

# The Truth About Acne & Photodynamic Therapy: What Every Patient Needs to Know

## Introduction to Photodynamic Therapy

The battle is the same, but the weapons are changing. Since the beginning of June 2004, Dr. Eric Dohner has started to use a new cosmetic technique to tackle acne, precancerous skin spots called actinic keratosis and skin that needs refreshing. Instead of using Accutane, antibiotics, or liquid nitrogen, a growing number of Oneonta residents are tackling these problems with light and a topical medication called Levulan. The procedure is called Photodynamic Therapy (PDT) and it is taking North America by storm.

Why is it so popular? It is an easy, safe and cosmetically pleasing treatment that takes little time from your busy schedule.

## What Is Photodynamic Therapy?

Photodynamic therapy (PDT) is a special treatment performed with a topical photosensitizing agent called Levulan (5-aminolevulinic acid or ALA) activated with the correct wavelength of light. This is also known as "ALA/PDT treatment." These treatments remove sun damaged pre-cancerous zones and spots called actinic keratoses. Sun damage, fine lines, and blotchy pigmentation are also improved because of the positive effect of Levulan and the light treatment. ALA/PDT treatment also has the unique ability to minimize pores and reduce oil glands, effectively treating stubborn acne vulgaris, acne rosacea, and the appearance of some acne scars.

## How Much Improvement Can I Expect?

Patients with severe sun damaged skin manifested by actinic keratosis, texture, and tone changes including mottled pigmentation and skin laxity may see excellent results. You may also see improvement of large pores and pitted acne scars. Active acne can improve dramatically.

## How Many Treatments Will It Take To See The Best Results?

To achieve maximum improvement of pre-cancerous (actinic keratosis) sun damage, skin tone and texture, a series of three treatments three to five weeks apart is most effective. (Some patients with just actinic keratoses are happy with one treatment). Acne patients will usually need 4 treatments depending on the severity of the acne.

## What Are The Disadvantages?

Following PDT, the treated areas can appear red with some peeling for 2-7 days. Temporary swelling of the lips and around your eyes can occur for a few days. Darker pigmented patches called liver spots can become temporarily darker and then peel off leaving normal skin. (This usually occurs over 7-10 days). Repeat treatments may be necessary as medicine is not an exact science.

## What Are The Advantages?

1. Easier for patients than repeated topical liquid nitrogen, Efudex (5-FU), or Aldara because the side effects are minimal, rapid healing, and only 1-3 treatments required.
2. The ALA/PDT treatment at our clinic is painless verses liquid nitrogen, 5-FU, and Aldara.
3. Reduced scarring and improved cosmetic outcome compared with cautery, surgery, and Efudex. Liquid nitrogen can leave white spots on your skin.
4. Levulan improves the whole facial area treated creating one color, texture, and tone rather than just spot treating with liquid nitrogen, cautery, and surgery.

In summary, PDT matches the "Ideal Treatment" for actinic damage.

- Well tolerated (essentially painless)
- Easily performed by a specialty clinic environment
- Non-invasive (no needles or surgery required)
- Excellent cosmetic outcome (particularly in cosmetic sensitive areas of the face)

## Treatment Steps

1. Patients who have a history of recurring cold sores (Herpes simplex type I) should start oral Valtrex 500 mg tablets, two tablets twice daily for three days starting this prescription the morning of your PDT treatment. The prescription for this product will be ordered for you.
2. Make sure you skin is clean and free of all make-up, moisturizers, and sunscreens. Bring a hat, sunglasses, and scarf when appropriate to the clinic.
3. Photography will be done by the staff before the Levulan is applied.
4. You must sign a laser consent form.
5. An acetone scrub is performed. This will enhance the absorption of the Levulan and give much more even uptake.

6. Levulan is applied topically to the whole area 0- whole zone to be treated (such as the whole face, back of the hands, extensor part of the forearms). This is done by Dr. Dohner or his staff.
7. The Levulan is left on for 3-70 minutes before any light treatment.
8. The Levulan is activated with the V-Beam. This unique spectrum of light activates the Levulan beginning with low energy levels. This is painless, but requires about 89 minutes to complete.
9. Post-treatment instructions will be given to you to care for your improved skin.

## Home Care Instruction for Patients following Photodynamic Skin Rejuvenation

### Day of Treatment:

1. Remain indoors and avoid sunlight.
2. Take analgesics such as Tylenol or Advil if necessary.
3. Apply Hydrocortisone 1% ointment, Vaseline or Catrix ointment at night. Your skin will feel dry; keep it moisturized.

