023 American Medical Association. All rights reserved. CPT is a registered trademark of the American Medical Association.

*Note:* The following CPT/HCPCS codes are included below for informational purposes and may not be all inclusive. Inclusion or exclusion of a CPT/HCPCS code(s) below does not signify or imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by the member's specific benefit plan

	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS16.02	
		<i>Effective Date</i>	08/21/2023	
		<i>Approval Date</i>	05/16/2023	
	<i>Subject</i>	<b>Treatment for Skin Conditions</b>	<i>Supersedes Date</i>	11/01/2022
			<i>Page</i>	14 of 25

document and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee of payment. Other policies and coverage determination guidelines may apply.

*Note:* All inpatient admissions require preauthorization.

<i>Adherence to the provision in this policy may be monitored and addressed through post payment data analysis and/or medical review audits</i>
Advantage MD: Regulatory guidance supersedes JHHP Medical Policies. If there are no statutes, regulations, NCDs, LCDs, or LCAs, or other CMS guidelines, apply the Medical Policy criteria.
Employer Health Programs (EHP): Specific Summary Plan Descriptions (SPDs) supersedes JHHP Medical Policy. If there are no criteria in the SPD, apply the Medical Policy criteria.
Johns Hopkins Health Plan of Virginia, Inc. (JHHPVA): Regulatory guidance supersedes JHHP Medical Policies. If there are no statutes, regulations, NCDs, LCDs, or LCAs, or other CMS guidelines, apply the Medical Policy criteria.
Priority Partners (PPMCO): Regulatory guidance supersedes JHHP Medical Policy. If there are no criteria in COMAR regulations, or other State guidelines, apply the Medical Policy criteria.
US Family Health Plan (USFHP): Regulatory guidance supersedes JHHP Medical Policy. If there are no TRICARE policies, or other regulatory guidelines, apply the Medical Policy criteria.

## VIII. CODING INFORMATION

<b>CPT® CODES ARE FOR INFORMATIONAL PURPOSES ONLY</b>	
<b>CPT® CODES</b>	<b>DESCRIPTION</b>
10040	Acne surgery (eg, marsupialization, opening or removal of multiple milia, comedones, cysts, pustules)
11300	Shaving of epidermal or dermal lesion, single lesion, trunk, arms or legs; lesion diameter 0.5 cm or less
11301	Shaving of epidermal or dermal lesion, single lesion, trunk, arms or legs; lesion diameter 0.6 to 1.0 cm
11302	Shaving of epidermal or dermal lesion, single lesion, trunk, arms or legs; lesion diameter 1.1 to 2.0 cm
11303	Shaving of epidermal or dermal lesion, single lesion, trunk, arms or legs; lesion diameter over 2.0 cm
11305	Shaving of epidermal or dermal lesion, single lesion, scalp, neck, hands, feet, genitalia; lesion diameter 0.5 cm or less
11306	Shaving of epidermal or dermal lesion, single lesion, scalp, neck, hands, feet, genitalia; lesion diameter 0.6 to 1.0 cm
11307	Shaving of epidermal or dermal lesion, single lesion, scalp, neck, hands, feet, genitalia; lesion diameter 1.1 to 2.0 cm
11308	Shaving of epidermal or dermal lesion, single lesion, scalp, neck, hands, feet, genitalia; lesion diameter over 2.0 cm
11310	Shaving of epidermal or dermal lesion, single lesion, face, ears, eyelids, nose, lips, mucous membrane; lesion diameter 0.5 cm or less
11311	Shaving of epidermal or dermal lesion, single lesion, face, ears, eyelids, nose, lips, mucous membrane; lesion diameter 0.6 to 1.0 cm

	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS16.02	
		<i>Effective Date</i>	08/21/2023	
		<i>Approval Date</i>	05/16/2023	
	<i>Subject</i>	<b>Treatment for Skin Conditions</b>	<i>Supersedes Date</i>	11/01/2022
			<i>Page</i>	15 of 25

