

# PIMA DERMATOLOGY

ADULT / PEDIATRIC / COSMETIC / LASER & SKIN SURGERY

## Photodynamic Therapy for Pre-Cancers, Sun Damaged Skin and Acne

### What is Photodynamic Therapy?

Photodynamic therapy (PDT) is a special treatment performed with a topical light sensitizing agent called Levulan (5-aminolevulinic acid or ALA) activated with the correct wavelength of light. This is also known as 'ALA/PDT Treatment' or 'Photodynamic Skin Rejuvenation'. These treatments remove sun damaged precancerous spots called actinic keratoses, as well as rejuvenate sun damaged skin. 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 and acne rosacea.

### 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 some improvement of large pores. Active acne can improve significantly with multiple treatments.

### How many treatments will it take to see the best results?

To achieve maximum improvement of pre-cancerous lesions (actinic keratoses), sun damage, skin tone and texture, a series of 2-3 sessions 4-6 weeks apart is the most effective. Some patients with only actinic keratosis are happy with just one treatment. More sessions can be done at periodic intervals in the future to maintain the rejuvenated appearance of the skin.

### What are the disadvantages?

Following PDT Rejuvenation, the treated areas can appear red with some peeling for 5-14 days. Some patients have an exuberant response to PDT Rejuvenation, and experience marked redness of their skin. Temporary swelling of the skin around the lips and eyes can occur for several days to a week. Darker pigmented patches, called lentigenes, can become temporarily darker and then peel off leaving normal skin (this usually occurs over 7-10 days). Repeat treatments may be necessary as PDT Rejuvenation results may vary. Treated skin is very sun and light sensitive for 24-48 hours. **\*\*It is imperative to avoid direct sun and light exposure and to wear a broad spectrum sunscreen for 1-3 days after treatment.\*\***

### What are the advantages?

1. Easier for patients than repeated topical liquid nitrogen therapy and less apt to leave whitish spots on the skin.
2. Home applied 5-FU treatment (Carac, Efudex or Fluoroplex) or Aldara may take 3-4 weeks of active medication application at home with a 1-2 week recovery period. The treatment and redness may last 5-6 weeks or more. The PDT treatment is done by the providers in office. Side effects are minimal, healing is relatively rapid (1-2 weeks) and only 1-3 treatments are required.
3. The ALA/PDT Rejuvenation treatment is much easier to tolerate than liquid nitrogen, 5-FU and Aldara.
4. Improved cosmetic outcome compared with cautery or surgery. Levulan improves the entire treated area creating one color, texture and tone, rather than just spot treating with liquid nitrogen, cautery or surgery.

**Please see reverse side of page.**

## **Advantages Continued**

PDT Treatment can be combined with our regular Laser Skin Toning treatments using IPL, Vbeam, Gentle:YAG, Smoothbeam or Starlux Fractional Resurfacing Lasers. These treatments target redness, brown spots as well as stimulate formation of more collagen in the skin, resulting in some skin tightening and scar remodeling. There is normally no downtime for these Laser Skin Toning treatments without Levulan. These treatments can be done alternatively or sequentially at 3-4 week intervals to compliment the results of PDT.

## **Treatment Steps**

1. When you have been advised to have Photodynamic Therapy, please inform your provider if you have a history of facial and/or nasal herpes to receive advice on antiviral therapy prior to treatment.
2. For patients who have a history of recurring cold sores, we will prescribe an oral antiviral medicine to be started the day of your treatment.
3. The skin should be clean and free of all makeup, moisturizers, and sunscreens. Bring a broad-brimmed hat and sunglasses to the treatment session.
4. An acetone scrub will be used to degrease the skin. This will enhance the absorption of the Levulan and give a much more even uptake.
5. Levulan is applied topically to the whole area or zone to be treated (the face, scalp, back of the hands and forearms).
6. The Levulan is left on for 60-90 minutes before any light treatment.
7. The area will be washed off before the treatment is started.
8. The Levulan is activated with a unique spectrum of light beginning with low energy levels. It usually Requires about 15-20 minutes to complete.
9. Occasionally a brief (5 minute) outdoor sun exposure will be recommended to augment the response.
10. High potency sunscreen will be applied to the treated area immediately following the treatment session.
11. Post Treatment instructions will be given to you to care for your skin following treatment.

## **In Summary**

PDT Rejuvenation matches the 'Ideal Treatment' for photo damaged skin:

- Well tolerated (essentially painless)
- Easily performed in the office
- Non-invasive (no needles or surgery required)
- Excellent medical and cosmetic outcome

**If you have additional questions, please call 520.795.7729. For more information, please visit [www.pimaderm.com](http://www.pimaderm.com).**