



CIGNA MEDICAL COVERAGE POLICY

The following Coverage Policy applies to all health benefit plans administered by CIGNA Companies including plans formerly administered by Great-West Healthcare, which is now a part of CIGNA.

Subject Phototherapy,
Photochemotherapy, and
Excimer Laser Therapy for
Dermatologic Conditions

Effective Date 4/15/2011
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Hyperlink to Related Coverage Policies

- Acne Procedures
- Alefacept (Amevive®)
- Etanercept (Enbrel®)
- Infliximab (Remicade®)
- Laser Therapy and Grenz Ray Therapy for Treatment of Psoriasis
- Photodynamic Therapy for Dermatologic Conditions
- Photopheresis (Extracorporeal Photochemotherapy)

INSTRUCTIONS FOR USE

Coverage Policies are intended to provide guidance in interpreting certain **standard** CIGNA HealthCare benefit plans. Please note, the terms of a customer's particular benefit plan document [Group Service Agreement (GSA), Evidence of Coverage, Certificate of Coverage, Summary Plan Description (SPD) or similar plan document] may differ significantly from the standard benefit plans upon which these Coverage Policies are based. For example, a customer's benefit plan document may contain a specific exclusion related to a topic addressed in a Coverage Policy. In the event of a conflict, a customer's benefit plan document **always supercedes** the information in the Coverage Policies. In the absence of a controlling federal or state coverage mandate, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of 1) the terms of the applicable benefit plan document in effect on the date of service; 2) any applicable laws/regulations; 3) any relevant collateral source materials including Coverage Policies and; 4) the specific facts of the particular situation. Coverage Policies relate exclusively to the administration of health benefit plans. Coverage Policies are not recommendations for treatment and should never be used as treatment guidelines. Proprietary information of CIGNA. Copyright ©2011 CIGNA

Coverage Policy

Coverage for home phototherapy devices is subject to the terms, conditions and limitations of the applicable benefit plan's Durable Medical Equipment (DME) benefit and schedule of copayments. In addition, some types of home phototherapy devices, such as ultraviolet cabinets, are specifically excluded under some benefit plans. Please refer to the applicable benefit plan document to determine benefit availability and the terms, conditions and limitations of coverage. Under many benefit plans, coverage for DME is limited to the lowest-cost alternative.

Coverage for the treatment of vitiligo is dependent on benefit plan language, may be subject to the provisions of a cosmetic exclusion and/or reconstructive surgery benefit, and may be governed by state mandates. Please refer to the applicable benefit plan language to determine benefit availability and the terms, conditions and limitations of coverage.

CIGNA covers office-based phototherapy and photochemotherapy* as medically necessary when there is intolerance or contraindication to conventional medical management (e.g., diet restrictions, topical ointments and creams, immunosuppressants) for ANY of the following medical conditions:

- atopic dermatitis (i.e., atopic eczema)
- connective tissue diseases involving the skin (e.g., cutaneous graft vs. host disease [GVHD], localized scleroderma, lupus erythematosus)
- cutaneous T-cell lymphoma (CTCL) (e.g., mycosis fungoides)
- lichen planus
- photodermatoses (e.g., polymorphic light eruption, actinic prurigo, chronic actinic dermatitis)
- psoriasis

*Office-based phototherapy includes actinotherapy, type A ultraviolet (UVA) radiation; type B ultraviolet (UVB) radiation; and combination UVA/UVB radiation. Photochemotherapy includes psoralens (P) and type A ultraviolet (UVA) radiation, known as PUVA photochemotherapy and combinations of P/UVA/UVB.

CIGNA does not cover excimer laser therapy for the treatment of EITHER of the following because it is considered experimental, investigational or unproven:

- atopic dermatitis (i.e., atopic eczema)
- lichen planus

CIGNA does not cover phototherapy, photochemotherapy or excimer laser therapy for the treatment of localized or generalized vitiligo in any setting because such treatment is considered cosmetic and not medically necessary. Services that are cosmetic are not covered under most benefit plans.

If coverage for home phototherapy devices is available, the following conditions of coverage apply:

CIGNA covers an ultraviolet B (UVB) home phototherapy device as medically necessary for an individual who meets the above criteria for office-based phototherapy and photochemotherapy, and outpatient phototherapy has been utilized, demonstrated to be beneficial and is expected to be long-term.

CIGNA does not cover an ultraviolet A (UVA) phototherapy device in the home setting because it is considered not medically necessary.