11312	Shaving of epidermal or dermal lesion, single lesion, face, ears, eyelids, nose, lips, mucous membrane; lesion diameter 1.1 to 2.0 cm
11313	Shaving of epidermal or dermal lesion, single lesion, face, ears, eyelids, nose, lips, mucous membrane; lesion diameter over 2.0 cm
11400	Excision, benign lesion including margins, except skin tag (unless listed elsewhere), trunk, arms or legs; excised diameter 0.5 cm or less
11401	Excision, benign lesion including margins, except skin tag (unless listed elsewhere), trunk, arms or legs; excised diameter 0.6 to 1.0 cm
11402	Excision, benign lesion including margins, except skin tag (unless listed elsewhere), trunk, arms or legs; excised diameter 1.1 to 2.0 cm
11403	Excision, benign lesion including margins, except skin tag (unless listed elsewhere), trunk, arms or legs; excised diameter 2.1 to 3.0 cm
11404	Excision, benign lesion including margins, except skin tag (unless listed elsewhere), trunk, arms or legs; excised diameter 3.1 to 4.0 cm
11406	Excision, benign lesion including margins, except skin tag (unless listed elsewhere), trunk, arms or legs; excised diameter over 4.0 cm
11420	Excision, benign lesion including margins, except skin tag (unless listed elsewhere), scalp, neck, hands, feet, genitalia; excised diameter 0.5 cm or less
11421	Excision, benign lesion including margins, except skin tag (unless listed elsewhere), scalp, neck, hands, feet, genitalia; excised diameter 0.6 to 1.0 cm
11422	Excision, benign lesion including margins, except skin tag (unless listed elsewhere), scalp, neck, hands, feet, genitalia; excised diameter 1.1 to 2.0 cm
11423	Excision, benign lesion including margins, except skin tag (unless listed elsewhere), scalp, neck, hands, feet, genitalia; excised diameter 2.1 to 3.0 cm
11424	Excision, benign lesion including margins, except skin tag (unless listed elsewhere), scalp, neck, hands, feet, genitalia; excised diameter 3.1 to 4.0 cm
11426	Excision, benign lesion including margins, except skin tag (unless listed elsewhere), scalp, neck, hands, feet, genitalia; excised diameter over 4.0 cm
11440	Excision, other benign lesion including margins, except skin tag (unless listed elsewhere), face, ears, eyelids, nose, lips, mucous membrane; excised diameter 0.5 cm or less
11441	Excision, other benign lesion including margins, except skin tag (unless listed elsewhere), face, ears, eyelids, nose, lips, mucous membrane; excised diameter 0.6 to 1.0 cm
11442	Excision, other benign lesion including margins, except skin tag (unless listed elsewhere), face, ears, eyelids, nose, lips, mucous membrane; excised diameter 1.1 to 2.0 cm
11443	Excision, other benign lesion including margins, except skin tag (unless listed elsewhere), face, ears, eyelids, nose, lips, mucous membrane; excised diameter 2.1 to 3.0 cm
11444	Excision, other benign lesion including margins, except skin tag (unless listed elsewhere), face, ears, eyelids, nose, lips, mucous membrane; excised diameter 3.1 to 4.0 cm

	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS16.02	
		<i>Effective Date</i>	08/21/2023	
		<i>Approval Date</i>	05/16/2023	
	<i>Subject</i>	<b>Treatment for Skin Conditions</b>	<i>Supersedes Date</i>	11/01/2022
			<i>Page</i>	16 of 25

11446	Excision, other benign lesion including margins, except skin tag (unless listed elsewhere), face, ears, eyelids, nose, lips, mucous membrane; excised diameter over 4.0 cm
15780	Dermabrasion; total face (eg, for acne scarring, fine wrinkling, rhytids, general keratosis)
15781	Dermabrasion; segmental, face
15782	Dermabrasion; regional, other than face
15783	Dermabrasion; superficial, any site (eg, tattoo removal)
15786	Abrasion; single lesion (eg, keratosis, scar)
15787	Abrasion; each additional 4 lesions or less (List separately in addition to code for primary procedure)
15788	Chemical peel, facial; epidermal
15789	Chemical peel, facial; dermal
15792	Chemical peel, nonfacial; epidermal
15793	Chemical peel, nonfacial; dermal
17000	Destruction (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), premalignant lesions (eg, actinic keratoses); first lesion
17003	Destruction (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), premalignant lesions (eg, actinic keratoses); second through 14 lesions, each (List separately in addition to code for first lesion)
17004	Destruction (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), premalignant lesions (eg, actinic keratoses), 15 or more lesions
17106	Destruction of cutaneous vascular proliferative lesions (eg, laser technique); less than 10 sq cm
17107	Destruction of cutaneous vascular proliferative lesions (eg, laser technique); 10.0 to 50.0 sq cm
17108	Destruction of cutaneous vascular proliferative lesions (eg, laser technique); over 50.0 sq cm
17110	Destruction (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), of benign lesions other than skin tags or cutaneous vascular proliferative lesions; up to 14 lesions
17111	Destruction (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), of benign lesions other than skin tags or cutaneous vascular proliferative lesions; 15 or more lesions
17340	Cryotherapy (CO2 slush, liquid N2) for acne
17360	Chemical exfoliation for acne (eg, acne paste, acid)
96567	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
96573	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
96574	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



	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS16.02	
		<i>Effective Date</i>	08/21/2023	
		<i>Approval Date</i>	05/16/2023	
	<i>Subject</i>	<b>Treatment for Skin Conditions</b>	<i>Supersedes Date</i>	11/01/2022
			<i>Page</i>	17 of 25

96900	Actinotherapy (ultraviolet light)
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 photo responsive 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

#### HCPCS CODES ARE FOR INFORMATIONAL PURPOSES ONLY

HCPCS CODES	DESCRIPTION
A4633	Replacement bulb/lamp for ultraviolet light therapy system
E0691	Ultraviolet light therapy system panel, includes bulbs/lamps, timer and eye protection, treatment area 2 sq ft or less
E0692	Ultraviolet light therapy system panel, includes bulbs/lamps, timer and eye protection, 4 ft panel
E0693	Ultraviolet light therapy system panel, includes bulbs/lamps, timer and eye protection, 6 ft panel
E0694	Ultraviolet multidirectional light therapy system in 6 ft cabinet, includes bulbs/lamps, timer, and eye protection.

