

## LipiFlow® Thermal Pulsation Therapy Information Sheet

### **What is Meibomian Gland Dysfunction and/or Evaporative Dry Eye Syndrome?**

Meibomian Gland Dysfunction (MGD) is a common condition where the Meibomian glands, located in the eyelids, do not function properly. These glands secrete an oily substance that helps to lubricate the surface of the eye and prevent tears from evaporating too quickly. When the Meibomian glands become blocked or dysfunctional, the quality and quantity of the oil they produce may be insufficient. This can lead to a range of symptoms, including dryness, irritation, redness, itching, and a gritty sensation in the eyes.

Evaporative Dry Eye Syndrome is a type of dry eye condition where there is an imbalance in the tear film, resulting in excessive evaporation of tears. Normally, the tear film consists of three layers: an outer oily layer produced by the Meibomian glands, a middle aqueous layer, and an inner mucous layer. When there is inadequate oil production from the Meibomian glands, the outer oily layer may be deficient, causing tears to evaporate too quickly and leaving the eyes dry and irritated.

Both Meibomian Gland Dysfunction and Evaporative Dry Eye Syndrome can result in similar symptoms and may overlap in some cases. Effective management typically involves addressing the underlying cause, such as using warm compresses, eyelid hygiene, artificial tears, or in more severe cases, treatments like LipiFlow® to clear blocked Meibomian glands and improve the quality of the tear film.

### **What is LipiFlow Treatment?**

LipiFlow® is an advanced in-office treatment designed to address Meibomian Gland Dysfunction (MGD) and associated Evaporative Dry Eye Syndrome. It utilizes a combination of gentle heat and pressure applied to the eyelids to help clear blockages in the Meibomian glands and restore their natural function.

During the LipiFlow procedure, a device is placed over the eyelids to deliver controlled heat to the inner eyelid surface, targeting the Meibomian glands. At the same time, the device applies pulsatile pressure to the outer eyelid surface, helping to express and clear any blockages within the glands. This dual-action approach aims to stimulate the production of healthy Meibomian gland secretions, which are essential for maintaining a stable tear film and preventing excessive evaporation of tears.

LipiFlow treatment is typically well-tolerated and takes approximately 12 minutes to complete for both eyes. It is considered a minimally invasive procedure and does not require any incisions or anesthesia. Many patients experience improvement in their dry eye symptoms following LipiFlow therapy, with results lasting for an extended period.

LipiFlow treatment is often recommended for individuals with moderate to severe Meibomian Gland Dysfunction who have not responded adequately to traditional treatments such as warm compresses, eyelid hygiene, and artificial tears.

### Prognosis and possible risks:

Meibomian Gland Dysfunction (MGD) is a condition that tends to worsen over time if left untreated. Opting out of this procedure may result in the progression of your condition, potentially limiting your treatment options in the future.

While uncommon, there are minimal risks associated with the procedure, including discomfort, or swelling in the eye or eyelids, irritation, inflammation of eyelid glands, corneal abrasion, conjunctival swelling, or irritation. You may also experience symptoms such as burning, stinging, tearing, itching, discharge, redness, a sensation of a foreign body in the eye, visual disturbances, light sensitivity, or the possibility of loosened or dislodged punctal plugs.

### What are the benefits of LipiFlow:

The benefits of LipiFlow® treatment include:

1. **Improved Meibomian Gland Function:** LipiFlow therapy helps to clear blockages within the Meibomian glands, allowing them to resume their normal function of producing oil. This helps to restore the natural lipid layer of the tear film, which is crucial for preventing tear evaporation and maintaining ocular surface health.
2. **Reduction of Dry Eye Symptoms:** By addressing the underlying cause of Evaporative Dry Eye Syndrome associated with Meibomian Gland Dysfunction (MGD), LipiFlow treatment can lead to a significant reduction in dry eye symptoms. Patients often experience relief from symptoms such as dryness, irritation, burning, itching, redness, and a gritty sensation in the eyes.
3. **Long-Term Relief:** LipiFlow therapy offers sustained improvement in Meibomian gland function and tear film stability. Many patients experience long-lasting relief from dry eye symptoms following treatment, with results lasting for an extended period, potentially up to several years.
4. **Minimally Invasive:** The LipiFlow procedure is performed in-office and is minimally invasive, requiring no incisions or anesthesia. It is generally well-tolerated by patients and involves minimal discomfort during the treatment process.
5. **Convenience:** LipiFlow treatment is a relatively quick procedure, typically taking around 12 minutes to complete for both eyes. Patients can resume their normal activities immediately following the treatment, making it a convenient option for those with busy lifestyles.

Overall, LipiFlow therapy offers an effective and safe solution for addressing Meibomian Gland Dysfunction and associated dry eye symptoms, providing patients with improved ocular comfort and quality of life.