

Making Treatment Decisions

PHOTOTHERAPY

LIGHT TREATMENT FOR PSORIASIS



NATIONAL
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PHOTOTHERAPY

LIGHT TREATMENT FOR PSORIASIS

WHAT IS PSORIASIS?

Psoriasis is a noncontagious, lifelong skin disease that has been diagnosed in more than 4.5 million adults in the United States. The most common form, plaque [pronounced plak] psoriasis, appears as raised, red lesions covered with a silvery white buildup of dead skin cells, called scale.

About 10 percent to 30 percent of people with psoriasis also develop psoriatic [sore-ee-AA-tic] arthritis, which causes pain, stiffness and swelling in and around the joints. The hands, feet, wrists, ankles, knees and lower back are most often affected by this type of arthritis.



Three percent to 10 percent of the body affected by psoriasis is considered to be a moderate case. More than 10 percent is considered severe. The palm of the hand equals 1 percent of the skin. However, the severity of psoriasis is also measured by how psoriasis affects a person's quality of life. Psoriasis can have a serious impact even if it involves a small area, such as the palms of the hands or soles of the feet.

To learn more about the types of psoriasis or psoriatic arthritis, contact the National Psoriasis Foundation and request the following booklets:

- *Psoriatic Arthritis*
- *Specific Forms of Psoriasis*

Phototherapy involves exposing the skin to wavelengths of ultraviolet light under medical supervision. Treatments usually take place in a doctor's office or psoriasis clinic. However, it is possible to follow a treatment regimen at home with a unit prescribed by your doctor. The key to success with phototherapy is consistency.

For more information about psoriasis treatments, request the following National Psoriasis Foundation educational booklets:

- *Biologic Medications for Psoriasis & Psoriatic Arthritis*
- *Steroids*
- *Systemic Medications: Internal Drugs for Moderate to Severe Psoriasis*
- *Topical Treatments for Psoriasis*

UVB PHOTOTHERAPY

What is UVB and how does it work?

Present in natural sunlight, ultraviolet light B (UVB) is an effective treatment for psoriasis. UVB penetrates the skin and slows the abnormally rapid growth of skin cells associated with psoriasis. UVB treatment involves exposing the skin to an artificial UVB light source for a set length of time on a regular schedule, either under a doctor's direction in a medical setting or with a home unit purchased with a doctor's prescription. (See page 10 to learn more about home phototherapy.)

There are two types of UVB treatment, broad band and narrow band. Broad-band UVB is primarily featured in this booklet because it is more commonly used in the United States; however, narrow-band UVB is similar in many ways and is becoming more widely used. The major difference between broad-band and

narrow-band UVB is that narrow-band UVB units emit a more specific range of UV wavelengths.

Several studies indicate that narrow-band UVB clears psoriasis faster and produces longer remissions than broad-band UVB. Narrow-band UVB may be effective with fewer treatments per week than broad-band UVB. Narrow-band UVB is also emerging as an alternative to PUVA, the light-sensitizing medication psoralen plus exposure to ultraviolet light A. (See page 13 to learn more about PUVA.) Although not as effective as PUVA, narrow-band UVB is easier for people to undergo and may be safer over the long term.

The use of narrow-band UVB may increase as doctors and patients learn more about its effectiveness and safety and as the equipment becomes less expensive.

Who is a candidate for UVB?

UVB treatment can be used by adults and children, and will be effective in treating psoriasis for at least two-thirds of patients who meet these criteria:

- Thin plaques (decreased scale buildup)
- Moderate to severe disease (involving more than 3 percent of the skin)
- Responsive to natural sunlight

UVB may be used alone or in combination with topical treatments or systemic medications. Topical treatments, such as anthralin, coal tar and derivatives of vitamin D₃ (Dovonex; also known by its generic name calcipotriene) and vitamin A (Tazorac; also known by its generic name tazarotene), have been shown to be effective in conjunction with UVB in some patients. In addition, the combination of UVB

with systemic treatments, including methotrexate, biologics and Soriatane (also known by its generic name acitretin), may improve the response to UVB. For more information on topical or systemic medications, request the Psoriasis Foundation educational booklets *Topical Treatments for Psoriasis* or *Systemic Medications: Internal Drugs for Moderate to Severe Psoriasis*.