#### ICD 10 CODES ARE FOR INFORMATIONAL PURPOSES ONLY

ICD10 CODES	DESCRIPTION
C84.0-C84.09	Mycosis Fungoides
C86.6	Primary cutaneous CD30-positive T-cell proliferations
L20-L30.9	Dermatitis and eczema
L40.0-L40.9	Psoriasis
L41.0-L41.1	Pityriasis Lichenoides
L41.3-L41.9	Parapsoriasis
L42	Pityriasis rosea
L43.0-L43.9	Lichen planus
L44.0	Pityriasis rubra pilaris
L50.3-L50.9	Urticaria pigmentosa

	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS16.02	
		<i>Effective Date</i>	08/21/2023	
		<i>Approval Date</i>	05/16/2023	
	<i>Subject</i>	<b>Treatment for Skin Conditions</b>	<i>Supersedes Date</i>	11/01/2022
			<i>Page</i>	18 of 25

L56.0-L56.9; Use Addtl Code W89- X32	Other acute skin changes due to ultraviolet radiation
L63.0 - L63.8	Alopecia Areata
L70	Acne
L73.0-L73.9	Eosinophilic Folliculitis
L80	Vitiligo
L91.0	Hypertrophic scar
L92.0- L92.9	Granuloma annulare
L94.0-L94.9	Other localized connective tissue disorders
M34.0- M34.9	Systemic sclerosis [scleroderma]
Q82.2	Congenital cutaneous mastocytosis

## IX. REFERENCE STATEMENT

Analyses of the scientific and clinical references cited below were conducted and utilized by the Johns Hopkins Health Plans (JHHP) Medical Policy Team during the development and implementation of this medical policy. The Medical Policy Team will continue to monitor and review any newly published clinical evidence and revise the policy and adjust the references below accordingly if deemed necessary.

## X. REFERENCES

- Aetna. (2022, August 2). *Actinic Keratoses Treatments*. Medical Clinical Policy Bulletins: 0567. <http://www.aetna.com/>
- Aetna. (2022, September 20). *Alopecia Areata*. Medical Clinical Policy Bulletins: 0423. <https://www.aetna.com/>
- Aetna. (2022, June 17). *Carbon Dioxide Laser for Actinic Lesions and Other Selected Indications*. Medical Clinical Policy Bulletins: 0427. <https://www.aetna.com/>
- Aetna. (2023, March 6). *Cosmetic Surgery and Procedures*. Medical Clinical Policy Bulletins: 0031. <http://www.aetna.com/>
- Aetna. (2023, April 26). *Dermabrasion, Chemical Peels, and Acne Surgery*. Medical Clinical Policy Bulletins: 0251. <http://www.aetna.com/>
- Aetna. (2023, March 29). *Extracorporeal Photochemotherapy (Photopheresis)*. Medical Clinical Policy Bulletins: 0241. <https://www.aetna.com/>
- Aetna. (2022, June 21). *Hypertrophic Scars and Keloids*. Medical Clinical Policy Bulletins: 0389. [https://www.aetna.com](https://www.aetna.com/)
- Aetna. (2022, August 8). *Laser Treatment for Psoriasis and Other Selected Skin Conditions*. Medical Clinical Policy Bulletins: 0577. <http://www.aetna.com/>

 <b>Johns Hopkins Health Plans</b> <b>Medical Policy Manual</b> <b>Medical Policy</b>	<b>Johns Hopkins Health Plans</b> <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS16.02
	<i>Subject</i> <b>Treatment for Skin Conditions</b>	<i>Effective Date</i>	08/21/2023
		<i>Approval Date</i>	05/16/2023
		<i>Supersedes Date</i>	11/01/2022
		<i>Page</i>	19 of 25

Aetna. (2023, April 17). *Phototherapy and Photochemotherapy (PUVA) for Skin Conditions*. Medical Clinical Policy Bulletins: 0205. <http://www.aetna.com/>

Aetna. (2022, August 8). *Pulsed Dye Laser Treatment*. Medical Clinical Policy Bulletins: 0559. <http://www.aetna.com/>

Aetna. (2022, June 14). *Vitiligo*. Medical Clinical Policy Bulletins: 0422. <https://www.aetna.com/>

American Academy of Dermatology Association. (2023a). Acne: Overview. <https://www.aad.org/>

American Academy of Dermatology Association. (2023b). Actinic Keratosis: Diagnosis and Treatment. <https://www.aad.org/>