CIGNA does not cover the use of a tanning bed/unit for any reason in any setting because it is not considered medical in nature and as such does not meet the standard plan definition of Durable Medical Equipment. In addition, CIGNA does not cover the use of a tanning bed/unit in any setting, including the home, for the treatment of dermatologic conditions because it is considered not medically necessary.

General Background

Phototherapy (e.g., actinotherapy) is defined as exposure to non-ionizing, ultraviolet (UV) radiation for therapeutic benefit by inducing DNA damage. The therapy involves exposure to type A ultraviolet (UVA) radiation or type B ultraviolet (UVB) radiation or various combinations of UVA and UVB. The differences in these ultraviolet light forms are the length of the waves. UVA wavelength is 320-400 nanometers [nm], broadband (bb) UVB is 280–320 nm and narrowband (nb) UVB is 311–312 nm. The longer wavelengths emit a lower energy level. UVA bulbs, for example, are used in tanning beds for cosmetic effects because they promote tanning using lower energy with less erythema than UVB (ECRI, 2008; Scheinfeld and Deleo, 2003). Photochemotherapy is exposure to UVA radiation following administration of a psoralen (e.g., methoxsalen, trioxsalen) given orally, topically, or in a bath. Combination therapy includes phototherapy or photochemotherapy with topical agents, such as tar, anthralin and corticosteroids, or with systemic agents, such as retinoids and methotrexate. The duration and number of treatments depends on the dermatologic condition; type, number, and location of the lesions; skin type; type of therapy (e.g., UVA, UVB, PUVA); and the dosage. Treatments may be given 2–5 times per week for several weeks and may involve up to 40 treatments depending on the response of the condition to the therapy.

Excimer laser is a form of ultraviolet laser proposed for the treatment of various dermatologic conditions including, atopic dermatitis, psoriasis and vitiligo. An excimer laser releases a spectrum of 308-nm UVB wavelengths and is used to treat small, focused areas of the body (e.g., 2 X 2 centimeters). Laser therapy is proposed to increase the precision and delivery of UVB energy to targeted tissue. The increased precision results in a faster therapeutic effect and decreases the total number of treatments needed, limits the amount of UV radiation exposure, and decreases the risk of skin cancer. However, this precision makes total-body treatment with laser therapy difficult. Some propose that laser therapy is effective, safe and well tolerated when limited to less than 20% of the body surface. Treatments are typically given two to three times a week on nonconsecutive days for 4–36 weeks (Groysman and Sami, 2010; Nicolaidou, et al., 2009).

U.S. Food and Drug Administration (FDA)

Phototherapy and photochemotherapy light sources are approved by the FDA 510(k) process as Class II phototherapy units. Examples of phototherapy light sources include: VersaClear™ Skin Therapy System (TheraLight, Inc., Carlsbad, CA) and the Houva Phototherapy System with PhotoSense II™ (National Biological Corporation, Inc., Beachwood, OH). They are approved for the treatment of various skin disorders.

XeCl excimer lasers are also approved by the FDA 510(k) process. Not all lasers are approved for the treatment of the same dermatological conditions. The FENCER Excimer Laser System (Kera Harvest/Laser Max Medical Technologies Corporation, Visalia, CA) is approved for the treatment of psoriasis, vitiligo, leukoderma, and atopic dermatitis. The 308 Dermatological Excimer Lamp Phototherapy system (Quantel Medical, Hasbrouck Heights, NJ), distributed by National Biological Corporation, is approved for the treatment of psoriasis and vitiligo. The Excilite™ and Excilite-μ (Cynosure, Inc., Chelmsford, MA) monochromatic excimer light systems are approved for the treatment of “leukoderma, psoriasis, vitiligo, eczema, and seborrheic dermatitis, for skin types I to VI” (FDA, 2008; FDA, 2007; FDA, 2005).

Indications for Phototherapy, Photochemotherapy and Excimer Laser Therapy

Evidence in the published peer-reviewed scientific literature, including randomized controlled trials and case series, as well as professional societies and organizations support the safety and effectiveness of phototherapy and photochemotherapy for the treatment of atopic dermatitis, connected tissue diseases involving the skin, cutaneous T-cell lymphoma, lichen planus, photodermatoses, and psoriasis for patients who do not tolerate or are unresponsive to conventional medical management (e.g., diet restrictions, stress control, oral immunosuppressive agents, biologic agents, topical and oral steroids).

