



MASSACHUSETTS

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Medical Policy

Phototherapeutic Keratectomy

Table of Contents

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

Policy Number: 597

BCBSA Reference Number: 9.03.07A

NCD/LCD: NA

Related Policies

- Endothelial Keratoplasty, #[180](#)
- Epiretinal Radiation Therapy for Age-Related Macular Degeneration, #[610](#)
- Gas Permeable Scleral Contact Lens, #[371](#)
- Implantation of Intrastromal Corneal Ring Segments, #[235](#)
- Intravitreal Angiogenesis Inhibitors for Choroidal Vascular Conditions, #[343](#)
- Keratoprosthesis, #[221](#)
- Orthoptic Training for the Treatment of Vision or Learning Disabilities, #[611](#)
- Photocoagulation of Macular Drusen, #[607](#)
- Photodynamic Therapy for Choroidal Neovascularization, #[599](#)
- Surgical Vision Services, #[241](#)
- Transpupillary Thermotherapy for Treatment of Choroidal Neovascularization, #[600](#)
- Vision Services, #[675](#)

Policy

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

Phototherapeutic keratectomy may be **MEDICALLY NECESSARY** when used as an alternative to a lamellar keratoplasty in the treatment of visual impairment or irritative symptoms related to corneal scars, opacities, or dystrophies extending beyond the epithelial layer.

Phototherapeutic keratectomy is **NOT MEDICALLY NECESSARY** when used as an alternative to a superficial mechanical keratectomy in treating patients with superficial corneal dystrophy, epithelial membrane dystrophy, and irregular corneal surfaces due to Salzmann's nodular degeneration or keratoconus nodules.

INVESTIGATIONAL applications of phototherapeutic keratectomy include, but are not limited to, treatment of recurrent corneal erosions and infectious keratitis.

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)	Prior authorization is not required .
Commercial PPO and Indemnity	Prior authorization is not required .
Medicare HMO Blue SM	Prior authorization is not required .
Medicare PPO Blue SM	Prior authorization is not required .

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.

HCPCS Codes

HCPCS codes:	Code Description
S0812	Phototherapeutic keratectomy (PTK)

ICD-10 Diagnosis Codes

ICD-10-CM diagnosis codes:	Code Description
H17.00	Adherent leukoma, unspecified eye
H17.01	Adherent leukoma, right eye
H17.02	Adherent leukoma, left eye
H17.03	Adherent leukoma, bilateral
H17.10	Central corneal opacity, unspecified eye
H17.11	Central corneal opacity, right eye
H17.12	Central corneal opacity, left eye
H17.13	Central corneal opacity, bilateral
H17.811	Minor opacity of cornea, right eye
H17.812	Minor opacity of cornea, left eye
H17.813	Minor opacity of cornea, bilateral
H17.819	Minor opacity of cornea, unspecified eye
H17.821	Peripheral opacity of cornea, right eye
H17.822	Peripheral opacity of cornea, left eye
H17.823	Peripheral opacity of cornea, bilateral
H17.829	Peripheral opacity of cornea, unspecified eye
H17.89	Other corneal scars and opacities
H17.9	Unspecified corneal scar and opacity
H18.59	Other hereditary corneal dystrophies

Description

Phototherapeutic keratectomy involves the use of the excimer laser to treat visual impairment or irritative symptoms relating to diseases of the anterior cornea by sequentially ablating uniformly thin layers of corneal tissue. Phototherapeutic keratectomy may be performed in the office setting using topical anesthesia. *Phototherapeutic* keratectomy must be distinguished from *photorefractive* keratectomy, which involves the use of the excimer laser to correct refractive errors of the eye (i.e., myopia, astigmatism, hyperopia, and presbyopia). Photorefractive keratectomy is addressed in a separate policy, No. 9.03.02.

Essentially, phototherapeutic keratectomy (PTK) functions by removing anterior stromal opacities or eliminating elevated corneal lesions while maintaining a smooth corneal surface. Complications of PTK include refractive errors, most commonly hyperopia, corneal scarring, and glare. The U.S. Food and Drug Administration (FDA) labeling for the excimer laser identifies the following ophthalmologic therapeutic indications:

- Superficial corneal dystrophies (including granular, lattice, and Reis-Buckler's dystrophies)
- Epithelial basement membrane dystrophy, irregular corneal surfaces (secondary to Salzmann's degeneration, keratoconus nodules, or other irregular surfaces)
- Corneal scars and opacities (i.e., post-traumatic, post-surgical, post-infectious, and secondary to pathology).

Although not included in the FDA labeling, there has been interest in PTK as a treatment of recurrent corneal erosions in patients who have not responded to conservative therapy with patching, cycloplegia, topical antibiotics, and lubricants.

When PTK is used to remove only the epithelial surface of the cornea, the alternative technology is mechanical superficial keratectomy, i.e., corneal scraping. When PTK is used to remove deeper layers of the cornea, i.e., extending into Bowman's layer, competing technologies include lamellar keratoplasty. In addition, candidates for PTK should have exhausted medical approaches. For example, recurrent corneal erosions can be treated conservatively with lubricants, patching, bandage contact lenses, or anterior stromal punctures, while keratoconus can be treated with rigid contact lenses to correct the astigmatism.

Policy History

Date	Action
3/2020	Policy updated with literature review through February 1, 2020. No references added. Policy statements unchanged.
8/2014	Medical policy ICD10 remediation: Formatting, editing and coding updates. No changes to policy statements.
4/2000	Medically necessary indications described.

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. Summit Technology, Inc., Summary of Safety and Receptiveness Data, ExciMed UV200LA or SVS Apex (formerly the OmniMed) Excimer Laser System for Phototherapeutic Keratectomy (PTK). Waltham, MA: Summit Technology, Inc. 1995.
2. Maloney RK, Thompson, V, Ghiselli G et al. A prospective multicenter trial of excimer laser phototherapeutic keratectomy for corneal vision loss. The Summit Phototherapeutic Keratectomy Study Group. Am J Ophthalmol 1996; 122(2):149-60.