Oscar Clinical Guideline: Xdemvy (lotilaner) (PG161, Ver. 4)

Xdemvy (lotilaner)

Disclaimer

Clinical guidelines are developed and adopted to establish evidence-based clinical criteria for utilization management decisions. Clinical guidelines are applicable according to policy and plan type. The Plan may delegate utilization management decisions of certain services to third parties who may develop and adopt their own clinical criteria.

Coverage of services is subject to the terms, conditions, and limitations of a member's policy, as well as applicable state and federal law. Clinical guidelines are also subject to in-force criteria such as the Centers for Medicare & Medicaid Services (CMS) national coverage determination (NCD) or local coverage determination (LCD) for Medicare Advantage plans. Please refer to the member's policy documents (e.g., Certificate/Evidence of Coverage, Schedule of Benefits, Plan Formulary) or contact the Plan to confirm coverage.

Summary

Blepharitis is an inflammation of the eyelid margins. It's often marked by symptoms like red, watery eyes, a burning or stinging sensation, eyelid itchiness, and red or swollen eyelids. Those affected may notice unusual eyelash growth patterns, eyelash loss, or a crusty buildup around the lashes. Risk factors for blepharitis include inflammatory skin conditions (e.g., rosacea, dermatitis, psoriasis), infections, contact irritants or allergens (e.g., cosmetics, cigarette smoke, contact lenses) and some medications like retinoids.

A significant cause of blepharitis is the infestation of eyelash follicles and meibomian glands by tiny parasitic mites, mainly of the species *Demodex folliculorum* and *Demodex brevis*. It is proposed that Demodex blepharitis may be the cause of over two-thirds of the cases of Blepharisitis in the United States. This specific condition, termed Demodex blepharitis, features symptoms like redness, inflammation, abnormal eyelash growth, itching at the eyelid base, and the presence of collarettes. However, many individuals infested with Demodex mites do not exhibit any symptoms.

- *Demodex folliculorum* tends to infest the base of the eyelash, leading to anterior Demodex blepharitis, while *Demodex brevis* colonizes the meibomian glands, leading to posterior Demodex blepharitis.
- Traditional treatment methods have included tea tree oil, but its effectiveness remains under-researched.
- Other strategies for management of Demodex blepharitis include Xdemvy (lotilaner ophthalmic solution), and oral and topical ivermectin.

Xdemvy (lotilaner ophthalmic solution) 0.25% is a topical solution is an ectoparasiticide (anti-parasitic) indicated for the treatment of Demodex blepharitis. Xdemvy (lotilaner ophthalmic solution) works by inhibiting a gamma-aminobutyric acid (GABA)-gated chloride channel specific to mites, which causes paralysis in the mite, resulting in death. Xdemvy (lotilaner ophthalmic solution) 0.25% topical solution is applied to each eye twice daily (1 drop approximately 12 hours apart) for six (6) weeks. If another ophthalmic agent is being co-administered, it should be separated by at least five (5) minutes. If the individual uses contact lenses, these should be removed before Xdemvy (lotilaner ophthalmic solution) administration, and reinserted at least 15 minutes later.

Definitions

"Blepharitis" is an ocular condition characterized by the inflammation of the margins of the eyelids.

"Collarettes" are cylindrical dandruff or scaly debris found at the base of eyelashes, often seen in cases of Demodex blepharitis.

"Demodex blepharitis" is a specific type of blepharitis caused by the infestation of Demodex mites, marked by symptoms such as redness, inflammation, abnormal eyelash growth, and itching at the eyelid base.

"Demodex folliculorum and Demodex brevis" are two species of tiny parasitic mites that can infest the human eyelash follicles and meibomian glands, often leading to a type of blepharitis.

"Documentation" refers to written information, including but not limited to:

- Up-to-date chart notes, relevant test results, and/or relevant imaging reports to support diagnoses; or
- Prescription claims records, and/or prescription receipts to support prior trials of formulary alternatives.

"Ectoparasiticideis" a type of medication used to kill external parasites.

"Epilated lash" is an eyelash that has been plucked or removed.

