



## MASSACHUSETTS

Blue Cross Blue Shield of Massachusetts is an Independent Licensee of the Blue Cross and Blue Shield Association

### Medical Policy

## Eyelid Thermal Pulsation for the Treatment of Dry Eye Syndrome

### Table of Contents

- [Policy: Commercial](#)
- [Policy: Medicare](#)
- [Authorization Information](#)
- [Coding Information](#)
- [Description](#)
- [Policy History](#)
- [Information Pertaining to All Policies](#)
- [References](#)

### Policy Number: 613

BCBSA Reference Number: 9.03.29

NCD/LCD: Local Coverage Determination (LCD): Category III CPT® Codes (L33392) (A56195)

### Related Policies

None

### Policy

#### Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity

Eyelid thermal pulsation therapy to treat dry eye syndrome is **INVESTIGATIONAL**.

#### Medicare HMO Blue<sup>SM</sup> and Medicare PPO Blue<sup>SM</sup> Members

This is not a covered service.

Medical necessity criteria and coding guidance for **Medicare Advantage members living in Massachusetts** can be found through the link below.

[Local Coverage Determinations \(LCDs\) for National Government Services, Inc.](#)

Local Coverage Determination (LCD): Category III CPT® Codes (L33392) (A56195)

**Note:** To review the specific LCD, please remember to click “accept” on the CMS licensing agreement at the bottom of the CMS webpage.

For medical necessity criteria and coding guidance for **Medicare Advantage members living outside of Massachusetts**, please see the Centers for Medicare and Medicaid Services website at <https://www.cms.gov> for information regarding your specific jurisdiction.

### Prior Authorization Information

#### Inpatient

- For services described in this policy, precertification/preauthorization **IS REQUIRED** for all products if the procedure is performed **inpatient**.

## Outpatient

- For services described in this policy, see below for products where prior authorization **might be required** if the procedure is performed **outpatient**.

	Outpatient
Commercial Managed Care (HMO and POS)	This is <b>not</b> a covered service.
Commercial PPO and Indemnity	This is <b>not</b> a covered service.
Medicare HMO Blue <sup>SM</sup>	This is <b>not</b> a covered service.
Medicare PPO Blue <sup>SM</sup>	This is <b>not</b> a covered service.

## CPT Codes / HCPCS Codes / ICD Codes

*Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.*

*Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.*

**The following CPT codes are considered investigational for Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:**

### CPT Codes

CPT codes:	Code Description
0207T	Evacuation of meibomian glands, automated, using heat and intermittent pressure, unilateral
0330T	Tear film imaging, unilateral or bilateral, with interpretation and report
0507T	Near-infrared dual imaging (ie, simultaneous reflective and trans-illuminated light) of meibomian glands, unilateral or bilateral, with interpretation and report

## Description

### Dry Eye Syndrome

Dry eye syndrome (DES), dry eye disease, or dysfunctional tear syndrome, either alone or in combination with other conditions, is a frequent cause of ocular irritation that leads patients to seek ophthalmologic care. DES is considered a significant public health problem. It is estimated to affect between 14% and 33% of the population worldwide.<sup>1,2</sup> The prevalence of DES increases with age, especially in postmenopausal women. It is estimated that DES affects more than 7 million Americans older than 40 years of age,<sup>1</sup> and approximately 1 to 4.3 million Americans between 65 and 84 years of age.<sup>3</sup> Prevention and treatment of DES are expected to be of greater importance as the population ages.

### Treatment

Current treatment options for Meibomian gland dysfunction include physical expression to relieve the obstruction, administration of heat (warm compresses) to the eyelids to liquefy solidified meibomian gland contents, eyelid scrubs to relieve external meibomian gland orifice blockage, and medications (eg, antibiotics, topical corticosteroids) to mitigate infection and inflammation of the eyelids.<sup>4,5</sup> These treatment options, however, have shown limited clinical efficacy. For example, physical expression can be very painful given the amount of force needed to express obstructed glands. Warm compress therapy can be time-consuming and labor intensive, and there is limited evidence that medications relieve MGD.<sup>5</sup> While the symptoms of DES often improve with treatment, the disease usually is not curable and may lead to substantial patient and physician frustration. Dry eyes can be a cause of visual morbidity and may compromise results of corneal, cataract, and refractive surgery. Inadequate treatment of DES may result in increased ocular discomfort, blurred vision, reduced quality of life, and decreased productivity.

## Summary

The LipiFlow Thermal Pulsation System is a treatment option for meibomian gland dysfunction. Meibomian gland dysfunction is recognized as the major cause of dry eye syndrome. The LipiFlow System applies heat to the palpebral surfaces of the upper and lower eyelids directly over the meibomian glands, while simultaneously applying graded pulsatile pressure to the outer eyelid surfaces, thereby expressing the meibomian glands.

