

Instructions for Blue Light Phototherapy

1. Use for 10-30 minute periods daily for 1 –2 weeks. Skipping a day will not detract from the effects, nor will it help speed the effects. Ideally, 20 minutes per day in minimum 10 minute sessions will bring good results.
2. **SAFETY: Always** wear the orange glasses, and to the extent possible keep eyes closed during the procedure. This will allow therapy of the eyelids as well as protect the eyes from radiation. More than 1 hour per day is probably not useful to advance the effects. There is not an established dangerous level of blue light, but keep it under an hour per day. This is 1/5 the level that has been used without event. **Never** look directly at the bulbs without the glasses, and warn other people entering the room to avoid looking at the light source, and to wear glasses if they will be in the room for more than a minute.
3. Please take photographs of the areas so both of us can see if there is a positive effect. In 80% of reported cases, there is improvement, but in 20% of cases there is not. Photographs are very, very useful in this regard. Digital photographs are ideal.
4. Mechanism: Acne is often attributed to the activity of a bacteria under the skin called the acne bacterium (*Propionibacterium acnes*). The bacteria are natural, and it is believed that in themselves the bacteria do not cause the symptoms ascribed to acne. However, they do interact with chemicals produced (or not produced) by the body, and as a result the symptoms occur. Having the bacterial is normal and natural, nothing else. Having sporadic and localized reactions occur is also very typical, and may involve a number of factors from stress, hormone production to bad luck. It is very difficult to deliver oral or topical antibiotics to kill the bacteria, and only certain very potent regimens of antibiotics are used.

The bacteria produce a substance called Protoporphyrin IX, which absorbs blue light. When the blue light, oxygen (from the tissues) and Protoporphyrin IX interact, it causes the destruction of the bacteria. If the conditions are right for an acne inflammation (stress/chemicals/hormones/bad luck) but there is no bacteria present, then the inflammation cannot occur.

5. There is no “cure” for acne, but we can relieve some of the symptoms. We hope this will be the result with the Blue Light Therapy.
6. We ask that the device not be shared with others.