"Madarosis" refers to the loss of eyelashes.

"Microscopic examination" is a method to analyze samples under a microscope to identify and diagnose various conditions, such as the presence of mites.

"[s]" indicates state mandates may apply.

Clinical Indications

Medical Necessity Criteria for Initial Clinical Review

Initial Indication-Specific Criteria

Demodex Blepharitis

The Plan considers Xdemvy (lotilaner) medically necessary when ALL of the following criteria are met:

1. The medication is prescribed by or in consultation with an ophthalmologist or optometrist; *AND*
2. The member is 18 years of age or older; *AND*
3. The member has a diagnosis of Demodex blepharitis based on the presence of clinical signs such as collarettes (i.e., cylindrical dandruff), lid erythema, itching, burning, tearing, sensation of a foreign body, madarosis, redness, ocular irritation, and/or misdirected lashes; *AND*
4. Documentation indicating that the member has symptoms attributable to Demodex blepharitis in at least one eye (e.g. itching, foreign body sensation, burning, etc); *AND*
5. Xdemvy (lotilaner) is being prescribed at a dose and frequency that is within FDA approved labeling OR is supported by compendia or evidence-based published dosing guidelines for the requested indication*; AND*

   The requested medication is being used within the Plan's Quantity Limit of: 1 bottle every 6 weeks.

6. The member has NOT undergone more than one (1) 6-week treatment course in the past 12 months.

If the above prior authorization criteria are met, Xdemvy (lotilaner) will be approved for up to 6-weeks.[s]

Continued Care

Medical Necessity Criteria for Subsequent Clinical Review

Subsequent Indication-Specific Criteria

Demodex Blepharitis

All reauthorization requests will be reviewed on a case-by-case basis[s] to determine if retreatment of therapy is medically necessary (based on the documentation provided, current treatment guidelines, and individual member needs). The following clinical chart documentation should be provided for review:

1. Current clinical documentation supporting the need for retreatment; *and*
2. Documented response to the previous course of treatment; *and*

   Documentation should indicate that the member has experienced an improvement in signs and symptoms of Demodex blepharitis with previous course of therapy (e.g., minimal to no itching, minimal to no lid erythema, and/or a decrease in collarettes compared to baseline)
3. Plan for the duration of the treatment course.

   The benefits of a longer treatment course beyond 6-weeks are unknown.

Experimental / Investigational, or unproven[s]

Xdemvy (lotilaner) for any other indication or use is considered experimental, investigational, or unproven.

References

1. Epstein, Ilan J. MD; Rosenberg, Eric DO; Stuber, Ross BA; Choi, Michael B. MD; Donnenfeld, Eric D. MD,; Perry, Henry D. MD,. Double-Masked and Unmasked Prospective Study of Terpinen-4-ol Lid Scrubs With Microblepharoexfoliation for the Treatment of Demodex Blepharitis. Cornea 39(4):p 408-416, April 2020. | DOI: 10.1097/ICO.0000000000002243
2. American Academy of Ophthalmology. Blepharitis Preferred Practice Pattern. Published: April 2024. Available at: https://www.aao.org/education/preferred-practice-pattern/new-preferredpracticepatternguideline-4. Accessed July 17, 2026.
3. Epstein IJ, Rosenberg E, Stuber R, Choi MB, Donnenfeld ED, Perry HD. Double-masked and unmasked prospective study of terpinen-4-ol lid scrubs with microblepharoexfoliation for the treatment of demodex blepharitis. Cornea 2020;39;408-416.
4. Gaddie IB, Donnenfeld ED, Karpecki P, et al. Lotilaner Ophthalmic Solution 0.25% for Demodex Blepharitis: Randomized, Vehicle-Controlled, Multicenter, Phase 3 Trial (Saturn-2). Ophthalmology. 2023 Oct;130(10):1015-1023. doi: 10.1016/j.ophtha.2023.05.030. Epub 2023 Jun 5.
5. Gao YY, Di Pascuale MA, Li W, et al. High prevalence of Demodex in eyelashes with cylindrical dandruff. Invest Ophthalmol Vis Sci. 2005 Sep;46(9):3089-94. doi: 10.1167/iovs.05-0275.