Excimer laser therapy is proposed for the treatment of localized atopic dermatitis, psoriasis and vitiligo. There is insufficient evidence in the peer-reviewed literature to support the efficacy of excimer laser therapy for the treatment of atopic dermatitis. The treatment of vitiligo is aimed at repigmentation and improved cosmesis and not medically indicated (For information on the treatment of psoriasis with laser therapy, refer to the CIGNA Coverage Policy Laser Therapy and Grenz Ray Therapy for Treatment of Psoriasis).

Atopic Dermatitis (Eczema)

Atopic dermatitis, or eczema, is a chronic skin condition characterized by a dry, itchy rash on the face, elbows, hands, knees, and/or feet. In addition to skin care and avoidance of substances that might irritate the skin, topical ointments and creams, and oral corticosteroid are standard treatment options. For severe cases in adults, immunosuppressants may be prescribed. If unresponsive to medication, phototherapy and photochemotherapy (i.e., UVA, UVB and PUVA) are established treatment alternatives (Brown and Reynolds, 2006; Wise, 2006). Evidence to support excimer laser therapy for the treatment of atopic dermatitis is lacking.

Literature Review: The evidence in the published peer-reviewed scientific literature in the form of systematic reviews, randomized controlled trials, case series, and retrospective reviews support UVB, nbUVB, and UVA phototherapy, PUVA, and combination treatments as safe, effective, and well-tolerated therapies for atopic dermatitis. Studies reported appreciative improvement in symptoms and in some cases long-term remission (Tzaneva, et al., 2010; Clayton, et al., 2007; Meduri, et al., 2007; Sezer and Etikan, 2007; Schiener, et al., 2003).

There are a limited number of studies evaluating laser therapy for the treatment of atopic dermatitis. Brenninkmeijer et al. (2010) conducted a within patient, randomized controlled trial (n=10) to compare the safety and efficacy of 0.05% topical clobetasol propionate (CP) ointment to excimer laser (EL) therapy for the treatment of prurigo atopic dermatitis. The patients had more than four symmetrical prurigo nodules on the lower

and upper extremities that had persisted for six months or longer. Treatment was randomized to either the right or left side of the patient's body. Laser therapy was administered for ten weeks. Compared to baseline scores, both sides showed a significant improvement of mean Physician Assessment of Individual Signs (PAIS) ($p < 0.001$) during follow up weeks 14–34. At week 34, the EL-treated nodules had a significantly better PAIS score compared to the CP-treated nodules ($p < 0.05$). More patients reported marked improvement following EL ($n=7$) compared to CP ($n=4$). Less relapse of disease was seen following EL treatment. There was no significant difference in the pruritus scores between the two treatments. Author-noted limitations of the study included the small patient population, selection of more severely affected patients, loss of blinding due to sustained hyperpigmentation in the EL group and the use of various radiant exposures.

B. Baltas et al. (2006) conducted a prospective case series to evaluate the efficacy of 308-nm XeCl excimer laser for the treatment of vitiligo ($n=15$ patients). Lesions were located on the arms and/or legs and involved less than 20% of the body surface. A wash-out period of two to four weeks for topical and systemic therapy was required prior to the beginning of the study. Patients were treated twice a week on nonconsecutive days for four weeks or less if lesions cleared. At the end of the therapy, the Eczema Area Severity Index scores reflected relief from symptoms with a mean score of 3.57 compared to a mean score of 8.5 prior to treatment. An 81% reduction in the itching score was reported at the completion of therapy. The quality of life scores also reflected an improvement (mean 1.71 vs. mean 9.57, respectively). No “serious or unpleasant” side effects were observed. Limitations of the study include the small patient population, short-term follow-up, and lack of a control or comparison group.

Professional Societies/Organizations: In 2007, the National Institute for Clinical Excellence (NICE) (United Kingdom) published a guidance document for the treatment of atopic eczema in children up to age 12 years. The clinical trials revealed limited evidence of the effectiveness of phototherapy in the treatment of children and possible serious adverse effects. The Guidance Development Group concluded that phototherapy should only be considered “for the treatment of severe atopic eczema in children when other management options have failed or are inappropriate and where there is a significant negative impact on quality of life.” Laser therapy was not discussed as a treatment option.

