

*This content has neither been reviewed nor approved by MCG Health.*

## SHP Corneal Cross-Linking

AUTH: SHP Medical 264 v4 (AC)

**MCG Health**  
Ambulatory Care  
26th Edition

[Link to Codes](#)

- [Coverage](#)
- [Application to Products](#)
- [Authorization Requirements](#)
- [Description of Item or Service](#)
- [Exceptions and Limitations](#)
- [Clinical Indications for Procedure](#)
- [Document History](#)
- [Coding Information](#)
- [References](#)
- [Codes](#)

---

### Coverage

[Return to top of SHP Corneal Cross-Linking - AC](#)

See the appropriate benefit document for specific coverage determination. Member specific benefits take precedence over medical policy.

---

### Application to Products

[Return to top of SHP Corneal Cross-Linking - AC](#)

Policy is applicable to all products.

---

### Authorization Requirements

[Return to top of SHP Corneal Cross-Linking - AC](#)

Pre-certification by the Plan is required.

---

### Description of Item or Service

[Return to top of SHP Corneal Cross-Linking - AC](#)

Corneal cross-linking is a minimally-invasive procedure to build up the cornea if it has been damaged by keratoconus or other diseases using collagen and ultraviolet A (UVA) light to bond.

---

### Exceptions and Limitations

[Return to top of SHP Corneal Cross-Linking - AC](#)

There is insufficient scientific evidence to support the medical necessity of epithelium-off photochemical collagen cross-linkage for uses other than those listed in the clinical indications for procedure section.

---

### Clinical Indications for Procedure

[Return to top of SHP Corneal Cross-Linking - AC](#)

- Corneal collagen cross-linkage using riboflavin and ultraviolet A is considered medically necessary for treatment of individuals with **1 or more** of the following:
  - Progressive keratoconus
  - Corneal ectasia after refractive surgery in individuals who have failed conservative treatment (eg. optometric correction, rigid contact lens)

---

### Document History

[Return to top of SHP Corneal Cross-Linking - AC](#)

- Revised Dates:
  - 2020: January
  - 2016: February
  - 2015: March
  - 2014: February
  - 2012: March, April, May
  - 2010: February
  - 2009: February
  - 2008: May
  - 2005: October
  - 1998: February, October

- 1994: February
- Reviewed Dates:
  - 2023: January
  - 2022: January
  - 2021: January
  - 2018: February
  - 2017: December
  - 2015: February
  - 2013: February
  - 2012: February
  - 2011: February
  - 2007: December
  - 2004: October
  - 2003: October, November
  - 2002: October
  - 2001: November
  - 2000: November
  - 1999: November
  - 1996: February
- Effective Date: June 1992

---

## Coding Information

[Return to top of SHP Corneal Cross-Linking - AC](#)

- CPT/HCPCS codes covered if policy criteria is met:
  - CPT 0402T - Collagen cross-linking of cornea, including removal of the corneal epithelium and intraoperative pachymetry, when performed (Report medication separately)
- CPT/HCPCS codes considered not medically necessary per this Policy:
  - None

---

## References

[Return to top of SHP Corneal Cross-Linking - AC](#)

References used include but are not limited to the following:

Specialty Association Guidelines; Government Regulations; Winifred S. Hayes, Inc; Uptodate; Literature Review; Specialty Advisors; National Coverage Determination (NCD); Local Coverage Determination (LCD).

(2022). Retrieved Nov 16, 2022, from Centers for Medicare and Medicaid Services: <https://www.cms.gov/medicare-coverage-database/search-results.aspx?keyword=cross-link&keywordType=starts&areald=s53&docType=NCA,CAL,NCD,MEDCAC,TA,MCD,6,3,5,1,F,P&contractOption=all&sortBy=relevance>

(2022). Retrieved Nov 16, 2022, from AIM Specialty Health: <https://aimspecialtyhealth.com/>

(2022). Retrieved Nov 16, 2022, from National Comprehensive Cancer Network: <https://www.nccn.org/search-result?indexCatalogue=nccn-search-index&searchQuery=collagen%20cross-linking&wordsMode=AllWords>

(2022, Aug 18). Retrieved Nov 17, 2022, from MCG: <https://careweb.careguidelines.com/ed26/index.html>

(2022). Retrieved Nov 17, 2022, from Department of Medical Assistance Services: <https://vamedicaid.dmas.virginia.gov/global-search?keys=cross-linking>

