

A close-up photograph of a woman's face, focusing on her eye. A semi-circular diagram with many fine, parallel lines is overlaid on the lower eyelid, representing the Meibomian glands. The background features a blue header with a white dashed line, a grey area with a colorful wavy graphic on the left, and a blue footer.

YOUR MEIBOMIAN GLANDS:

- PROTECTION
- HEALTH
- COMFORT

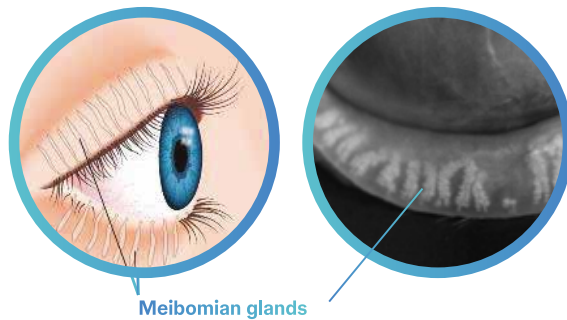
Every time you blink

In a normal eye

Tiny glands in the eyelids called meibomian glands secrete oil over the surface of the eye to protect the eye from drying out.

In an eye with MGD

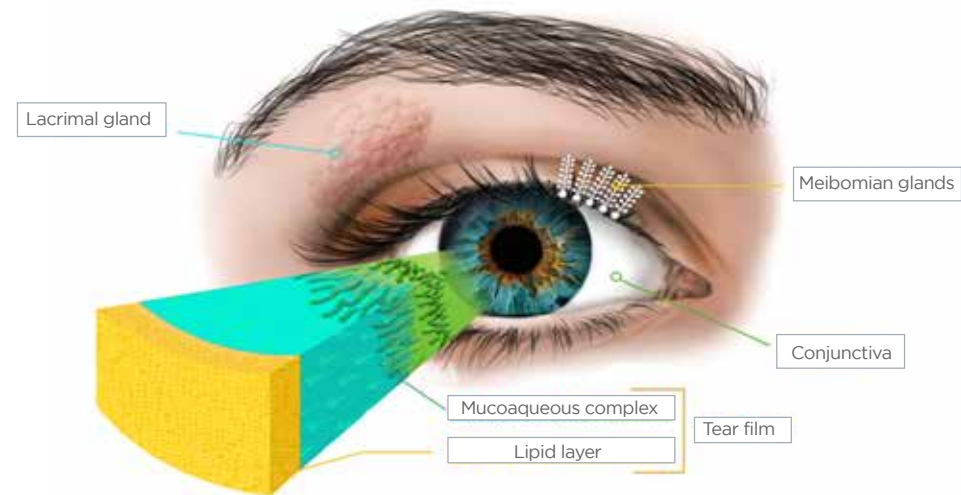
Blocked meibomian glands result in a lack of oil over the surface of the eye sometimes causing dry eye symptoms or blurry vision.