How is UVB administered?

The patient stands in a treatment light box lined with UVB lamps, or an enclosure containing one or more columns of lamps. A person undresses to expose all affected areas to the ultraviolet light. Some doctors have small units for treating localized areas such as the palms and soles.

A patient generally will receive treatments three times per week. It takes an average of 30 treatments to reach maximum improvement of psoriasis lesions.

The first exposure to the light is usually quite short, lasting as little as a few seconds. Exposure time depends on the person's skin type (see Table 1 on page 7) and the intensity of the light emitted from the bulbs. People with lighter skin start with shorter exposure times than people with darker skin.

Normally, treatment times are gradually increased until clearing occurs, unless the last session produced itching and/or skin tenderness. Because administering UVB light is not an exact science, each person's reaction to the light is not completely predictable. Subsequent sessions of UVB are adjusted according to a person's individual response.

UVB requires a significant time commitment. People get the best results when they keep scheduled appointments and follow treatment directions carefully.

A doctor may require a patient to do one or more of the following before UVB treatments begin:

- Inform medical staff of medications used, topically or internally;
- Soak in warm water for 30 minutes to remove psoriasis scales;
- Protect certain areas of skin (for example, the backs of hands, neck, lips, nipples and dark, pigmented areas of the breasts) with sunscreen;
- Cover uninvolved areas of the body, such as the face, with paper, cloth or sunscreen to shield from unwanted light exposure;
- Apply topical coal tar preparations to the lesions at night and wash them off in the morning before a UVB treatment.

Some studies suggest that mineral oil and petrolatum are as effective as coal tar or anthralin when used in conjunction with UVB. Applied in a thin layer before treatment, mineral oil or petrolatum can improve the ability of light to penetrate the skin. However, anything that might enhance penetration of light to the skin must be done gradually to avoid burning.

Any other topical application left on the skin may block some or all of the UVB light and reduce the effectiveness of the treatment. This is especially true of coal tar, salicylic acid and thick, white moisturizers. It is important for you to talk to your doctor about all moisturizers and topical medications that you

are using to receive the maximum benefit from phototherapy treatment.

Table I – Skin Types

The U.S. Food and Drug Administration (FDA) and the American Academy of Dermatology recognize six skin-type categories:

Skin types	Sun history	Examples
I	Always burns easily, never tans, extremely sensitive skin	Red-headed, freckled, Celts, Irish-Scots
II	Always burns easily, tans minimally, very sensitive skin	Fair-skinned, fair-haired, blue-eyed Caucasians
III	Sometimes burns, tans gradually to light brown, sun-sensitive skin	Average-skinned Caucasians, light-skinned Asians
IV	Burns minimally, always tans to moderate brown, minimally sun-sensitive	Mediterranean-type Caucasians
V	Rarely burns, tans well, sun-insensitive skin	Middle Easterners, some Hispanics, some African-Americans
VI	Never burns, deeply pigmented, sun-insensitive skin	African-Americans

What happens once the skin clears?

Once the skin clears, the treatments can be stopped. They should be resumed as the lesions begin to reappear. Sometimes UVB is continued on a maintenance basis.

Studies show that UVB maintenance can increase remission time. Most people need about eight

maintenance treatments per month to prolong clearance, but it is different for every person.

If psoriasis lesions return, an individual may return to three treatments per week. Sometimes a person is rotated to a different psoriasis treatment. This rotation gives the skin a break from UVB, minimizing long-term exposure and possible side effects.