American Academy of Dermatology Association. (2023c). Types of Psoriasis: Can You Have More Than One? <https://www.aad.org/>

American Academy of Dermatology Work Group, Menter, A., Korman, N.J., Elmets, C.A., Feldman, S.R., Gelfand, J.M., Gordon, K., B., Gottlieb, A., Koo, J.Y., Lebwohl, M., Leonardi, C.L., Lim, H.W., Van Voorhees, A.S., Beutner, K.R., Ryan, C., & Bhushan, R. (2011). Guidelines of care for the management of psoriasis and psoriatic arthritis: section 6. Guidelines of care for the treatment of psoriasis and psoriatic arthritis: case-based presentations and evidence-based conclusions. *Journal of the American Academy of Dermatology*, 65(1), 137-174. <https://doi.org/>

American Osteopathic College of Dermatology. (2020). Phototherapy: PUVA. [https://www.aocd.org](https://www.aocd.org/)

American Psychological Association. (2023). APA Dictionary of Psychology. <https://dictionary.apa.org/>

Athavale, S.M., Ries, W.R., Carniol, P.J. (2011). Laser treatment of cutaneous vascular tumors and malformations. *Facial plastic surgery clinics of North America*, 19(2), 303-312. <https://doi.org/>

Beani, J.C., Jeanmougin, M. (2010). Narrow-band UVB therapy in psoriasis vulgaris: good practice guideline and recommendations of the French Society of Photodermatology. *Annales de dermatologie et de venerologie* [Article translated from French], 137(1), 21-31. <https://doi.org/>

Benedetti, J. (2022). Granuloma Annulare. Merck Manual Professional Version. <https://www.merckmanuals.com/>

Berger, T.G. (2023). Evaluation and management of severe refractory dermatitis (eczema) in adults. *UpToDate*. Retrieved: April 2023 from <https://www.uptodate.com/>

Berman, B. (2023). Treatment of actinic keratosis. *UpToDate*. Retrieved April 2023 from <https://www.uptodate.com/>

Bhalla, M., Thami, G.P. (2006). Microdermabrasion: Reappraisal and brief review of literature. *Dermatologic surgery: official publication for American Society for Dermatologic Surgery* [et.al], 32(6), 809-814. <https://doi.org/>

Bharti, G., Kirman, C., Molnar, J., Liess, B., Harmon, C., Prather, C., Caputy, G. (2018). Dermabrasion Treatment and Management. *Medscape*. <https://emedicine.medscape.com/>

Bhutani, T., and Liao, W. (2010). A Practical Approach to Home UVB Phototherapy for the Treatment of Generalized Psoriasis. *Practical dermatology*, 7(2), 31-35. <http://www.ncbi.nlm.nih.gov/>

Brodell, R.T. (2021). Granuloma annular: Management. *UpToDate*. Retrieved April 2023 from <https://www.uptodate.com/>

Brunasso, G., Massone, C. (2022). Palmoplantar pustulosis: Treatment. *UpToDate*. Retrieved April 2023 from <https://www.uptodate.com/>

 <b>JOHNS HOPKINS</b> HEALTH PLANS	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i> CMS16.02
	<i>Subject</i> <b>Treatment for Skin Conditions</b>	<i>Effective Date</i> 08/21/2023
		<i>Approval Date</i> 05/16/2023
		<i>Supersedes Date</i> 11/01/2022
		<i>Page</i> 20 of 25

Burfield, L., Rutter, K.J., Thompson, B., Marjanovic, E.J., Neale, R.E., Rhodes, L.E. (2023). Systematic review of the prevalence and incidence of the photodermatoses with meta-analysis of the prevalence of polymorphic light eruption. *J Eur Acad Dermatol Venereol*, 37(3):511-520. <https://doi.org/>

Channual, J., Choi, B., Osann, K., Pattanachinda, D., Lotfi, J., Kelly, K. M. (2008). Vascular effects of photodynamic and pulsed dye laser therapy protocols. *Lasers in surgery and medicine*, 40(9), 644-650. <https://doi.org/>

Cho, A., Jantschitsch, C., Knobler, R. (2018). Extracorporeal Photopheresis-An Overview. *Front Med (Lausanne)*, 5, 236. <https://doi.org/>

Cigna. (2022, June 15). *Dermabrasion and Chemical Peels*. Medical Policy Number 0505. <https://static.cigna.com/>

Cigna.(2022, July 15). *Phototherapy, Photochemotherapy and Excimer Laser Therapy for Dermatologic Conditions*. Medical Policy Number 0031. <https://static.cigna.com/>

Cigna.(2022, June 15). *Rosacea Procedures*. Medical Policy Number 0482. <https://static.cigna.com/>

Cigna. (2023, May 15). *Treatment of Cutaneous and/or Deep Tissue Hemangioma, Port Wine Stain and Other Vascular Lesions*. Medical Policy Number 0313. <https://static.cigna.com/>

Das, S. (2022). Lichen Planus. Merck Manual Professional Version. <https://www.merckmanuals.com/>