### Day 2

1. You may take a shower; Men should probably not shave if their face was treated.
2. You may take analgesics. Any discomfort usually subsides by day 3.
3. You should avoid sunlight and try to remain indoors on day 2. The photosensitivity to sunlight is usually gone 24 hours after treatment, but may last as long as 40 hours.
4. You should soak the treated areas with a solution of 1 tsp. white vinegar in 1 cup of cold water for 20 minutes every 4-6 hours. Ice may be applied directly over the vinegar soaks. The area should be patted dry and Vaseline ointment reapplied following the vinegar soaks.

### Day 3-7

1. You may begin applying make-up once any crusting has healed. The area may be slightly red for a few weeks. If make-up is important to you, please see one of our staff for a complimentary consultation for cover up makeup. It is especially effective to mask redness.
2. The skin will feel dry and tightened. A good moisturizer should be used daily.
3. Try to avoid direct sunlight for one week. No beaches! Use a sunscreen with a minimum SPF 30 for four months.

## What Areas Can Be Treated?

The face, neck, head, back and chest have all been treated with PDT and the BLU U for acne and actinic keratosis.

## What is the BLU-U?

The BLU-U is a special light with a blue wave length that helps kill the bacteria on the skin that causes acne. A treatment consists of a 15 minute session sitting in front of the light twice a week for 4 to 5 weeks. It is used for mild to moderate acne and has been shown to reduce acne by 30 to 70 % . There are no side effects, redness, swelling or crusting . The treatments can be continued after the initial series to maintain the improvement in acne.

## How much do PDT and BLU-U treatments cost?

We aim to make PDT and BLU-U treatments available and affordable to you. We charge for a full package of treatments combined with your home care products and facials, peels or microdermabrasions treatments allowing a huge discount over the individual cost of the treatments. We do offer the PDT and BLU-U treatments for those who wish to try it out as a single treatment.

We also offer discounts when PDT and BLU-U of the face is combined with treating the neck and or chest at the same time. Further discounts are offered when PDT and BLU-U is combined with Botox, Fillers (Restylane, Hylaform or Cosmoderm), PDT and BLU-U of the neck, and / or Threading.

## Are You Afraid To Have PDT Done?

Many people who have had cosmetic treatments of any sort have had fears and doubts. A common concern is that they will be thought of as being vain. My experience has been that those who have a cosmetic treatment done are no more vain than anybody else. What distinguishes these individuals is their intense desire to get the most out of life. Having good looks, to them, is as important as how they feel. Looking after your appearance is not about being vain; it is actually a normal human trait. The history of the world tells us over and over: I think you should feel proud of yourself for having the will and ability to change something you do not like. The only time it is a mistake is if you do this for someone other than yourself – you need to do it FOR YOU!

## Who Should You See To Get The Best Results?

Your best chance of getting the best results is to see an expert who continues to learn about PDT and BLU-U. The expert should be a person well trained in all aspects of cosmetic surgery and skin care.

Here are some questions you should ask:

1. Is your Skin professional an M.D.?

2. How long has the doctor been doing PDT and BLU-U?
3. Where and with whom did the doctor take his PDT and BLU-U training?
4. When was your doctor's last training in PDT and BLU-U? (This is important, because new things are always being discovered about PDT and BLU-U. I learn new things about it all the time).
5. How often does your doctor do PDT and BLU-U treatments? Daily?
6. What is the price of the PDT and BLU-U? (If it is too cheap. You should be concerned that the provider may be cutting to save costs).
7. Does the doctor discuss other options in addition to PDT and BLU-U?

**DUSA Pharmaceuticals** has issued results of a phase II trial of their **Levulan (aminolevulinic acid) Photodynamic Therapy (PDT)**, for the treatment of acne. Trial data indicated that the addition of Levulan to vehicle PDT decreased total inflammatory facial lesion count in the subset of patients with the most severe disease (>60 lesions), compared to an increase in lesions for vehicle treatment alone. For all other endpoints the drug did not demonstrate significant superiority to vehicle group, including median decrease in total lesion count (-61% vs. -80%), and percent of subjects achieving at least 2 grades improvement in symptom severity (39% vs. 67%). This investigator blinded study enrolled 72 subjects, who received one of 3 incubation periods with Levulan Kerastick (15, 60 or 120 minute) plus PDT with BLU-U (Blue Light Photodynamic Therapy Illuminator), or BLU-U vehicle PDT alone.