HEALTHY MEIBOMIAN GLANDS

are critical to healthy,
comfortable vision

MGD



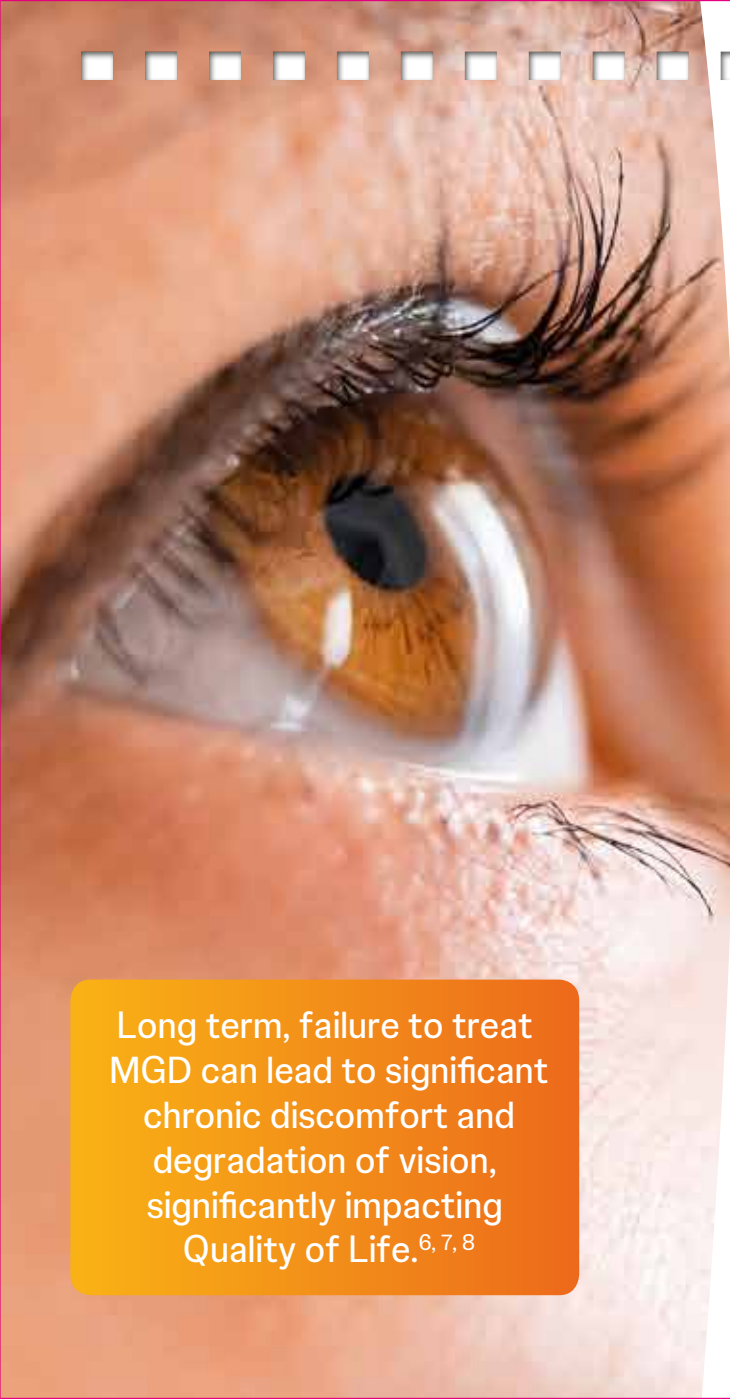
Blocked
meibomian
gland

Thinning
of oily layer

Dry eye

Reference:

1. Willcox MDP, et al. TFOS DEWS II Tear Film Report. The Ocular Surface. 2017; 15:366-403. REF2018TS4196.



Long term, failure to treat MGD can lead to significant chronic discomfort and degradation of vision, significantly impacting Quality of Life.^{6, 7, 8}



HEALTHY MEIBOMIAN GLANDS KEEP YOUR EYES MOIST

Meibomian Gland Dysfunction (MGD), due to blocked Meibomian glands, is a leading cause of dry eye disease.

- MGD is a chronic, progressive condition¹
- Many patients with MGD do not experience symptoms²
- Some of the people affected by MGD:
 - 86% of dry eye patients³
 - 63% of cataract patients⁴
 - 60% of contact lens wearers⁵

References:

1. Tomlinson A, et al. The International Workshop on Meibomian Gland Dysfunction: Report of the Diagnosis Subcommittee. *Invest Ophthalmol Vis Sci*. 2011;52(4):2006-49. REF2019OTH4651. 2. Viso E, et al. Prevalence of asymptomatic and symptomatic Meibomian Gland Dysfunction in the general population of Spain. *Invest Ophthalmol Vis Sci*. 2012; 53(6): 2601-2606. doi: 10.1167/ iovs.11-9228. REF2018OTH4456. 3. Lemp MA, et al. Distribution of Aqueous-Deficient and Evaporative Dry Eye in a Clinic-Based Patient Cohort. *Cornea*. 2012; 31(5): 472-478. doi:10.1097/ico.0b013e318225415a. REF2019OTH4479. 4. Trattler WS, et al. The prospective health assessment of cataract patient (PHACO) study: the effect of dry eye. *Clin Ophthalmol*. 2017; 11: 1423-30. REF2019TS4026. 5. Machalinska A, et al. Comparison of morphological and functional meibomian gland characteristics between daily contact lens wearers and nonwearers. *Cornea*. 2015 Sep; 34(9):1098-104. REF2022TS4005. 6. Xiao J, et al. Functional and Morphological Evaluation of Meibomian Glands in the Assessment of Meibomian Gland Dysfunction Subtype and severity. *Am J Ophthalmol*. 2020;209:160-67. REF2020MLT4049. 7. Geerling G, et al. Emerging strategies for the diagnosis and treatment of meibomian gland dysfunction – Proceedings of the OCEAN group meeting. *The Ocular Surface*. 2017;15:179-92. REF2020TS4024. 8. Ye F, et al. Objective assessment of tear-film quality dynamics in patients with meibomian gland dysfunction and aqueous-deficient dry eye optical quality changes in different dry eye subtypes. *Indian Journal of Ophthalmology*. 2019;67(5):599-603. REF2020TS4025.

