

Photodynamic therapy

What is photodynamic therapy (PDT)?

Photodynamic therapy (PDT) is a treatment that uses light and a medicine that is put on the skin (Levulan®) to kill cancer and pre-cancer skin cells.

What is PDT used to treat?

- Actinic keratoses- precancerous skin changes caused by years of sun exposure
- Diffuse actinic squamous dysplasia- skin with a lot of sun damage and a history of skin cancer.
- The Food and Drug Administration (FDA) has not approved PDT to treat the following skin cancer but research shows that it may be useful for:
 - Squamous cell carcinoma in situ (early cancer)
 - Squamous cell carcinoma
 - Basal cell carcinoma

What are other treatment options besides PDT?

Other treatment options may include:

- Chemotherapy cream used on the skin (Efudex®, Solaraze®, and Carac®)
- Immunotherapy cream used on the skin (Aldara®)
- Electrodesiccation and curettage -cancer is cut from the skin and the area is treated with an electric current that stops the bleeding and kills cancer cells
- Cryotherapy (also called cold spray) – a treatment that freezes and kills abnormal tissue
- Chemical peel - a solution put on the skin that causes it to peel off
- Mohs surgery - thin layers of cancer tissue are cut from the skin and each layer is looked at under the microscope until no cancer cells are seen
- Standard excision - the cancer is cut from the skin along with some of the normal skin around it

Your doctor will talk to you about these options and together you will decide which treatment is best for you.

Getting Ready for Treatment

Tell your doctor:

- If you or anyone in your family is very sensitive to sunlight.
- If you or anyone in your family is allergic to porphyrins.
- If you are pregnant, nursing or planning to become pregnant.
- If you have a blood-clotting problem.
- If you take any medicines (including topical and non-prescription). Some medicines may increase your sensitivity to light (see the attached list).
- If you have any drug allergies or sensitivities.

On the day of treatment:

- Do not wear makeup, lotions, or perfumes on the day of treatment.
- Take all of your medicine, unless you are told not to by your doctor or nurse.
- Bring items to protect your skin (umbrella, sunglasses, wide-brimmed hat, long-sleeved top and long pants) because your skin will be sensitive to light after the treatment.
- Bring a sunscreen that contains zinc oxide or titanium dioxide.
- Bring a book, magazine or personal music player to help pass the time. Your appointment may last up to 2-3 hours.

About the Treatment

Levulan Kerastick® topical solution is applied

1. You will be asked to clean the treatment area with soap and water.
2. Next, the area will be cleansed with acetone.
3. Then the medicine will be applied to your skin.
4. Your doctor will then tell you how long you will need to wait (usually 1-1 ½ hours) for the medicine to treat the skin cells.
5. Once the Levulan® is applied, your skin is now sensitive to light, and you must avoid exposure to sunlight and other forms of bright light for 36 hours.
6. You will then wait in a softly lit area.

BLU-U® or “light” treatment

1. You will be asked to gently clean the treatment area again with soap and water.
2. Your treatment with BLU-U® will take about 17 minutes.
3. Your doctor and/or nurse will be with you during the actual BLU-U® treatment.
4. Protective eyewear will be given to you to wear during your BLU-U® treatment. You will also be given a small fan to help cool the treatment area.

5. You may have stinging or burning during the light treatment. This feeling is usually strongest during the 2nd to 7th minute of treatment. It may last up to 24 hours. If at anytime the feeling becomes too strong, tell your doctor or nurse right away. They will have you take a break or stop the treatment.
6. A large amount of sunscreen will be applied to the treated area before you leave. If your face is treated, you will be leaving the office with a visible coating of sunscreen.

After the Treatment

- Your skin will be very sensitive to light after this treatment. Protect your skin with the items you were asked to bring.
- You may have redness and swelling for up to 4 weeks after your treatment.
- You may have scaling or crusting on the skin for up to 4 weeks after your treatment.
- Your treated skin may look darker or lighter (hyper- or hypo-pigmentation).

Please remember:

- To avoid the sun and/or bright light for 36 hours (do not walk the dog, do yard work or take out the garbage during the day). Plan time off of work as needed.
- To protect your skin with the sun-protective items you were told to bring.
- To apply your sunscreen (containing zinc oxide or titanium dioxide) 3 times a day for 3 days.
- To use moisturizers as needed.

How do I get in touch with my doctor or nurse?

- Call our Nursing Phone Triage number at 215-728-4300 during normal business hours, Monday - Friday 8:00 am to 5:00 pm.
- Call the Fox Chase Cancer Center operator after normal business hours at 215-728-6900 and ask to speak with Dr. Perlis or Dr. Lessin.
- If you have a true emergency that cannot wait for a response please call 215-356-6942. This is the direct cell phone number for Dr. Perlis.

Adopted: 10/09