The Goeckerman regimen

Some people with severe psoriasis are referred to a hospital or psoriasis day treatment center for three to four weeks of treatment with UVB and prescription coal tar. This is called the Goeckerman [GEK-er-man] regimen. Once or twice daily, crude coal tar is applied and then removed before the patient is exposed to total body UVB light. This is followed by a cleansing bath or shower to remove the residual tar and scales.

The regimen can be supplemented with steroid medications and keratolytics (scale removers), particularly in the early stages of treatment. In a modification of the Goeckerman regimen, anthralin is used instead of coal tar (this is called the Ingram regimen).

To be admitted to a psoriasis day treatment center for Goeckerman treatment, a person must:

- Be able to walk without help
- Be free of health problems that could complicate treatment
- Be able to commute to the center daily for three to five weeks
- Go home or to other lodgings for evenings and weekends

A limited number of day treatment centers for psoriasis exist in the United States.

Intensive inpatient Goeckerman treatment in the hospital may be necessary for certain people. Sometimes a person's emotional as well as physical condition requires medical supervision. Bed rest and removal from the stresses of daily life are important additional elements of hospital Goeckerman therapy.

Average remission times of six to 12 months have been reported by Goeckerman regimen patients. Less intensive coal tar and UVB treatments available in a doctor's office are often referred to as modified Goeckerman regimens.

What are the side effects of UVB treatment?

During treatment, psoriasis may worsen temporarily before improving. The skin may itch and become red because of exposure to the UVB light. The amount of UVB administered may need to be reduced to avoid further irritation. Occasionally, temporary flares occur even with non-burning doses of UVB. These reactions may resolve with continued UVB treatment.

Irritation

If coal tar is applied, skin pores can clog and cause small pimple-like eruptions (folliculitis). Eruptions are caused by applying the coal tar incorrectly. Coal tar should be stroked on the skin in the same direction the hair grows. Folliculitis is not permanent, but occasionally it requires some patients to stop using coal tar preparations.

Sunburn

Certain medications, herbal supplements and topical ingredients can cause sensitivity to light; it is

important to tell your doctor about all medications, treatments and supplements you are taking. Patients should avoid exposure to natural sunlight on UVB treatment days. Overexposure to ultraviolet light can cause a serious burn.

Skin cancer

UVB is an established carcinogen (cancer-causing substance or agent) in humans. However, there is no direct evidence of increased risk of skin cancer from UVB treatment for psoriasis. It is important to have a doctor examine your skin periodically. Skin cancers generally can be removed easily if detected early.

Some doctors recommend the use of sunscreen on uninvolved skin as a means of minimizing exposure to UVB. The face, for example, is exposed to a great deal of natural sunlight. If there is no psoriasis on the face, a person should avoid UVB exposure there.

HOME PHOTOTHERAPY

Treating psoriasis with a UVB light unit at home can be an economical, convenient choice. Home UVB can be quite effective in controlling psoriasis, but it requires a very consistent treatment schedule. Patients are usually treated initially at a medical facility and eventually begin using a light box at home. However, all phototherapy requires a prescription.

A dermatologist experienced in home phototherapy will provide instruction for the schedule you should follow. How long you should expose your skin to the ultraviolet light will depend on your skin type (see Table 1 on page 7), the type of UVB device and the intensity of light emitted from the home UVB lamps.

Just as with office-based phototherapy, people should take care to protect their eyes and other sensitive areas. Goggles, wrap-around UV-opaque glasses or coated lenses must be worn whenever you expose your eyes to the light. Men should shield their genitals with clothing or sunscreen (see page 19 for more details). Your doctor will be able to provide guidance in this area.

The most important rule in using home phototherapy as a treatment for psoriasis is to follow your doctor's instructions and continue with regular check-ups. Home phototherapy is a medical treatment and requires monitoring by a medical professional.

Choosing a unit

More detailed information about the types of home phototherapy units available can be obtained from home phototherapy equipment manufacturers (a list is available at the end of this booklet) or by talking with your dermatologist.