The American Academy of Dermatology (AAD) guidelines for the management of atopic dermatitis recommended treatment with UV phototherapy, including combination bbUVB/UVA, nbUVB, PUVA and UVA. The AAD noted that relapse following cessation of treatment frequently occurs (Hanifin, et al., 2004).

Connective Tissue Disease, Including Cutaneous Graft Versus Host Disease (GVHD)

Connective tissue disease, also referred to as sclerosing skin diseases, includes numerous conditions that affect the connective tissue in various parts of the body. Sclerosing skin diseases include: systemic sclerosis localized scleroderma, also known as morphea; sclerodermoid GVHD; extragenital lichen sclerosus et atrophicus; lupus erythematosus; and sclerodermoid rarities (e.g., eosinophilic fasciitis, pansclerotic morphea); and polyneuropathy, organomegaly, endocrinopathy, monoclonal gammopathy, and skin changes (POEMS) syndrome. Symptoms and treatment options vary according to each condition. In some diseases, topical steroids are indicated and in others, phototherapy and photochemotherapy are considered a treatment option. The choice of the best therapeutic option is contingent upon the disease entity and the clinical manifestations (Brenner, et al., 2005).

Literature Review: Systematic reviews, randomized controlled trials, and case series support the efficacy of UVA and PUVA for the treatment of sclerosing skin diseases (Kroft, et al., 2008; Kreuter, et al., 2006; El-Mofty, et al., 2004; Polderman, et al., 2004; Wetzig, et al., 2005; Wolff, et al., 2004).

Cutaneous T-Cell Lymphoma, Including Mycosis Fungoides

Cutaneous T-cell lymphoma (CTCL) is a slowly evolving form of non-Hodgkin lymphoma of the T-cell. Early stages of the disease may present as distinctive lymphoid dermatoses, such as parapsoriasis, poikiloderma atrophicum vasculare, follicular mucinosis (alopecia mucinosa), and pityriasis lichenoides. Two-thirds of CTCL cases are mycosis fungoides, a form of CTCL that evolves from scaly skin patches and plaques. Sezary syndrome is an aggressive form of mycosis fungoides. CTCL may initially be treated with topical chemotherapy agents. PUVA is a widely used treatment for early cutaneous T-cell lymphoma, mycosis fungoides and Sezary syndrome (National Cancer Institute, 2010; Olsen, et al., 2007; Gokdemir, et al., 2006; Habermann and Pittelkow, 2008; El-Mofty, et al., 2005).

Literature Review: Although the evidence in the peer-reviewed literature is primarily in the form of case series, phototherapy and photochemotherapy are an established treatment option for CTCL. The results from the clinical trials reported significant improvement to complete remission of mycosis fungoides when treated with nbUVB and PUVA (Gokdemir, et al., 2006; El-Mofty, et al., 2005). Outcomes from additional clinical trials reported that UVA1, UVB, nbUVB and PUVA were effective in the treatment of cutaneous T-cell lymphoma (Scheinfeld, et al., 2003; Whitaker, et al., 2003).

Professional Societies/Organizations: The National Cancer Institute (2010) recognizes PUVA and UVB phototherapy as treatment options for mycosis fungoides and Sezary syndrome.

The European Organization for Research and Treatment for Cancer (EORTC) (Belgium) (Trautinger, et al., 2006) consensus recommendations for the treatment of stages IA-III mycosis fungoides and Sezary syndrome include PUVA as a treatment option for these conditions.

The Joint British Association of Dermatologists and UK Cutaneous Lymphoma Group (Whittaker, et al., 2003) guidelines recommended phototherapy for the treatment of stages IA-IIA mycosis fungoides and PUVA for patients with stage IB-IIA mycosis fungoides/Sezary's syndrome unresponsive to topical treatments.

Lichen Planus

Lichen planus is an inflammatory disease that usually affects the skin and/or the mouth and is characterized by recurrent, itchy, inflammatory rash and/or lesions. Since there is no cure for lichen planus, treatment is aimed at relieving symptoms. Milder cases may be treated with corticosteroid creams and ointments, anti-inflammatory drugs, and antihistamines. More severe cases may require oral or injectable corticosteroids, phototherapy and photochemotherapy.

Literature Review: Although primarily in the form of case series and retrospective reviews, the evidence in the clinical trials supports the efficacy of PUVA and nbUVB phototherapy for the treatment of lichen planus. Phototherapy and photochemotherapy are established treatment options for this condition. Partial and complete response have been reported in patients following therapy (Pavlotsky, et al., 2008; Wackernagle, et al., 2007; Saricaoglu, et al., 2003; Reichrath, et al., 2002).

