Policy Name	Clinical Policy – Keratoplasty (Corneal Transplant) and Keratectomy
Policy Number	1315.00
Department	Clinical Product & Development
Subcategory	Medical Management
Original Approval Date	03/21/2018
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Current Effective Date	04/01/2025

Company Entities Supported (Select All that Apply)
X Superior Vision Benefit Management
X Superior Vision Services
X Superior Vision of New Jersey, Inc.
X Block Vision of Texas, Inc. d/b/a Superior Vision of Texas
X Davis Vision
(Collectively referred to as 'Versant Health' or 'the Company')

ACRONYMS	
ALK	Anterior lamellar keratoplasty
DALK	Deep anterior lamellar keratoplasty
DLEK	Deep lamellar endothelial keratoplasty
DMEK	Descemet's membrane endothelial keratoplasty
DSEK	Descemet's stripping endothelial keratoplasty
DSO	Descemet's stripping only
ED	Epithelial debridement
EK	Endothelial keratoplasty
FALK	Femtosecond laser assisted anterior lamellar keratoplasty
FLAK	Femtosecond laser assisted keratoplasty
PK	Penetrating keratoplasty
PTK	Excimer laser phototherapeutic keratectomy
SK	Superficial keratectomy
KPro	Keratoprosthesis

PURPOSE

To provide the medical necessity criteria to support the indication(s) for keratoplasty and keratectomy for medical necessity determinations. Applicable procedure codes are also defined.

POLICY

A. Background

Variations of corneal transplants include keratoplasty and keratectomies for removing the cornea's surface portion. These procedures are used to treat scarring from infections, corneal dystrophy, corneal degeneration, chemical burns, edema of the cornea, and corneal complications following other intraocular surgery. When corneal transplants fail, additional surgery may be necessary.

The type of corneal procedure performed depends upon the portion of the cornea involved in the disease or injury. Treatments include epithelial debridement (ED), superficial keratectomy (SK), phototherapeutic keratectomy (PTK), anterior lamellar keratoplasty (ALK), deep anterior lamellar keratoplasty (DALK) endothelial keratoplasty (EK), Descemet's stripping automated endothelial keratoplasty (DSEK), Descemet's membrane endothelial keratoplasty (DMEK), penetrating keratoplasty (PK), and keratoprosthesis (KPro).

B. Medically Necessary

When a medically necessary keratoplasty is performed, processing, preserving and transporting corneal tissue (V2785) is managed and reported by the facility (i.e., hospital outpatient department or ambulatory surgery center) that provides the donor cornea, not the surgeon.

1. ED may be medically necessary in patients with redundant irregular epithelium, such as epithelial basement membrane dystrophy, recurrent erosions, and herpes keratitis.

2. SK or PTK may be medically necessary for the treatment of epithelial basement membrane dystrophy, Salzmann's nodular corneal degeneration, band keratopathy, Reis-Bucklers corneal dystrophy, Thiel-Behnke corneal dystrophy, lattice corneal dystrophy, granular corneal dystrophy, Schnyder's corneal dystrophy, and macular corneal dystrophy. PTK may be used for removal of superficial corneal scarring and recurrent corneal dystrophies after keratoplasty.

3. SK or PTK may be medically necessary for treating all types of recurrent corneal erosions resulting from trauma or underlying disease.

4. ALK or DALK may be medically necessary for treatment of Reis-Bucklers corneal dystrophy, Thiel-Behnke corneal dystrophy, lattice corneal dystrophy, granular corneal dystrophy, Schnyder's corneal dystrophy, macular corneal dystrophy, keratoconus and other corneal ectasias, and mid to posterior corneal stromal scarring.

5. EK (DSEK or DMEK) may be medically necessary for treatment of diseases of the endothelial layer, such as Fuchs' dystrophy, posterior polymorphous dystrophy, secondary corneal edema, and failed corneal transplant.

6. Descemet stripping only (DSO) may be medically necessary for treatment of Fuchs' dystrophy.[1]

7. Full thickness PK may be medically necessary for the same indications as the partial thickness transplants. The use of femtosecond laser to assist PK is an incidental part of the surgery and is not reviewed as a standalone procedure. The indications for the laser-assisted PK are the same as any other PK.