MEIBOMIAN GLAND FUNCTION¹

GRADE 3



Secretion quality

Clear oil

GRADE 2



Colored
/ Cloudy liquid

GRADE 1



Inspissated
(Semi-Solid,
Toothpaste-Like
Consistency)

GRADE 0



No secretion
(Includes capped
orifices)



GLAND FUNCTION AND STRUCTURE,

along with other information can be
used by your Doctor who determines
whether you have MGD

MEIBOMIAN GLAND STRUCTURE



Normal gland
structure



Significant
gland loss



Severe
gland loss

Identifying
MGD

¹. Meibomian Gland Evaluator, Model MGE-1001 – Package insert – 0841-0004, current revision.



Drug-free,
12-min
treatment¹

TearScience™

LIPIFLOW™

THERMAL PULSATION

As the only automated therapy for the simultaneous application of heat and pressure for MGD, TearScience™ LipiFlow™ uses heat and pressure to clear blocked meibomian glands.^{1-3*}

TearScience™ LipiFlow™ Significantly improves: dry eye symptoms, less frequent blurred and/or poor vision.^{4,5}

Just 1 treatment increases mean gland secretion 3-fold and reduces more than 50% dry eye symptoms⁶

Treatment also **increased patient comfortable contact lens wear time by approximately 4 hours on average per day.⁷**

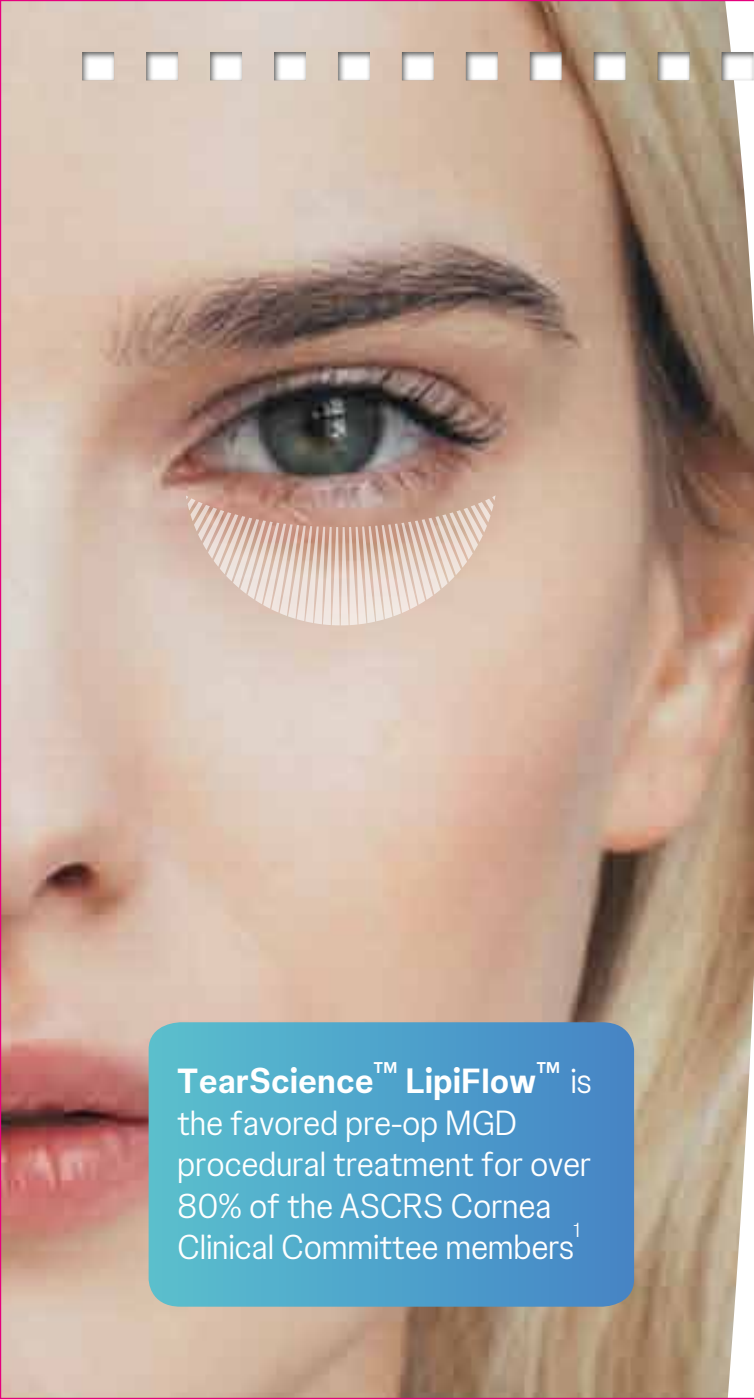
Results vary depending on MGD condition

*Internal competitive and patent analysis as of June 2018 against TearScience and iLux Systems in the US. See iLux website <http://www.tearfilm.com/ilux-device/> and TearCare website <https://sightsscience.com/us/products/tear-care/>