There is insufficient evidence in the peer-reviewed literature to support the efficacy of excimer laser therapy for the treatment of lichen planus. Trehan et al. (2004) conducted a prospective case series to evaluate "the novel use" of low-dose 308-nm excimer laser therapy for the treatment of oral lichen planus (n=8). Follow-up visits occurred for up to 18 months. The volunteers for this study had active disease and had failed previous therapy (e.g., topical and systemic steroids, topical analgesics). The mean number of treatments was 21 (range 7–30). Statistically significant improvements were seen following treatments seven (p=0.02; n=8), 14 (p=0.002; n=8), 21 (p=0.02; n=7) and 28 (p=0.11; n=3). Five patients had an excellent response (i.e., > 75% improvement compared to baseline), two had fair improvement (i.e., 25–50% improvement compared to baseline) and one had poor results (i.e., < 25% improvement compared to baseline). There were no adverse events. Remission ranged from 2–17 months. The authors noted that further clinical trials were warranted to validate the results of this study. Limitations include the small, volunteer patient population; short-term follow-up; and lack of a control or comparison group.

Professional Societies/Organizations: The British Association of Dermatologists (Ibbotson, et al., 2004) reported that nbUVB phototherapy has been used with encouraging results for the treatment of lichen planus. Excimer laser was not included as a treatment option for this condition.

Photodermatoses (e.g., Polymorphic Light Eruption, Actinic Prurigo, Chronic Actinic Dermatitis):

Photodermatoses refers to skin conditions that are aggravated by sunlight. The primary photodermatoses include polymorphic light eruption, actinic prurigo, and chronic actinic dermatitis, also known as photosensitivity dermatitis. Treatment options include avoiding sun exposure, using sunscreens, and topical and/or oral steroids. Phototherapy is viewed as a mainstay of treatment for severe cases.

Literature Review: A limited number of studies in the form of randomized controlled trials and case series have reported that photodermatoses can be successfully treated with UVA, UVB, UVA/UVB, nbUVB phototherapy, and PUVA. Phototherapy and photochemotherapy are recognized treatment options for these conditions (Gambichler, et al., 2006; Ibbotson, et al., 2004).

Psoriasis

Psoriasis is a skin disease involving thickened, red areas covered with silvery scales and characterized by chronic, recurrent exacerbations and remissions. The forms of psoriasis include plaque, pustular, inverse, erythrodermic, guttate, and palmoplantar. Medical management of psoriasis may include bath solutions, moisturizers, topical corticosteroid ointments and creams, vitamin D ointment, retinoid gel and coal tar (i.e., Goeckerman treatment). Phototherapy and photochemotherapy are established treatment options for patients with psoriasis who do not respond to medical management (For information on the treatment of psoriasis with laser therapy, refer to the CIGNA Coverage Policy Laser Therapy and Grenz Ray Therapy for Treatment of Psoriasis).

Literature Review: Evidence in the published, peer-reviewed scientific literature supports the safety and efficacy of phototherapy and photochemotherapy for the treatment of psoriasis. Randomized controlled trials have reported favorable response to treatment using bbUVB, nbUVB, PUVA, and baths followed by phototherapy (e.g., balneophototherapy) (Dayal, et al., 2010; Jain, et al., 2010; Mahajan, et al., 2010; Sivanesan, et al., 2009; Kirke, et al., 2007; Brockow, et al., 2007; Schiener, et al., 2007; Amornpinyokeit and Asawanonda, 2006; Boztepe, et al., 2006; Yones, et al., 2006; Vongthongsri, et al., 2006). Case series and earlier clinical trials also reported improvement in the symptoms of psoriasis following phototherapy and photochemotherapy treatment sessions (Erkin, et al., 2007; Sezer, et al., 2007; Asawanonda, et al., 2005; Lebwohl, et al., 2005; Berneburg, et al., 2005; Zanolli, 2004; Tahir, et al., 2004).

Professional Societies/Organizations: In their 2010 guidelines on the treatment of psoriasis, the American Academy of Dermatology's (AAD) recommendations included UVB phototherapy and PUVA. According to AAD, UVB phototherapy is safe and effective, and nbUVB phototherapy is generally preferable and has improved efficacy compared to bbUVB phototherapy. UVB phototherapy can be given in the office or at home. PUVA is also effective and may result in long remissions, but may increase the risk for squamous cell carcinoma and malignant melanoma. The duration of treatment varies depending on the type of psoriasis, skin type, ultraviolet dosing, and whether nbUVB (e.g., 15–20 treatments), bbUVB (e.g., 20–25 treatments), or topical or systemic PUVA is used. Improvement may be seen within 2–4 weeks and 8–40 treatments.