Here are a few important tips to keep in mind when choosing a unit:

- Look for safety features in home UVB equipment, such as key switches or disabling keys, that render the unit inoperative when the owner is not around.
- Make sure the unit has a reliable timer.
- Check for safety guards or grids over the lamps.
- Evaluate the durability and stability of the equipment.
- Ask whether the price includes shipping and/or assembly charges.

- Find out if the company sells replacement lamps, and the cost.

Some insurance companies will pay a percentage of the cost of home UVB equipment. A call to your health insurance company prior to purchase is worthwhile. Home UVB equipment is usually covered as durable medical equipment.

LASERS

Targeted UVB treatment

The Xtrac laser, which is approved by the FDA for psoriasis, emits a high-intensity beam of UV light that is very similar to the light delivered by narrow-band UVB units.

Xtrac's beam is small—less than 1 inch in diameter—and can be targeted at selected areas of the skin affected by psoriasis. Mostly, the laser is used to treat people with mild to moderate plaque psoriasis. This light treatment is recommended for those with less than 10 percent of the body covered by psoriasis or lesions localized to specific areas of the body.

How well an individual will respond to the treatment varies. It can take an average of four to 10 sessions to see results, depending on the particular case of psoriasis. It is recommended that patients are treated twice per week, with a minimum of 48 hours between treatments. Generally, the only side effect from laser treatment is a mild sunburn.

There is very little long-term data yet to indicate how long the improvement or clearance will last following a

course of therapy. The Psoriasis Foundation has heard anecdotal reports from doctors that some patients' treated lesions will remain clear for eight months or more, but results will vary.

Pulsed dye lasers

Like the Xtrac laser, pulsed dye lasers are approved for treating chronic, localized plaque lesions. Pulsed dye lasers emit a different form of light than UVB units and the Xtrac laser.

Pulsed dye lasers destroy the tiny blood vessels that contribute to and support the formation of psoriasis lesions. They have been in use for approximately 15 years for removing unwanted blood vessels and birthmarks, such as port wine stains. Investigators first reported that psoriasis could be cleared with pulsed dye lasers in 1990.

Treatment with a pulsed dye laser reportedly feels like being snapped repeatedly with a rubber band. Treatment consists of 15- to 30-minute sessions every three weeks. For patients who respond, usually it takes between four and six sessions to clear the target lesion.

Side effects of pulsed dye laser treatments include a small risk of scarring. The most common side effect is a bruise that remains after treatment for a week to 10 days.

PUVA

What is PUVA and how does it work?

PUVA is an acronym for psoralen (a light-sensitizing medication) combined with exposure to ultraviolet light A (UVA). UVA, like UVB, is found in sunlight. By itself, however, UVA is not usually used to clear

psoriasis. It is relatively ineffective unless used with a light-sensitizing medication such as psoralen.

PUVA slows down the excessive cell reproduction of psoriasis and can clear the symptoms for varying periods of time.

How effective is PUVA?

Studies show that PUVA clears psoriasis for more than 85 percent of patients. It induces long remission times, even without maintenance treatment, that can last from a few months to more than a year.

Who is a candidate for PUVA?

PUVA is considered for moderate to severe cases of psoriasis in adults. Stable plaque psoriasis, guttate psoriasis, and psoriasis of the palms and soles are especially responsive to PUVA treatment.

PUVA is not normally recommended for children or teenagers. However, it can be used by young people to avoid unwanted side effects of other treatments or if other treatments have not been successful.

Some people are not good candidates for PUVA due to their medical histories. The following are possible reasons to avoid PUVA:

- A family history of allergy to sunlight
- Pregnancy or nursing
- A history of arsenic intake (e.g., Fowler's solution)
- Previous ionizing radiation therapy (Grenz ray or X-ray)
- Medical conditions such as lupus

erythematous, porphyria or skin cancer that require one to avoid the sun

- Heart or blood pressure problems so severe that one can't tolerate heat or prolonged standing
- A history of skin cancer
- Liver disease (may increase levels of medicine in the blood, although people with liver disease may use bath PUVA)

How is PUVA administered?