Das, S. (2022). Pityriasis Rosea. Merck Manual Consumer Version. <https://www.merckmanuals.com/>

de Berker, D., McGregor, J. M., Mohd Mustapa, M. F., Exton, L. S., & Hughes, B. R. (2017). British Association of Dermatologists' guidelines for the care of patients with actinic keratosis 2017. *The British Journal of Dermatology*, 176(1), 20–43. <https://doi.org/>

Del Toro, D., Dehia, R., & Tollefson, T.T. (2016). Advances in scar management: prevention and management of hypertrophic scars and keloids. *Current Opinion in Otolaryngology & Head and Neck Surgery*, 24(4), 322-329. <https://doi.org/>

Dianzani, C., Conforti, C., Guiffrida, R., Cornell, P., di Meo, N., Farinazzo, E., Magaton Rizzi, G., and Zalaudek, I. (2020). Current therapies for actinic keratosis. *International Journal of Dermatology*, 59, 677-684. <https://doi.org/>

Eisen, D.B., Asgari, M.M., Bennett, D.D, Connolly, S.M., Dellavalle, R.P., Freeman, E.E., Goldenberg, G., Leffell, D.J., Peschin, S., Sligh, J.E., Wu, P.A., Frazer-Green, L., Malik, S., and Schlesinger, T.E. (2021). Guidelines of care for the management of actinic keratosis. *Journal of the American Academy of Dermatology*, 85(4), e209-e233. <https://doi.org/>

Eisen, D.B., Dellavale, R.P., Frazer-Green, L., Schlesinger, T.E., Shive, M., & Wu, P.A. (2022). Focused update: Guidelines of care for the management of actinic keratosis. *Journal of the American Academy of Dermatology*, 87(2), 373-374.e5. <https://doi.org/>

Elhag, S., Rivas, N., Tejovath, S., Mustaffa, N., Deonarine, N., Abdullah Hashmi, M., Yerneni, S., Hamid, P. (2022). Chronic Kidney Disease-Associated Pruritus: A Glance at Novel and Lesser-Known Treatments. *Cureus*, 14(1), e21127. <https://doi.org/>

Elmets, C.A., Lim, H.W., Stoff, B., Connor, C., Cordero, K.M., Lebwohl, M., et al (2019). Joint American Academy of Dermatology-National Psoriasis Foundation guidelines of care for the management and treatment of psoriasis with phototherapy. *J Am Acad Dermatol*, 81(3), 775-804. <https://doi.org/>

 <b>JOHNS HOPKINS</b> HEALTH PLANS	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS16.02
		<i>Effective Date</i>	08/21/2023
		<i>Approval Date</i>	05/16/2023
	<i>Subject</i> <b>Treatment for Skin Conditions</b>	<i>Supersedes Date</i>	11/01/2022
		<i>Page</i>	21 of 25

- Erceq, A., de Jong, E.M., van der Kerkhof, P.C., & Seyger, M.M. (2013). The efficacy of pulsed dye laser treatment for inflammatory skin diseases: a systemic review. *Journal of the American Academy of Dermatology*, 69(4), 609-615. e8. <https://doi.org/>
- Feily, A., & Mehraban, S. (2015). Treatment modalities of necrobiosis lipoidica: A concise systematic review. *Dermatology Reports*, 7(2), 5749. <https://doi.org/>
- Feldman, S.R. (2023). Treatment of psoriasis in adults. *UpToDate*. Retrieved April 2023 from <https://www.uptodate.com/>
- Feldman, S.R.(2022). Targeted phototherapy. *UpToDate*. Retrieved April 2023 from <https://www.uptodate.com/>
- Food and Drug Administration (FDA). (2011). Powered Laser Surgical Instruments, 510(K). Number K103654. <http://www.accessdata.fda.gov>
- Food and Drug Administration (FDA). (2004). 510(K) Summary: IRIDEX Corporation, VariLite Laser Systems. <http://www.accessdata.fda.gov>
- Fukuyama, M., Ito, T., Ohyama, M. (2022). Alopecia areata: Current understanding of the pathophysiology and update on therapeutic approaches, featuring the Japanese Dermatological Association guidelines. *J Dermatol*, 49(1), 19-36. <https://doi.org/>
- Gokemir, G., Kivanc-Altunay, I., & Koslu, A. (2005). Narrow-band ultraviolet B phototherapy in patients with psoriasis: for which types of psoriasis is it more effective? *The Journal of Dermatology*, 32(6), 436-41. <https://doi.org/>
- Goldstein, B.G., Goldstein, A.O. (2021). Lichen planus. *UpToDate*. Retrieved April 2023 from <https://www.uptodate.com/>
- Graber, E. (2022). Acne Vulgaris: Management to Moderate Severe Acne. *UpToDate*. Retrieved April 2023 from <https://www.uptodate.com/>
- Graber, E. (2023). Acne Vulgaris: Overview of Management. *UpToDate*. Retrieved April 2023, from <https://www.uptodate.com/>
- Grimes, P.E. (2023). Vitiligo: Management and prognosis. *UpToDate*. Retrieved April 2023 from <https://www.uptodate.com/>
- Hayes, Inc. (2023). Fractional Laser Treatment for Burns and Traumatic Scars for Functional Improvement. Evidence Analysis Research Brief. <https://evidence.hayesinc.com/>
- Hayes, Inc. (2021). Fractional Laser Treatment for Burns and Traumatic Scars for Functional Improvement. Health Technology Assessment. [Archived March 26, 2022]. <https://evidence.hayesinc.com/>
- Hayes, Inc. (2020). Home Ultraviolet B Phototherapy for Vitiligo. Evidence Analysis Research Brief. [Archived August 23, 2021]. <https://evidence.hayesinc.com/>
- Hayes, Inc. (2016). Pulsed Dye Laser Therapy for Cutaneous Vascular Lesions. Health Technology Assessment. [Archived January 31, 2018]. <https://evidence.hayesinc.com/>
- Hayes, Inc. (2015). Photodynamic Therapy for Actinic Keratosis and Squamous Cell Carcinoma In Situ. Health Technology Assessment. [Archived December 4, 2015]. <http://www.hayesinc.com>
- Hayes, Inc. (2013). Phototherapy for Acne Vulgaris. Health Technology Assessment. [Archived March 13, 2014]. <https://evidence.hayesinc.com/>