8. Artificial corneal transplants, such as the Boston KPro, are reserved for patients who have had two or more prior unsuccessful corneal transplants, or where corneal transplantation is not an option such as patients with Stevens-Johnson Syndrome and severe chemical injuries. This limitation does not apply to temporary keratoprostheses when used intraoperatively for a combined retinal surgery and a PK.[2]

C. Not Medically Necessary

Procedures performed to reduce or eliminate the patient's dependence on eyeglasses, e.g., keratoplasty to treat refractive defects

D. Documentation

Keratoplasty and keratectomy services must be supported by adequate and complete documentation in the beneficiary's medical record that describes the procedure and the medical rationale for it. At a minimum, all the following items are required. If a subsequent medical review audit is necessary, these items are expected to sustain previous payments. For any retrospective review, a full operative report and medical plan of care is needed.

Every page of the record must be legible and include appropriate patient identification information (e.g., complete name, date(s) of service) with an electronic or written signature. Stamped signatures are not accepted.

1. Eye exam with description of medical justification for surgery on the cornea.
2. Allied diagnostic testing with physician's order, medical rationale, findings, interpretation and report.
3. Detailed procedure/operative report that incorporates:
   a. Indications
   b. Procedure description
   c. Post operative report

E. Procedural Detail

[1] Hakim, 2023
[2] Yu, 2022.

CPT instructs corneal transplant includes use of fresh or preserved grafts. The preparation of donor material is included for penetrating or anterior lamellar keratoplasty but reported separately for endothelial keratoplasty.

CPT/HCPCS Codes	
65400	Excision of lesion, cornea (keratectomy, lamellar, partial), except pterygium (PTK) (SK)
65435	Removal of corneal epithelium; with or without chemocauterization (abrasion, curettage) (ED)
65436	Removal of corneal epithelium; with application of chelating agent (e.g., EDTA)
65710	Keratoplasty (corneal transplant); anterior lamellar
65730	Keratoplasty (corneal transplant); penetrating (except in aphakia or pseudophakia) (PK)
65750	Keratoplasty (corneal transplant); penetrating (in aphakia) (PK)
65755	Keratoplasty (corneal transplant); penetrating (in pseudophakia) (PK)
65756	Keratoplasty (corneal transplant); endothelial (DLEK, DSEK, EK, PLK, DMEK)
65757	Backbench preparation of corneal endothelial allograft prior to transplantation (List separately in addition to code for primary procedure) (Use 65757 in conjunction with 65756)
65767	Backbench preparation of corneal endothelial allograft prior to transplantation (List separately in addition to code for primary procedure)
65770	Keratoprosthesis
66999	Unspecified anterior segment procedure (use for Descemet Stripping Only)
S0812	Phototherapeutic keratectomy (PTK)
V2785	Processing, preserving and transporting corneal tissue

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RELATED POLICIES AND PROCEDURES	
1333	Refractive Surgery

DOCUMENT HISTORY		
Approval Date	***Revisions***	***Effective Date***
03/21/2018	Initial policy	03/21/2018
10/18/2019	Annual review; no criteria changes.	11/01/2019
08/19/2020	Annual review; no criteria changes.	01/01/2021
01/06/2021	Annual review; revised with consideration of CMS newly released ICD-10 codes; no criteria changes.	04/01/2021
01/05/2022	Annual review; no criteria changes.	04/01/2022
01/04/2023	Annual review; removal of CPT code 0290T; delete requirement to submit surgical clearance; added indication of corneal erosion for SK/PTK.	07/01/2023
09/20/2023	Administrative review for CMS 2024 final rule Medicare Part C equity: no changes.	n/a
01/03/2024	Add DSO procedure for indication of Fuchs' dystrophy; added unlisted procedure code 66999 for DSO.	05/01/2024
01/08/2025	Add indication of herpes keratitis for ED procedure; add indication of other corneal ectasias to ALK/DALK procedures; add failed corneal transplant to EK procedure.	04/01/2025

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