

The TearScience® Solution for MGD

An end-to-end approach to addressing
Meibomian Gland Dysfunction



Identify, diagnose
and treat Meibomian
Gland Dysfunction
with confidence.

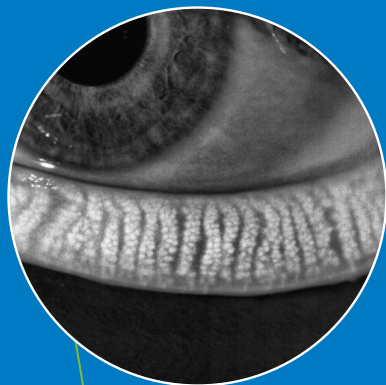
 **TearScience®**

Give MGD a Second Glance

Meibomian Gland Dysfunction is treatable.

The TearScience® Solution for MGD allows eye care professionals to safely and effectively identify, diagnose, and treat MGD in four easy steps.

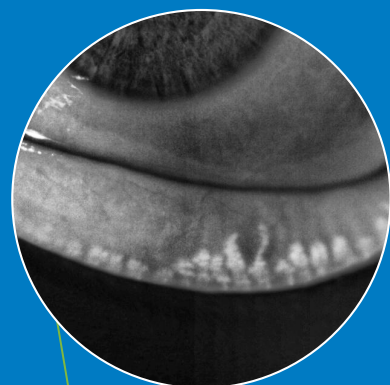
With 86% of all dry eye being attributed to Meibomian Gland Dysfunction (MGD) and 300 million dry eye sufferers worldwide, MGD patients represent one of the largest patient segments within eye care practices. MGD is prevalent, chronic, and progressive. By diagnosing and treating the root cause, eye care professionals intervene in the progression of the disease, improve gland function, and alleviate dry eye symptoms.



Normal meibomian gland structure



Structural change (duct dilation, gland atrophy and dropout)



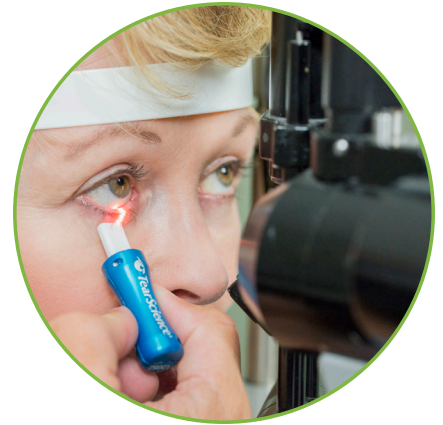
Structural change (severe gland atrophy and dropout)

Function & Structure

While dry eye is complex, its root cause, MGD, is straightforward.

Visualization of gland structure makes detection and management of MGD clear. Certain parallels can be drawn between the management of MGD and glaucoma. Glaucoma and MGD are both diagnosed and managed by measuring function and visualizing structure. The TearScience® Solution enables you to identify, diagnose and treat MGD without all the dry eye complexity.

Identify & Diagnose MGD in Minutes



1. Validated SPEED™ Dry Eye Questionnaire

TearScience's® Standard Patient Evaluation of Eye Dryness (SPEED™) questionnaire, validated by the Centre for Contact Lens Research at the School of Optometry and Vision Science at the University of Waterloo, was designed for use by eye care practices to quickly screen patients' dry eye symptoms, and can be used to help identify patients who may benefit from the LipiFlow® treatment for evaporative dry eye.

The SPEED™ questionnaire assesses frequency and severity of patients' dry eye symptoms. It examines the occurrence of symptoms on the current day, past 72 hours and past three months. With only four simple questions, the SPEED™ questionnaire can be easily administered in approximately two minutes. The SPEED™ score is then easily tallied to quickly obtain relevant dry eye patient symptom information.

The Korb
Meibomian
Gland
Evaluator™
(MGE)



2. Korb MGE™

The Korb Meibomian Gland Evaluator™ (MGE) is the only instrument that provides a standardized, repeatable evaluation of meibomian gland function. By applying a standardized force simulating the pressure of a deliberate blink eye care professionals are able to observe meibomian gland functionality through a slit lamp. The Korb MGE™ verifies the presence of MGD and allows eye care professionals to track disease progression and treatment response. By accurately assessing gland function, the Korb MGE™ supports the development of a treatment plan through an increased understanding of the presence and severity of MGD. The evaluation takes approximately two minutes per eye and fits easily into a routine eye exam.

3. LipiView® II

The LipiView® II is the only instrument that accurately measures lipid layer thickness, evaluates blink rate, and visualizes meibomian gland structure to determine lipid deficiency and detect MGD in its earliest stages.