	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS16.02	
		<i>Effective Date</i>	08/21/2023	
		<i>Approval Date</i>	05/16/2023	
	<i>Subject</i>	<b>Treatment for Skin Conditions</b>	<i>Supersedes Date</i>	11/01/2022
			<i>Page</i>	22 of 25

Heppt, M. V., Leiter, U., Steeb, T., Amaral, T., Bauer, A., Becker, J. C., Breitbart, E., Breuninger, H., Diepgen, T., Dirschka, T., Eigentler, T., Flaig, M., Follmann, M., Fritz, K., Greinert, R., Gutzmer, R., Hillen, U., Ihrler, S., John, S. M., Kölbl, O., ... Garbe, C. (2020). S3 guideline for actinic keratosis and cutaneous squamous cell carcinoma - short version, part 1: diagnosis, interventions for actinic keratoses, care structures and quality-of-care indicators. *Journal der Deutschen Dermatologischen Gesellschaft = Journal of the German Society of Dermatology*: JDDG, 18(3), 275–294. <https://doi.org/>

Honigsmann, H. (2023). UVB therapy (broadband and narrowband). *UpToDate*. Retrieved April 2023, from <https://www.uptodate.com/>

Hoppe, R.T. & Kim, Y.H. (2023). Treatment of early stage (IA to IIA) mycosis fungoides. *UpToDate*. Retrieved: April 2023 from <https://www.uptodate.com/>

Ingram, J.R. (2022). Hidradenitis suppurativa: Management. *UpToDate*. Retrieved April 2023 from <https://www.uptodate.com/>

Jacobe, H. (2020). Morphea (localized scleroderma) in adults: Management. *UpToDate*. Retrieved April 2023 from <https://www.uptodate.com/>

Johns Hopkins Medicine. Platelet-Rich Plasma (PRP) Injections. Accessed June 2023 from <https://www.hopkinsmedicine.org/>

Kadin, M.E. (2022). Lymphomatoid papulosis. *UpToDate*. Retrieved April 2023 from <https://www.uptodate.com/>

Keri, J.E.(2022) Acne. Merck Manual Professional Version. <https://www.merckmanuals.com/>

Keri, J.E. (2022). Hidradenitis Suppurativa. Merck Manual Consumer Version. <https://www.merckmanuals.com/>

Krutmann, J., Morita, A. (2021). UVA1 phototherapy. *UpToDate*. Retrieved April 2023 from <https://www.uptodate.com/>

Kumarasinghe, S. P. W., Pandya, A., Chandran, V., Rodrigues, M., Dlova, N. C., Kang, H. Y., Ramam, M., Dayrit, J. F., Goh, B. K., & Parsad, D. (2019). A global consensus statement on ashy dermatosis, erythema dyschromicum perstans, lichen planus pigmentosus, idiopathic eruptive macular pigmentation, and Riehl's melanosis. *International Journal of Dermatology*, 58(3), 263–272. <https://doi.org/>

Leung, N., Oliveira, M., Selim, M. A., McKinley-Grant, L., & Lesesky, E. (2018). Erythema dyschromicum perstans: A case report and systematic review of histologic presentation and treatment. *International Journal of Women's Dermatology*, 4(4), 216–222. <https://doi.org/>

Li, Y., Hao, J., Hu, Z., Yang, Y.G., Zhou, Q., Sun, L., Wu, J. (2022). Current status of clinical trials assessing mesenchymal stem cell therapy for graft versus host disease: a systematic review. *Stem Cell Res Ther*, 13(1), 93. <https://doi.org/>