PUVA treatments take place in a doctor's office. After psoralen is ingested or applied to the skin, a patient exposes his or her psoriasis lesions to UVA in a light unit lined with ultraviolet lamps. Most UVA units are vertical, and patients stand during treatment. Other special UVA units are used for exposing only specific parts of the body, such as the hands and feet.

A doctor and his or her phototherapy staff know exactly how much time should elapse between the patient taking the pill or applying psoralen topically, and exposing the lesions to UVA. Timing is critical to the success of the treatment. For the UVA light exposure to work, it must be administered at a time when the psoralen is at a high level in the skin.

Oral PUVA is the most common form. It calls for the patient to take psoralen pills 75 to 120 minutes before entering the UVA light box.

The topical forms of PUVA are referred to as "paint," "soak" and "bath." In paint PUVA, a psoralen preparation in ointment or liquid form is painted

directly on lesions, especially those on the palms and soles. In soak PUVA, affected areas are immersed in a basin of water that contains psoralen. Similarly, in bath PUVA, the entire body is immersed in a tub of water that contains psoralen. The UVA should be administered within 15 minutes after the psoralen is applied to the skin. Light sensitivity drops dramatically after one hour.

Topical PUVA avoids some of the unpleasant short-term side effects associated with oral PUVA. However, topical PUVA poses a higher risk of a person's skin burning from the light treatment, and it is more labor intensive.

Topical PUVA can be useful for people with stubborn patches of psoriasis because it provides a higher local concentration of psoralen. Consequently, it requires a lower amount of UVA for an effective response. Also, people who are resistant to oral PUVA may respond to topical PUVA.

Initially, exposure to UVA may be very short (30 seconds to several minutes), depending on the patient's skin type and the kind of UVA unit. Exposure time is gradually increased to 20 minutes or longer, depending on the strength of the UVA light. On average, 25 treatments are required for clearance, but may be greater for very severe psoriasis.

After clearing, a person may or may not go on a maintenance regimen, depending on the aggressiveness of the psoriasis. Only one or two PUVA treatments per month may be needed to maintain clearance, although the exact regimen will vary for each patient.

What are the side effects of PUVA?

The most common short-term side effects of oral PUVA are nausea, itching and redness of the skin. Drinking milk or ginger ale, taking ginger supplements or eating while taking oral psoralen may prevent nausea. Antihistamines, baths with colloidal oatmeal products or application of topical products with capsaicin (an extract of hot peppers) may help relieve itching caused by PUVA. Swelling of the legs from standing during PUVA treatment can sometimes be relieved by wearing support hose.

Skin cancers

The primary long-term risk of PUVA treatment is a higher risk of skin cancer, particularly non-aggressive forms like squamous cell carcinoma (SCC) and basal cell carcinoma (BCC). Studies show the more PUVA treatments you have, the more at risk you are for developing skin cancers, compared to the general, non-PUVA-treated population.

Long-term PUVA treatment requires careful monitoring for skin cancer, even after treatments are finished. If you have had more than a total of 150 PUVA treatments, it is advisable to have an annual skin examination by a dermatologist. Skin cancers generally can be removed easily if detected early.

Early signs of an increased risk of non-melanoma skin cancer are keratoses, or raised, scaly wart-like bumps, that can range from a tenth- to a half-inch in diameter at the base. PUVA-induced keratoses (as opposed to sun-induced keratoses) tend to appear on skin that does not receive regular sun exposure (e.g., the trunk and thighs). Keratoses and early skin cancer lesions generally can be removed.

There is also some evidence—not universally accepted by researchers and doctors—that people who receive high levels of PUVA treatments may be at increased risk of developing melanoma, a more aggressive and potentially deadly form of skin cancer.