The LipiView® II interferometer, with patented noise canceling technology, accurately measures sub-micron thickness of the lipid layer. LipiView® II analyzes over one billion data points, isolating the lipid layer of the tear film to generate an accurate repeatable measurement.

Real-time visualization of the lipid layer allows you to evaluate the dynamic response of the lipids to blinking, while proprietary algorithms measure the extent of lid closure during each blink.

DMI Technology: Advanced Gland Visualization

LipiView® II images meibomian glands with Dynamic Meibomian Imaging (DMI), which simultaneously employs Dynamic Reflected Illumination and Adaptive High-definition Transillumination. Each technology generates its own independent image of glands, which is then processed, displayed, and combined to provide a more accurate visualization of meibomian gland structure. Glare is virtually eliminated and lid thickness is factored in, significantly reducing interpretation errors.

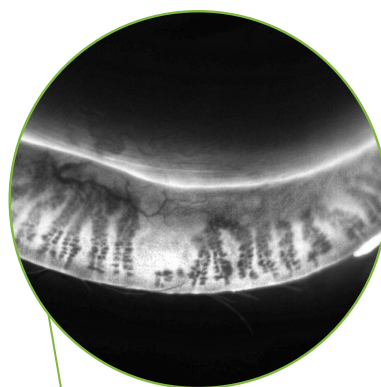


LipiView® II Key Features

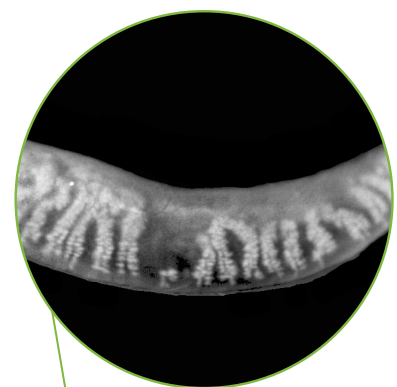
- Accurately measures sub-micron Lipid Layer Thickness (LLT), plotting its change over time
- Detects partial blinks and records blink interval for patient education
- Employs Dual-Mode DMI for a precise, integrated visualization of meibomian gland structure



Dynamic Illumination



Adaptive Transillumination



Dual-Mode DMI

Treat MGD in Minutes



4. LipiFlow®

LipiFlow® is the only FDA-cleared instrument for Meibomian Gland Dysfunction shown to restore gland function. It has been successfully used in over 45,000 treatments.

Utilizing patented VTP™ technology the LipiFlow® applies heat and pressure to the inner eyelid, optimizing its ability to heat and clear the meibomian glands and safely remove gland obstructions and stagnant gland contents.

Delivered through the LipiFlow® Activator, VTP™ technology maximizes results and minimizes discomfort. Patented vectored heat and adaptive force equalization targets the pulse, heat, and pressure on the meibomian glands to maximize effectiveness. Therapeutic motion rolls from base to lid margin releasing stagnant contents from the glands.

LipiFlow® Activator, a single-use sterile device, safely and comfortably delivers automated therapeutic energies to each meibomian gland from the inside while protecting the delicate structures of the patient's eye. Backed by 7 years of dedicated research and supported by 36 patents, LipiFlow® Activator provides a level of accuracy and quality that allows eye care professionals to treat their dry eye patients with confidence and ease.

A Breakthrough Inner Lid Approach Safe, Effective, Precise, Proven

In a clinical study, 90% of patients received a meibomian gland secretion score at least three times greater than before treatment. 80% of patients reported a mean improvement of 50% in symptoms one month following a single treatment.¹

LipiFlow® Activator featuring VTP™ technology

- _ Feedback-Guided
- _ Therapeutic
- _ Cornea Shield
- _ Force Equalization
- _ Proven Safety



1. 1 Lane SS, et al. A New System, the LipiFlow, for the Treatment of Meibomian Gland Dysfunction (MGD). Cornea 2012;31:396-404

About TearScience®

TearScience® is a medical device company that pioneers breakthrough technologies to significantly improve identification, diagnosis, and treatment of Meibomian Gland Dysfunction (MGD). MGD, the leading cause of dry eye, is chronic and progressive and affects approximately 300 million people worldwide. The TearScience® Solution for MGD is a comprehensive in-office diagnosis and treatment system that includes the LipiView® Ocular Surface Interferometer, the Korb Meibomian Gland Evaluator™, and the LipiFlow® Thermal Pulsation System. LipiFlow® is FDA-cleared and has been clinically proven to improve outcomes in patients with MGD. For additional information on how TearScience® is improving gland function and alleviating symptoms for patients with MGD worldwide, please visit www.tearscience.com.