Macri, A., Cook, C. (2022). Urticaria Pigmentosa. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing. Retrieved: April 2023 from <https://www.ncbi.nlm.nih.gov/>

Martin P. & Leonard J.P. (2022). Cutaneous T-cell Lymphomas. Merck Manual Consumer & Professional Version. <https://www.merckmanuals.com/>

Mayo Clinic. (2022). Actinic Keratosis Treatment and Drugs. <https://www.mayoclinic.org/>

Maytin, E., Warren, C., Corona, R. (2022). Photodynamic Therapy. *UpToDate*. Retrieved: April 2023, from <https://www.uptodate.com/>

Messenger, A.G. (2023). Alopecia areata: Management. *UpToDate*. Retrieved April 2023 from <https://www.uptodate.com/>

 <b>JOHNS HOPKINS</b> HEALTH PLANS	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i> CMS16.02
	<i>Subject</i> <b>Treatment for Skin Conditions</b>	<i>Effective Date</i> 08/21/2023
		<i>Approval Date</i> 05/16/2023
		<i>Supersedes Date</i> 11/01/2022
		<i>Page</i> 23 of 25

Musiek, A. (2022). Pityriasis lichenoides chronica. *UpToDate*. Retrieved April 2023 from <https://www.uptodate.com/>

Nashan, D., Meiss, F., & Muller, M. (2013). Therapeutic strategies for actinic keratoses--a systematic review. *European journal of dermatology: EJD*, 23(1), 14-32. <https://doi.org/>

National Cancer Institute (NCI). (2020). Laser Therapy. Dictionary of Cancer Terms. <https://www.cancer.gov/>

National Eczema Association (2002-2022). An Overview of the Different Types of Eczema. <https://nationaleczema.org/>

National Institute of Arthritis and Musculoskeletal and Skin Diseases. (2020). Overview of Acne. <https://www.niams.nih.gov/>

National Psoriasis Foundation. (1996-2021a). Phototherapy. <https://www.psoriasis.org>

National Psoriasis Foundation. (1996-2022b). Psoriasis. <https://www.psoriasis.org>

Nevares, A.M. (2022). Systemic Sclerosis. Merck Manual Consumer Version. <https://www.merckmanuals.com/>

NIH Genetic and Rare Diseases Information Center (2023). Eosinophilic pustular folliculitis. <https://rarediseases.info.nih.gov/>

NIH Genetic and Rare Diseases Information Center (2023). Lymphomatoid papulosis. <https://rarediseases.info.nih.gov/>

NIH Genetic and Rare Diseases Information Center (2023). Necrobiosis lipoidica. <https://rarediseases.info.nih.gov/>

NIH Genetic and Rare Diseases Information Center (2023). Pityriasis lichenoides. <https://rarediseases.info.nih.gov/>

NIH Genetic and Rare Diseases Information Center (2023). Pityriasis rubra pilaris. <https://rarediseases.info.nih.gov/>

NIH Genetic and Rare Diseases Information Center (2023). Prurigo nodularis. <https://rarediseases.info.nih.gov/>

NIH Genetic and Rare Diseases Information Center (2023). Pustulosis palmaris et plantaris. <https://rarediseases.info.nih.gov/>

Ogawa, R. (2022). Keloids and hypertrophic scars. *UpToDate*. Retrieved April 2023 from <https://www.uptodate.com/>

Ontario Health (Quality) (2020). Home Narrowband Ultraviolet B Phototherapy for Photoresponsive Skin Conditions: A Health Technology Assessment. *Ontario health technology assessment series*, 20(12), 1-134. <https://www.ncbi.nlm.nih.gov/>

Padilla, R.S. (2023). Epidemiology, natural history, and diagnosis of actinic keratosis. *UpToDate*. Retrieved: April 2023, from <https://www.uptodate.com/>

Post, N.F., Ezekwe, N., Narayan, V.S., Bekkenk, M.W., Van Geel, N., Hamzavi I., Passeron T., Wolkerstorfer A. (2022). The use of lasers in vitiligo, an overview. *J Eur Acad Dermatol Venereol*, 36(6), 779-789. <https://doi.org/>

Rajendran, P. & High, W.A. (2022). HIV-associated eosinophilic folliculitis. *UpToDate*. Retrieved April 2023 from <https://www.uptodate.com/>

Rathod, D.G., Muneer, H., Masood, S. (2023). Phototherapy. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing. Retrieved April 2023 from <https://www.ncbi.nlm.nih.gov/>

Regence Medical Policy. (2022, August 1). *Cosmetic and Reconstructive Surgery*. Policy Number 12. <http://blue.regence.com>

Richard, E. (2022). Psoralen plus ultraviolet A (PUVA) photochemotherapy. *UpToDate*. Retrieved: April 2023, from [https://www.uptodate.com.](https://www.uptodate.com/)