For individuals who have dry eye symptoms consistent with meibomian gland dysfunction who receive eyelid thermal pulsation, the evidence includes 3 randomized controlled trials, a nonrandomized comparison study, and longer-term follow-up of patients from randomized controlled trials and observational studies. Relevant outcomes are symptoms, morbid events, and functional outcomes. The trials do not provide strong evidence of long-term efficacy. Two randomized controlled trials have demonstrated positive findings for most outcome measures over the short term (up to 3 months). Observational studies have shown sustained treatment effects for most outcomes up to 3 years. The nonrandomized study showed similar outcomes for eyelid thermal pulsation and standard treatment. The evidence is insufficient to determine the effects of the technology on health outcomes.

## Policy History

Date	Action
4/2019	BCBSA National medical policy review. Description, summary and references updated. Policy statements unchanged.
7/2018	Clarified coding information.
4/2017	New references added from BCBSA National medical policy.
4/2016	New references added from BCBSA National medical policy.
5/2015	New references from BCBSA National medical policy. Clarified coding information.
5/2014	New references from BCBSA National medical policy.
8/2013	BCBSA National medical policy review. New policy describing investigational indications. Effective 8/1/2013.

## Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

[Medical Policy Terms of Use](#)

[Managed Care Guidelines](#)

[Indemnity/PPO Guidelines](#)

[Clinical Exception Process](#)

[Medical Technology Assessment Guidelines](#)

## References

1. Fiscella RG. Understanding dry eye disease: a managed care perspective. *Am J Manag Care*. Dec 2011;17(Suppl 16):S432-439. PMID 22435675
2. The definition and classification of dry eye disease: report of the Definition and Classification Subcommittee of the International Dry Eye WorkShop (2007). *Ocul Surf*. Apr 2007;5(2):75-92. PMID 17508116
3. American Academy of Ophthalmology Cornea/External Disease Panel. Preferred Practice Pattern Guidelines. Dry Eye Syndrome. San Francisco, CA: American Academy of Ophthalmology; 2013.
4. Nichols KK, Foulks GN, Bron AJ, et al. The international workshop on meibomian gland dysfunction: executive summary. *Invest Ophthalmol Vis Sci*. Mar 2011;52(4):1922-1929. PMID 21450913
5. Blackie CA, Korb DR, Knop E, et al. Nonobvious obstructive meibomian gland dysfunction. *Cornea*. Dec 2010;29(12):1333-1345. PMID 20847669
6. Medical devices; ophthalmic devices; classification of the eyelid thermal pulsation system. Final rule. *Fed Regist*. Aug 19 2011;76(161):51876-51878. PMID 21894651
7. Lane SS, DuBiner HB, Epstein RJ, et al. A new system, the LipiFlow, for the treatment of meibomian gland dysfunction. *Cornea*. Apr 2012;31(4):396-404. PMID 22222996

8. Finis D, Hayajneh J, Konig C, et al. Evaluation of an automated thermodynamic treatment (LipiFlow(R)) system for meibomian gland dysfunction: a prospective, randomized, observer-masked trial. *Ocul Surf.* Apr 2014;12(2):146-154. PMID 24725326
9. Blackie CA, Coleman CA, Holland EJ. The sustained effect (12 months) of a single-dose vectored thermal pulsation procedure for meibomian gland dysfunction and evaporative dry eye. *Clin Ophthalmol.* Jul 26 2016;10:1385-1396. PMID 27555745
10. Zhao Y, Veerappan A, Yeo S, et al. Clinical trial of thermal pulsation (Lipiflow) in meibomian gland dysfunction with pretreatment meibography. *Eye Contact Lens.* Nov 2016;42(6):339-346. PMID 26825281
11. Greiner JV. Long-term (12-month) improvement in meibomian gland function and reduced dry eye symptoms with a single thermal pulsation treatment. *Clin Experiment Ophthalmol.* Aug 2013;41(6):524-530. PMID 23145471
12. Finis D, Konig C, Hayajneh J, et al. Six-month effects of a thermodynamic treatment for MGD and implications of meibomian gland atrophy. *Cornea.* Dec 2014;33(12):1265-1270. PMID 25321941
13. Greiner JV. Effects of a single thermal pulsation system treatment on meibomian gland function and dry eye symptoms. *Eye Contact Lens.* Mar 2016;42(2):99-107. PMID 26222095
14. Miller KL, Walt JG, Mink DR, et al. Minimal clinically important difference for the Ocular Surface Disease Index. *Arch Ophthalmol.* Jan 2010;128(1):94-101. PMID 20065224
15. Ngo W, Situ P, Keir N, et al. Psychometric properties and validation of the Standard Patient Evaluation of Eye Dryness questionnaire. *Cornea.* Sep 2013;32(9):1204-1210. PMID 23846405