References:

1. TearScience™ LipiFlow™ Thermal Pulsation System - Doc. 0800-0017, current revision. **2.** Bzovey B, Ngo W. Eyelid Warming Devices: Safety, Efficacy, and Place in Therapy. *Clin Optom* 2022;14:133-147. 2024REF4283. **3.** Hu J, et al. Efficacy and safety of a vectored thermal pulsation system (LipiFlow®) in the treatment of meibomian gland dysfunction: a systematic review and meta-analysis. *Graefes's Archive for Clinical and Experimental Ophthalmology*. 10 Aug 2021. 2024REF4308. **4.** Lane SS, et al. A New System, the LipiFlow™, for the Treatment of Meibomian Gland Dysfunction (MGD). *Cornea*. 2012;31(4):396-404. REF2017OTH0234. **5.** Murakami D. Claims Substantiation Memo – Dec. 12, 2019. REF2019TS4124. **6.** Blackie CA, et al. The sustained effect (12 months) of a single-dose vectored thermal pulsation procedure for meibomian gland dysfunction and evaporative dry eye. *Clin Ophthalmol*. 2016; 10: 1385-1396. REF2018TS4059. **7.** Blackie CA, et al. A single vectored thermal pulsation treatment for meibomian gland dysfunction increases mean comfortable contact lens wearing time by approximately 4 hours per day. *Clin Ophthalmol*. 2018;12:169-183. REF2020OTH4466.

A topical anesthetic is used at the beginning of the procedure to ease patient discomfort for device placement.



TearScience™ LipiFlow™ is the favored pre-op MGD procedural treatment for over 80% of the ASCRS Cornea Clinical Committee members¹



IDENTIFYING AND TREATING MGD BEFORE CATARACT SURGERY

reduces post-operative complications and improves refractive outcomes^{1,2}

Patients treated with **TearScience™ LipiFlow™** pre-surgery had almost **2X reduction** in dry eye symptoms after surgery³

Untreated patients had **40% increase** in dry eye symptoms after surgery³

At 1-month post-treatment

References:

1. Starr C, et al. The ASCRS Cornea Clinical Committee. An algorithm for the preoperative diagnosis and treatment of ocular surface disorders. ASCRS and ESCRS 2019; 45(5):669-685. REF2019TS4104. 2. Cochener B, et al. Prevalence of meibomian gland dysfunction at the time of cataract surgery. *J Cataract Refract Surg* 2018; 44: 144-48. REF2018TS4020. 3. Data on File – LF-005: Final Clinical Study Report – Pilot Study for Treatment of Meibomian Gland Dysfunction (MGD) Prior to Cataract Surgery, Rev. B, p. 9, table 1. REF2020TS4006.



MORE THAN
830,000
WORLDWIDE
& GROWING¹

For patients with MGD, significantly improves:

Gland secretions²

Ocular surface symptoms including dry eye symptoms, and less frequent/poor vision^{3,4}

Contact lens wearing time⁵

When treating prior to cataract surgery, significantly improves dry eye symptoms and vision-related function scores post-operation^{4,6}

Choose TearScience™ LipiFlow™.
Because Eye Health Starts at the Surface.

References:

1. Aggregate Global Sales Figures; LipiFlow at 700K treatments worldwide.xlsx; Created Sep. 9, 2022. Data on file – REF2023TS4010. 2. Blackie CA, et al. The sustained effect (12 months) of a single-dose vectored thermal pulsation procedure for meibomian gland dysfunction and evaporative dry eye. *Clin Ophthalmol.* 2016; 10: 1385-1396. REF2018TS4059. 3. Lane SS, et al. A New System, the LipiFlow™, for the Treatment of Meibomian Gland Dysfunction (MGD). *Cornea.* 2012;31(4):396-404. REF2017OTH0234. 4. Murakami D. Claims Substantiation Memo – Dec. 12, 2019. REF2019TS4124. 5. Blackie CA, et al. A single vectored thermal pulsation treatment for meibomian gland dysfunction increases mean comfortable contact lens wearing time by approximately 4 hours per day. *Clin Ophthalmol.* 2018;12:169-183. REF2020OTH4466. 6. Data on file, 2018 (NCT01808560). Prospective randomized clinical trial including 34 subjects. Pilot study for treatment of Meibomian Gland Dysfunction (MGD) prior to cataract surgery. Accessed from: <https://clinicaltrials.gov/show/NCT01808560>. REF2020TS4006.

As with any medical procedure, risks and potential complications may occur. Please consult your eye care specialist for detailed information and to discuss these possible risks and complications with you prior to the procedure. © Johnson & Johnson Surgical Vision, Inc. 2024. 2024PP04396

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