 <b>JOHNS HOPKINS</b> HEALTH PLANS	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i> CMS16.02
		<i>Effective Date</i> 08/21/2023
		<i>Approval Date</i> 05/16/2023
	<i>Subject</i> <b>Treatment for Skin Conditions</b>	<i>Supersedes Date</i> 11/01/2022
		<i>Page</i> 24 of 25

Ruenger, T.M. (2023). Atopic Dermatitis (Eczema). Merck Manual Professional Version. <https://www.merckmanuals.com/>

Saedi, N., Uebelhoer, N. (2022). Management of acne scars. *UpToDate*. Retrieved: April 2023, from <https://www.uptodate.com/>

Spencer, J.M. (2022). Actinic Keratosis. *Medscape*, 1-19. <https://emedicine.medscape.com/>

Strauss, J.S., Krowchuk, D.P., Leyden, J.J., Lucky, A.W., Shalita, A.R., Siegfried, E.C., Thiboutot, D.M., Van Voorhees, A.S., Beutner, K.A., Sieck, C.K., Bhushan, R., & American Academy of Dermatology/American Academy of Dermatology Association (2007). Guidelines of care for acne vulgaris management. *Journal of the American Academy of Dermatology*, 56(4), 651-663. <https://doi.org/>

Tawfik, A.A. (2014). Novel treatment of nail psoriasis using the intense pulsed light: a one-year follow-up study. *Dermatologic surgery: official publication for American Society for Dermatologic Surgery [et al.]*, 40(7), 763-768. <https://doi.org/>

Tefferi, A. (2022). Prognosis and treatment of polycythemia vera and secondary polycythemia. *UpToDate*. Retrieved April 2023 from <https://www.uptodate.com/>

U.S. Food and Drug Administration (FDA). (2017). Ultraviolet Phototherapy Equipment-Medical Ultraviolet Lamps and Products. <https://www.fda.gov/>

U.S. National Library of Medicine. (2022a). *Port-wine stain*. Medline Plus. <https://medlineplus.gov>

U.S. National Library of Medicine. (2022b). *Vitiligo*. Medline Plus. <https://medlineplus.gov>

Vashi, N. & Kundu, R.V. (2022). Acquired hyperpigmentation disorders. *UpToDate*. Retrieved June 2023 from <https://www.uptodate.com/>

Vieyra-Garcia, P.A., Wolf, P. (2021). A deep dive into UV-based phototherapy: Mechanisms of action and emerging molecular targets in inflammation and cancer. *Pharmacol Ther*, 222, 107784. <https://doi.org/>

Wanat, K. & Rosenbach, M. (2023). Necrobiosis lipoidica. *UpToDate*. Retrieved April 2023 from <https://www.uptodate.com/>

Watsky, K. (2022). Prurigo nodularis. *UpToDate*. Retrieved April 2023 from <https://www.uptodate.com/>

Wong, T., Hsu, L., and Liao, W. (2013) Phototherapy in Psoriasis: A Review of Mechanisms of Action. *Journal of Cutaneous Medicine and Surgery*, 17(1), 6-12 <https://doi.org/>

Zaenglein, A.L., Pathy, A.L., Schlosser, B.J., Alikan, A., Baldwin, H.E., Berson, D.S., Bowe, W.P., Graber, E.M., Harper, J.C., Kang, S., Keri, J.E., Leyden, J.J., Reynolds, R.V., Silverberg, N.B., Stein Gold, L.F., Tollefson, M.M., Weiss, J.S., Dolan, N.C., Sagan, A.A., Stern, M., ...Bhushan, R. (2016). Guidelines of care for the management of acne vulgaris. *Journal of the American Academy of Dermatology*, 74(5), 945-73. e33. <https://doi.org/>

Zeiser, R. (2022). Treatment of acute graft-versus-host disease. *UpToDate*. Retrieved April 2023 from <https://www.uptodate.com/>

Zerbinati, N., Protasoni, M., D'Este, E., Mocchi, R., Coricciati, L., Rauso, R., Sbrano, P., Greco, M., Rodighiero, E., and Satolli, F. (2021). Skin vascular lesions: A new therapeutic option with sequential laser-assisted technique. *Dermatologic Therapy*, 34(1), e14573. <https://doi.org/>



 <b>JOHNS HOPKINS</b> HEALTH PLANS	Johns Hopkins Health Plans <b>Medical Policy Manual</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS16.02
	<i>Subject</i> <b>Treatment for Skin Conditions</b>	<i>Effective Date</i>	08/21/2023
		<i>Approval Date</i>	05/16/2023
		<i>Supersedes Date</i>	11/01/2022
		<i>Page</i>	25 of 25

Zhang, P., Wu, M.X.(2018). A clinical review of phototherapy for psoriasis. *Lasers In Medical Science*, 33(1), 173-180. <https://doi.org/>

## **XI. APPROVALS**

Historical Effective Dates: 06/05/2015, 06/02/2017, 09/03/2019, 08/02/2021, 11/01/2022, 08/21/2023