Other Indications

Vitiligo: Vitiligo is an autoimmune disease resulting in a loss of pigment cells (i.e., melanocytes), producing white patches. Treatments that repigment the affected areas such as phototherapy, photochemotherapy and laser therapy are aimed at improving the untoward cosmetic sequelae associated with the condition and do not treat the underlying autoimmune condition. Self-management of vitiligo includes avoiding sun exposure, and using sunscreens and self-tanning dyes. In some cases, the use of interventions that repigment is only temporizing and may not result in long-term or permanent results. Follow-up data on the long-term effectiveness of phototherapy maintaining pigmentation are limited, but relapse has been reported in up to 25–44% of patients within 12–18 months following cessation of nbUVB therapy. Some patients have reportedly relapsed within three months (Nicolaidou, et al., 2009).

Home Phototherapy

In some cases, UVB phototherapy may be transitioned to home use if the individual has extensive, widespread disease (e.g., psoriasis) that is going to require long-term use, and the phototherapy has been proven to be effective. Home devices emitting predominantly UVB phototherapy are used primarily for the treatment of psoriasis and require that the patient be motivated, reliable, adherent to instructions, able to administer the treatment correctly, keep records of exposure, and attend regular follow-up visits (Menter, et al., 2010; Rajpara, et al., 2010).

There are various types of home UVB phototherapy devices available (i.e., full-body, half-body, hand and/or foot, localized/spot treatment units).

Full-body UVB panels include six-foot stand-alone panels, such as the 6-Foot Panosol II[®] (National Biological Corporation, Inc., Beachwood, OH). Half-body units include two- to four-foot stand-alone panels that are indicated for localized treatment areas (i.e., the back). An example of the half-body unit is the 2-Foot Panosol II[®].

Hand and foot UVB units may be in the form of a combined unit or may be individual units. A combined unit has the appearance of a desk and allows the patient to place their hands and feet into the unit, receiving treatment simultaneously (e.g., Hand/Foot II™, National Biological Corporation, Inc., Beachwood, Inc., OH). Individual hand and foot units may have the appearance of a tabletop device such as the SolRX 500 Series (Solarc Systems, Inc., Ontario, Canada).

Localized/spot treatment devices may be a portable tabletop UVB device, such as the SolRx 500 mentioned above or a handheld wand-type device, like the DermaLume 2X™ (National Biological Corporation, Inc., Beachwood, OH), for small areas.

Once the size of unit is determined, a decision will be made by the physician as to the type of UVB light source indicated for treatment. The physician may prescribe bbUVB or nbUVB. The number of bulbs needed will be determined based on the size of the unit.

UVA phototherapy is primarily used in combination with psoralen (i.e., PUVA) for the treatment of disease (e.g., psoriasis) and is administered in an outpatient setting. On its own, UVA is ineffective in treating conditions such as psoriasis and atopic dermatitis and is therefore not generally used in the home setting.

Tanning beds, or units, which typically emit UVA, are used for self-tanning solely for the purpose of improvement in appearance (i.e., cosmetic); they are not medical devices designed to be used to administer physician-prescribed treatment for a dermatologic condition.

Literature Review: In a single-blind randomized controlled trial, Koek et al., 2009 compared the outcomes of outpatient UVB therapy (n=98) to home UVB therapy (n=98) for patients treated for mild to severe psoriasis. After the completion of therapy, the first 105 consecutive patients were followed for one year. Outcomes were measured by the self-administered psoriasis area and severity index (SAPASI) and the psoriasis area and severity index (PASI). Treatment effect indicated by the mean decline in the PASI and SAPASI scores was significant (P<0.001) and similar across groups (P>0.3) indicating that home therapy was as good as and in some cases, superior (SAPASI 90) to outpatient therapy. Improvement in quality life for home patients was rated as a 42% compared to 23% for outpatients. Total cumulative doses of ultraviolet B light and the occurrence of short term side effects were not significantly different between the groups.

