## **CELLUMA® LIGHT THERAPY**

Celluma® LED light therapy can be used as a powerful stand alone treatment or it can be added on to other treatments to optimize results (e.g. Radio Frequency (RF) or Intense Pulsed Light, IPL). The therapy applies light energy to the face or body to obtain therapeutic benefits. For maximum benefit, a 15 to 30 minute treatment is recommended.

Always use on clean, dry skin as lotions, creams and serums may decrease effectiveness by restricting light penetration.



CCUMO<sup>®</sup> Light Therapy

### What is Meibomian Gland Dysfunction (MGD)?

Our tears are made up of three layers: the lipid (oil) layer, aqueous (water) layer, and the mucous (sticky) layer. These layers work in unison to lubricate and coat the eyes, keeping them moist and comfortable.

Your meibomian glands control the lipids, also called meibum, which combine with other substances to create a thin film that consistently lubricates your eyes. Meibum is an essential part of your tear film as it prevents tear evaporation.

Meibomian Gland Dysfunction occurs when the meibomian glands fail to provide enough meibum. This can be triggered by various factors and causes the tear film to evaporate at a quicker rate, leading the eyes to feel dry and uncomfortable.



80% OF DRY EYE SYMPTOMS ARE DUE TO MEIBOMIAN GLAND DYSFUNCTION

# HEARTLAND EYE CONSULTANTS



Low Level Light Therapy (LLLT) for Ocular Surface Disease and Aesthetics

# HOW DOES LOW LEVEL LIGHT THERAPY (LLLT) WORK FOR DRY EYES?

LLLT applies light to the face & periorbital area (the region surrounding your eyes, including the eyelids, eyebrows, and upper cheekbones) gently warming the eyelids. This causes the meibomian glands to unclog and release oils, reducing the rapid evaporation of tears typically associated with MGD.

LLLT treats both the upper and lower eyelids simultaneously, and unlike other light treatments, it does not require a gel application. Based on your unique needs, the doctor will examine the severity of your condition and recommend either a single session or up to 3 sessions.

### WHAT DO THE DIFFERENT COLORS OF LLLT MEAN?

Blue, red and near-infrared are the most commonly used wavelengths in LED light therapy, and your eye doctor will select the wavelength or program most appropriate for your condition. The specific wavelengths are well researched and scientifically proven to have therapeutic benefits.



Blue penetrates the epidermis and is known to kill some acne bacteria.

Blue



Red reaches the dermal layer and has been shown to enhance collagen and elastic production through photobiostimulation of fibroblasts.

Red



**Near-Infrared** 

Near-infrared penetrates deepest and increases microcirculation (tissue repair), decreases inflammation and attenuates pain.

#### **TREATMENT FAQS:**

# Are there any post-treatment restrictions?

Once the Celluma® Light Therapy procedure is complete, no recovery time is needed, and you may resume normal activities.

#### **Does LLLT Hurt?**

This is a painless procedure. It usually takes approximately 15-30 minutes to complete the application while you sit comfortably in a reclining chair.

#### Is LLLT Safe?

Celluma® Light Therapy is a safe, non-invasive, non-surgical procedure.

# Are there any benefits outside of treating dry eye?

Low-level light therapy has been shown to effectively treat a wide variety of skin and musculoskeletal conditions. It is FDAcleared for wrinkles and acne as well as arthritic pain, and muscle and joint stiffness. In addition, it has clearances for muscle tissue tension and spasm and is proven to decrease inflammation and increase microcirculation and can be used anywhere on the body.

Your eye doctor will review contraindications and have you complete a special history form prior to treatment.