PRIOR AUTHORIZATION POLICY

POLICY: Ophthalmology – Oxervate Prior Authorization Policy
- Oxervate™ (cenegermin-bkbj ophthalmic solution – Dompé)

REVIEW DATE: 07/03/2024

OVERVIEW

Oxervate, a recombinant human nerve growth factor, is indicated for the treatment of **neurotrophic keratitis**.[1]

Duration of Treatment

The recommended dosing regimen is one drop six times a day (at 2 hour intervals) for 8 weeks.[1] In one of the pivotal studies, five patients who experienced a recurrence of neurotrophic keratitis after an 8-week course of Oxervate were re-treated with another 8 weeks of Oxervate.[2] Four of these patients achieved corneal healing, which was maintained through the end of the follow-up period.

Disease Overview

Neurotrophic keratitis, a rare degenerative disease, is characterized by corneal epithelium breakdown, impairment of corneal healing, and development of corneal ulceration, melting, and perforation.[3-6,9] Corneal epithelial cells release various neurotrophic growth factors, including nerve growth factors, which are important in maintaining the integrity and function of the ocular surface and in stimulating both epithelial and nerve fiber proliferation and survival.[7,8] When corneal sensory innervation is impaired, reduction of both protective reflexes and trophic neuromodulators essential for the vitality, metabolism, and wound healing of the ocular surface tissues results. *In vivo* studies have shown that increasing nerve growth factor concentration after injury can accelerate healing.[4,8]

Guidelines/Recommendations

Neurotrophic keratosis is classified into three stages: Stage 1 (mild), corneal epithelial changes; Stage 2 (moderate), corneal epithelial defect; Stage 3 (severe), corneal ulcer, perforation, melting.[6] Prior to the approval of Oxervate, there were no approved pharmacologic therapies for the treatment of neurotrophic keratitis.[3] If neurotrophic keratitis is left untreated, the condition can progress to anatomical loss of the eye; even with treatment, loss of vision is common.[6,7] Treatment should target corneal sensory innervation impairment to restore corneal integrity; treatment goals are to stop progression and promote epithelial healing.

There are no formal clinical guidelines, although there are expert opinion on the diagnosis and treatment of neurotrophic keratitis.[6] Optimal care requires identifying and treating the underlying causes of neurotrophic keratitis; for example, using antiviral medications for herpetic disease, correcting eyelid abnormalities, controlling hemoglobin A1c levels in patients with diabetes, and providing supportive therapy for limbal stem cell deficiency. For all stages, optimal care includes discontinuation of all preservative-containing ophthalmic medications to the extent possible and use of preservative-free tear substitutes or lubricants is recommended. For patients with Stage 2 disease, Oxervate, prophylactic ophthalmic preservative-free antibiotics, oral tetracyclines (e.g., doxycycline), corneal therapeutic contact lenses, and fresh-frozen self-retained amniotic membrane may be considered. For patients with Stage 3 disease, all of the listed options for Stage 2 disease as well as synthetic tissue adhesive, tarsorrhaphy, amniotic membrane transplant, and corneal neurotization are optimal treatments.

POLICY STATEMENT

Prior Authorization is recommended for prescription benefit coverage of Oxervate. All approvals are provided for the duration noted below. Because of the specialized skills required for evaluation and diagnosis of patients treated with Oxervate as well as the monitoring required for adverse events and long-term efficacy, approval requires Oxervate to be prescribed by a physician who specializes in the condition being treated.

Automation: None.

RECOMMENDED AUTHORIZATION CRITERIA

Coverage of Oxervate is recommended in those who meet the following criteria:

FDA-Approved Indication

1. **Neurotrophic Keratitis.** Approve if the patient meets ONE of the following (A or B):
   Note: The initial course is 8 weeks of treatment with Oxervate in the affected eye. If the patient has not yet received a total of 8 weeks of treatment in the affected eye, review under Initial Course. If the patient has already received at least 8 weeks of treatment in the affected eye, review under Recurrence.
   - **A)** Initial Course. Approve up to 8 weeks per affected eye(s) if the patient meets BOTH of the following (i and ii):
     Note: For example, if the patient has already received 2 weeks of treatment with Oxervate, an additional 6 weeks may be approved. This allows for a total of 8 weeks of treatment per affected eye(s).
     - **i.** Patient has previously received < 8 weeks of treatment in the affected eye(s); AND
     - **ii.** The medication is prescribed by an ophthalmologist or optometrist; OR
   - **B)** Recurrence. Approve up to 8 weeks per affected eye(s) if the patient meets BOTH of the following (i and ii):
     Note: For example, if the patient has already received 8 weeks of treatment with Oxervate, an additional 8 weeks may be approved. This allows for a total of 16 weeks of treatment per affected eye(s).
     - **i.** Patient has previously received at least 8 weeks but less than 16 weeks of treatment per affected eye(s); AND
     - **ii.** The medication is prescribed by an ophthalmologist or optometrist.

CONDITIONS NOT RECOMMENDED FOR APPROVAL

Coverage of Oxervate is not recommended in the following situations:

1. **Treatment Duration of > 16 Weeks Per Affected Eye(s).** Available data supports use of Oxervate for up to 16 weeks.[2,7]

2. Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.

REFERENCES

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8. Vesura P, Giannaccare G, Pellegrini M, et al. Neurotrophic keratitis: current challenges and future prospects. *Eye and Brain*. 2018;10:37-45.
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