6. Gonzalez-Salinas R, Karpecki P, Yeu E, et al. Safety and efficacy of lotilaner ophthalmic solution, 0.25% for the treatment of blepharitis due to demodex infestation: A randomized, controlled, double-masked clinical trial. Cont Lens Anterior Eye. 2022 Aug;45(4):101492. doi: 10.1016/j.clae.2021.101492. Epub 2021 Jul 28.
7. Muhammad Muneeb Akhtar S, Fareed A, Sohaib Asghar M, Mumtaz M, Kaur S. Efficacy and Safety of Lotilaner Ophthalmic Solution 0.25% for the Treatment of Demodex Blepharitis: A Meta-Analysis of Randomized Controlled Trials. Cont Lens Anterior Eye. 2024 Jun;47(3):102148. doi: 10.1016/j.clae.2024.102148. Epub 2024 Mar 21.
8. O'Dell L, Dierker DS, Devries DK, et al. Psychosocial Impact of *Demodex* Blepharitis. Clin Ophthalmol. 2022 Sep 2;16:2979-2987. doi: 10.2147/OPTH.S374530.
9. Randon M, Liang H, El Hamdaoui M, Tahiri R, Batellier L, Denoyer A, Labbé A, Baudouin C. In vivo confocal microscopy as a novel and reliable tool for the diagnosis of Demodex eyelid infestation. Br J Ophthalmol 2015;99;336-341.
10. Rhee MK, Yeu E, Barnett M, et al. Demodex Blepharitis: A Comprehensive Review of the Disease, Current Management, and Emerging Therapies. Eye Contact Lens. 2023 Aug 1;49(8):311-318. doi: 10.1097/ICL.0000000000001003. Epub 2023 Jun 2.
11. Sadri E, Paauw JD, Ciolino JB, et al. Long-Term Outcomes of 6-Week Treatment of Lotilaner Ophthalmic Solution, 0.25%, for Demodex Blepharitis: A Noninterventional Extension Study. Cornea. 2024 Nov 1;43(11):1368-1374. doi: 10.1097/ICO.0000000000003484. Epub 2024 Feb 9.
12. Savla K, Le JT, Pucker AD. Tea tree oil for Demodex blepharitis. Cochrane Database of Systematic Reviews 2020, Issue 6. Art. No.: CD013333. DOI: 10.1002/14651858.CD013333.pub2. Accessed 24 August 2023.
13. Shah PP, Stein RL, Perry HD. Update on the Management of Demodex Blepharitis. Cornea. 2022 Aug 1;41(8):934-939. doi: 10.1097/ICO.0000000000002911. Epub 2021 Nov 3. PMID: 34743107.
14. Yeu E, Holdbrook M, Baba SN, et al. Treatment of *Demodex* Blepharitis: A Prospective, Randomized, Controlled, Double-Masked Clinical Trial Comparing Topical Lotilaner Ophthalmic Solution, 0.25% Eyedrops to Vehicle. Ocul Immunol Inflamm. 2023 Oct;31(8):1653-1661. doi: 10.1080/09273948.2022.2093755. Epub 2022 Aug 1.
15. Yeu E, Wirta DL, Karpecki P, et al. Lotilaner Ophthalmic Solution, 0.25%, for the Treatment of Demodex Blepharitis: Results of a Prospective, Randomized, Vehicle-Controlled, Double-Masked, Pivotal Trial (Saturn-1). Cornea 2023; 42:435.
16. Zhao YE, Wu LP, Hu L, Xu JR. Association of blepharitis with Demodex: a meta-analysis. Ophthalmic Epidemiol 2012;19;95-102.
17. Xdemvy (lotilaner) [prescribing information]. Irvine, CA: Tarsus Pharmaceuticals Inc; July 2023.

Clinical Guideline Revision / History Information

Original Date: 9/21/2023

Reviewed/Revised: 12/19/2024, 10/01/2025, 01/04/2027