

## PHOTODYNAMIC THERAPY WITH ALA AND BLUE LIGHT



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### What is Photodynamic Therapy?

Photodynamic Therapy is a new and exciting procedure that was initially developed to treat pre-cancerous skin lesions. Over time and after several years of experience, it has been found to significantly improve the pigment and textural changes that are found in sun damaged skin. Additionally for patients with cystic acne, just a few treatments can give results similar to a prolonged course of antibiotics or Accutane, without the concern of medication side effects associated with those treatments.

### How does Photodynamic Therapy work?

Amino Levulinic Acid (ALA) is a light reactive substance that is produced in small amounts naturally by the skin. When applied topically in a solution, it is absorbed selectively by abnormal pre-cancerous and cancerous cells in the skin, as well as by certain other normal skin structures, such as the oil glands and hair follicles. Once absorbed by these tissues, a medical light source can be used to activate the ALA. The result is photochemical reaction that generates a toxic oxygen product that damages only the ALA containing cells without harming the adjacent tissue. The skin's natural repair process then clears and replaces any damaged cells, leading to more vital healthier skin.

### What conditions can be treated with Photodynamic Treatment?

Photodynamic Therapy can be used to treat a variety of conditions, including age spots, broken capillaries, sun damage, mottled pigmentation, redness from rosacea, skin texture changes, fine wrinkles, enlarged oil glands and pores, acne (including cystic acne), and pre-cancerous actinic keratoses.

### How is the treatment done?

The skin in the treatment area is cleansed and the surface oil is removed. AVISIA photoanalysis is then done to document the extent of texture changes and damage already present. The ALA is then applied and allowed to remain on the skin for 15 to 60 minutes, and is then removed. The area is then treated using the blue light, a painless non-ultraviolet light source. After treatment a sunblock is applied to protect the treated area from any additional light exposure. Normal activities can be resumed as long as light exposure is minimized for forty-eight hours after treatment.

### What is the recovery period after treatment?

There may be some temporary redness followed by minimal peeling, something like the effect of sunburn, after treatment. For those with more significant sun damage, there may be some crusting in the areas where there are pre-cancers. Rarely, there can be some temporary mild swelling, which resolves in several days.

### How many treatments are needed?

This depends on the condition being treated. In some patients, a single treatment is sufficient. For cystic acne, three to four treatments are usually required. Sun damaged skin may require two or three initial treatments, followed by periodic treatments as part of a multifaceted skin

health maintenance program, which would also include a prescribed daily skin care regimen, intermittent chemical peels and other directed aesthetic treatments.