Summary

The evidence in the published peer-reviewed scientific literature and professional society guidelines support the safety and effectiveness of phototherapy and photochemotherapy for the treatment of certain dermatologic conditions, including: atopic dermatitis, connective tissue diseases, cutaneous T-cell lymphoma including mycosis fungoides, lichen planus, photodermatoses, and psoriasis.

Phototherapy, photochemotherapy and excimer laser therapy for the treatment of vitiligo are administered for the purpose of repigmentation to improve appearance and therefore, are cosmetic in nature.

Ultraviolet B (UVB) home phototherapy may be indicated in a subset of individuals who meet the criteria for office-based phototherapy and photochemotherapy, have gained benefit from office-based therapy, and phototherapy is expected to be long-term.

There insufficient evidence in the published peer-reviewed literature to support the therapeutic effectiveness of excimer laser therapy for the treatment of atopic dermatitis (i.e. atopic eczema) and lichen planus. The home-use of ultraviolet A (UVA) phototherapy has not been established. Tanning beds are not considered medical devices and are not used to treat medical conditions.

Coding/Billing Information

Note: This list of codes may not be all-inclusive.

Phototherapy and Photochemotherapy

Covered when medically necessary:

| CPT®* Codes | Description |
|------------------------------|--|
| 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 photoresponsive dermatoses requiring at least four to eight hours of care under direct supervision of the physician (includes application of medication and dressings) |

| HCPCS Codes | Description |
|------------------------------|--|
| E0691 | Ultraviolet light therapy system panel, includes bulbs/lamps, timer and eye protection; treatment area two square feet or less |
| E0692 | Ultraviolet light therapy system panel, includes bulbs/lamps, timer and eye protection, four foot panel |
| E0693 | Ultraviolet light therapy system panel, includes bulbs/lamps, timer and eye protection, six foot panel |

| ICD-9-CM Diagnosis Codes | Description |
|---|---|
| 202.10- 202.18 | Mycosis fungoides |
| 691.8 | Other atopic dermatitis and related conditions |
| 692.72 | Acute dermatitis due to solar radiation |
| 692.74 | Other chronic dermatitis due to solar radiation |
| 695.4 | Lupus erythematosus |
| 696.1 | Other psoriasis and similar disorders |
| 697.0 | Lichen planus |
| 701.0 | Circumscribed scleroderma |
| 710.1 | Systemic sclerosis |
| 710.9 | Unspecified diffuse connective tissue disease |
| 996.85 | Complications of bone marrow transplant |

Excimer Laser for Lichen Planus and Atopic Dermatitis

Experimental/Investigational/Unproven/Not Covered:

| CPT®* Codes | Description |
|------------------------------|---|
| 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 |

| ICD-9-CM Diagnosis Codes | Description |
|---|--|
| 691.8 | Other atopic dermatitis and related conditions |
| 697.0 | Lichen planus |

Treatment of Vitiligo

Not Medically Necessary/Cosmetic/Not Covered:

| CPT ^{®*} Codes | Description |
|----------------------------|--|
| 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 photoresponsive dermatoses requiring at least four to eight 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 | Description |
|----------------|--|
| E0691 | Ultraviolet light therapy system panel, includes bulbs/lamps, timer and eye protection; treatment area two square feet or less |
| E0692 | Ultraviolet light therapy system panel, includes bulbs/lamps, timer and eye protection, four foot panel |
| E0693 | Ultraviolet light therapy system panel, includes bulbs/lamps, timer and eye protection, six foot panel |

| ICD-9-CM Diagnosis Codes | Description |
|--------------------------------|-------------|
| 709.01 | Vitiligo |

Ultraviolet Cabinets

Not Covered/Specifically Excluded Under Some Benefit Plans:

| HCPCS Codes | Description |
|----------------|---|
| E0694 | Ultraviolet multidirectional light therapy system in six foot cabinet, includes bulbs/lamps, timer and eye protection |

| ICD-9-CM Diagnosis Codes | Description |
|--------------------------------|-------------|
| | All codes |

*Current Procedural Terminology (CPT[®]) © 2010 American Medical Association: Chicago, IL.

References

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Policy History

| Pre-Merger Organizations | Last Review Date | Policy Number | Title |
|---------------------------------|-------------------------|----------------------|--|
| CIGNA HealthCare | 4/15/2008 | 0031 | Phototherapy and Photochemotherapy for Dermatological Conditions |
| Great-West Healthcare | 03/14/06 | 06.339.01 | Phototherapy for Psoriasis, Home Use |

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