Cataracts

There is a potential for PUVA to induce cataracts if the eyes are not protected for 12 to 24 hours after a PUVA treatment. Psoralen remains in the eye lens for a period of time following ingestion of the drug. To date, no increase in cataracts has been noted in patients using proper eye protection.

Special UVA-blocking PUVA glasses are prescribed for use following treatment. They must be worn for at least 12 hours following ingestion of psoralen, and this means anywhere the sun shines—even indoors. Unlike UVB, UVA penetrates windows.

Use of commercial sunglasses should be discussed with your doctor. Sunglasses must filter out 100 percent of the ultraviolet light.

Freckling and skin aging

PUVA patients who have received more than 150 treatments within five years are at a higher risk for premature aging of the skin. The aging usually takes the form of wrinkling and dryness, or tight, shiny skin. Discolored spots that look like dark freckles may develop.

Minimizing PUVA risks

Combining treatments

PUVA may be used alone or in combination with topical treatments or systemic medications. Sometimes doctors will prescribe steroid medications or anthralin

to help clear a few stubborn lesions rather than prolong UVA exposure. Dovonex is also combined with PUVA in some cases, but this medication should always be applied after a treatment. UVA exposure can inactivate Dovonex.

If the lesions are extensive, some doctors will combine UVB, biologics or methotrexate with PUVA to speed up the clearing and reduce the cumulative exposure to PUVA. RePUVA, a popular treatment in Europe, combines PUVA with a systemic retinoid medication. It can clear psoriasis with far less UVA exposure.

Rotating treatments

Rotating treatments also may reduce PUVA side effects. For example, a person may be rotated off PUVA to another treatment to limit exposure and long-term risks. Six treatments used for moderate to severe psoriasis are UVB, PUVA, biologics, methotrexate, Soriatane and cyclosporine. One of these treatments is used from 12 to 24 months, and then the patient is rotated to another of these treatments. Rotating treatments can prevent individuals from becoming resistant to certain treatments, and can minimize long-term side effects. A doctor will determine if rotating treatments is an appropriate option for you.

TIPS FOR YOUR PROTECTION AND COMFORT WITH PHOTOTHERAPY

Protect sensitive areas

Phototherapy patients should protect uninvolved skin during treatment. Men should shield their genitals, unless that area is specifically being treated. The male genital area is prone to skin cancer. An athletic supporter, shorts, a towel or sunscreen can be used.

Women should apply sunscreen to their nipples and the pigmented area around them.

The neck, face, lips, ears or the back of the hands should also be protected with sunscreen during and after treatment if no psoriasis is present. Your doctor may want to apply the sunscreen to ensure it is applied evenly. Because psoralen makes the skin extremely sensitive to the sun, you need to avoid accidental sunburn after a PUVA treatment. For example, if you are driving in the sun after a treatment, wear gloves and/or use a sunscreen to prevent burning.

Report any new medications

Phototherapy patients must tell their doctors when they begin taking any new medications or supplements. Certain prescription and over-the-counter medications may increase the risk of burning, including some antibiotics, anticancer drugs, antidepressants, antihistamines, antihypertensives, antiparasitics, antipsychotics, diuretics, hypoglycemics, nonsteroidal anti-inflammatory drugs and oral contraceptives.

Avoid sunbathing

Sunbathing can burn the skin, and that burn can be intensified by phototherapy. Be cautious when sunbathing during phototherapy treatment and be sure to discuss extended periods of natural sunlight exposure to your doctor.

HOME UVB EQUIPMENT MANUFACTURERS

Atlantic Ultraviolet Corp.

Freestanding and wall-mounted narrow-band and broad-band units
375 Marcus Blvd.
Hauppauge, N.Y. 11788
631.273.0500 www.atlanticuv.com

Daavlin

Full-body and hand/foot/scalp narrow-band and broad-band units
P.O. Box 626
Bryan, Ohio 43506
800.322.8546 www.daavlin.com

KBD, Inc.

Small broad-band units
(manufacturer of Cooper-Hewitt Products)
2550 American Ct.
Crescent Springs, Kent. 41017
800.544.3757 www.sperti.com

Kelsun Distributors

Replacement lamps, and fixtures and sockets for construction of units
13000 Bel-Red Road, No. 206
Bellevue, Wash. 98005
800.223.3808 www.light-sources.com/distributors.html

Lerner Medical Devices

Hand-held broad-band units
1545 Sawtelle Blvd., Suite 36
Los Angeles, Calif. 90025
800.8.LERNER www.lernermedical.com

National Biological Corp.

Full-body, hand-held and localized broad-band and narrow-band units
1532 Enterprise Parkway
Twinsburg, Ohio 44087
800.338.5045 www.natbiocorp.com

Psoralite Corp.

Broad-band and narrow-band full-body and hand/foot custom-built models
2806 Wm. Tuller Drive
Columbia, S.C. 29205
800.331.3534 www.psoralite.com

Solarc Systems, Inc.

Broad-band and narrow-band home phototherapy systems and replacement lamps
12 Parker Court
Barrie, Ontario L4N 2A6
Canada
866.813.3357 www.solarcsystems.com

The Richmond Light Co.

Broad-band and narrow-band full-body and foot units
2301 Falkirk Drive
Richmond, Va. 23236
888.276.0559 www.trlc.com

Ultralite Enterprises, Inc.

Broad-band and narrow-band full-body and hand/foot units, and wrap-around sunglasses
390 Farmer Court
Lawrenceville, Ga. 30045
800.241.7506 www.ultralite-uv.com

UVBioTek

Broad-band and narrow-band full-body units
124 E. North Shore Ave.
N. Fort Meyers, Fla. 33917
800.882.4683 www.uvbiotek.com

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TAKE ACTION.**

The National Psoriasis Foundation is committed to improving the lives of people with psoriasis and psoriatic arthritis. Join the Psoriasis Foundation to make a difference in the lives of millions of people with these diseases. Donate today!

Call **800.723.9166**

Visit **www.psoriasis.org**

E-mail **getinfo@psoriasis.org**

The following educational materials are available from the National Psoriasis Foundation:

- Alternative Approaches
- Biologic Medications for Psoriasis & Psoriatic Arthritis
- Conception, Pregnancy & Psoriasis
- Genital Psoriasis
- Phototherapy: Light Treatment for Psoriasis
- Psoriasis: How It Makes You Feel
- Psoriasis Research: Progress & Promise
- Psoriasis on Specific Skin Sites
- Psoriatic Arthritis
- Scalp Psoriasis
- Specific Forms of Psoriasis
- Steroids
- Sun & Water Therapy
- Systemic Medications: Internal Drugs for Moderate to Severe Psoriasis
- Topical Treatments for Psoriasis
- You & Your Doctor: Things to Consider
- Your Diet & Psoriasis

More updated information may be available at
www.psoriasis.org

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LIGHT TREATMENT FOR PSORIASIS

MISSION STATEMENT

Our mission is to improve the quality of life of people who have psoriasis and psoriatic arthritis. Through education and advocacy, we promote awareness and understanding, ensure access to treatment, and support research that will lead to effective management and, ultimately, a cure.

The National Psoriasis Foundation, a charitable 501(c)(3) organization, depends on your tax-deductible donations to support more than 5 million people affected by psoriasis and/or psoriatic arthritis. The Psoriasis Foundation is governed by a volunteer Board of Trustees and is advised on medical issues by a volunteer Medical Board. For more information, or to obtain a copy of the Foundation's Annual Report, call 800.723.9166.

National Psoriasis Foundation educational materials are reviewed by members of our Medical Board and are not intended to replace the counsel of a physician. The Psoriasis Foundation does not endorse any medications, products or treatments for psoriasis or psoriatic arthritis and advises you to consult a physician before initiating any treatment.

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