(2022). Retrieved Nov 17, 2022, from Food and Drug Administration: [https://www.accessdata.fda.gov/drugsatfda\\_docs/nda/2016/203324orig2s000sumr.pdf](https://www.accessdata.fda.gov/drugsatfda_docs/nda/2016/203324orig2s000sumr.pdf)

Aldairi, W., AlQahtani, R., Alzaid, S., Mousa, A., Khandekar, R., & Swailam, S. (2022, Jul 11). Accelerated versus conventional corneal collagen crosslinking: Short-term clinical outcomes in stabilizing keratoconus. Retrieved Nov 17, 2022, from PubMed: <https://pubmed.ncbi.nlm.nih.gov/35971481/>

Comparative Effectiveness Of Corneal Cross-Linking For Treatment Of Keratoconus. (2022, Jan 13). Retrieved Nov 16, 2022, from Hayes, Inc: <https://evidence.hayesinc.com/report/dir.corneal1798>

Conventional Corneal Collagen Cross-Linking For Treatment Of LASIK-Related Ectasia. (2022, Feb 04). Retrieved Nov 16, 2022, from Hayes, Inc: <https://evidence.hayesinc.com/report/dir.cornealcollagen4277>

Porter, D. (2022, Sep 26). Retrieved Nov 17, 2022, from American Academy of Ophthalmology: <https://www.aao.org/eye-health/treatments/corneal-cross-linking-2>

Wayman, L. (2022, Apr 06). Keratoconus. Retrieved Nov 16, 2022, from UpToDate: [https://www.uptodate.com/contents/keratoconus?search=Corneal%20Cross-Linking&source=search\\_result&selectedTitle=1~150&usage\\_type=default&display\\_rank=1#H1399093770](https://www.uptodate.com/contents/keratoconus?search=Corneal%20Cross-Linking&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1#H1399093770)

Conventional Corneal Collagen Cross-Linking for Treatment Of LASIK-Related Ectasia - Apr 21, 2021. (n.d.). Retrieved Dec 28, 2021, from Hayes 2: <https://evidence.hayesinc.com/report/dir.cornealcollagen4277>

(2021). Retrieved Dec 28, 2021, from MCG 25th Edition: <https://careweb.careguidelines.com/ed25/index.html>

(2021). Retrieved Dec 28, 2021, from AIM Specialty Health: <https://aimspecialtyhealth.com/resources/clinical-guidelines/>

(2021). Retrieved Dec 28, 2021, from NCCN Guidelines: [https://www.nccn.org/guidelines/category\\_1](https://www.nccn.org/guidelines/category_1)

CFR - Code of Federal Regulations Title 21CFR886 OPHTHALMIC DEVICES. (2021, Oct 1). Retrieved Dec 28, 2021, from FDA: <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?CFRPart=886>

Collagen Crosslinks, any Method 190.19. (2002). Retrieved Dec 28, 2021, from CMS.gov: <https://www.cms.gov/medicare-coverage-database/view/ncd.aspx?ncdid=96&ncdver=1&bc=0>

Comparative Effectiveness Of Corneal Cross-Linking For Treatment Of Keratoconus - Apr 22, 2021. (n.d.). Retrieved Dec 28, 2021, from Hayes: <https://evidence.hayesinc.com/report/dir.corneal1798>

Corneal Collagen Cross-linking. (2021). Retrieved Dec 28, 2021, from The Johns Hopkins University and Hospital: <https://www.hopkinsmedicine.org/wilmer/services/cornea/cxl.html>

Corneal Collagen Cross-Linking. (2021, Sept 20). Retrieved Jan 3, 2022, from American Academy of Ophthalmology (AAO): [https://eyewiki.org/Corneal\\_Collagen\\_Cross-Linking](https://eyewiki.org/Corneal_Collagen_Cross-Linking)

Keratitis. (2021, Nov 23). Retrieved Dec 28, 2021, from DynaMed: [https://www.dynamed.com/condition/keratitis#TOPIC\\_XDD\\_1TR\\_4NB](https://www.dynamed.com/condition/keratitis#TOPIC_XDD_1TR_4NB)

Keratoconus. (2020, Oct). Retrieved Dec 28, 2021, from UpToDate: [https://www.uptodate.com/contents/keratoconus?search=Corneal%20Collagen%20Cross-linking&source=search\\_result&selectedTitle=1~150&usage\\_type=default&display\\_rank=1](https://www.uptodate.com/contents/keratoconus?search=Corneal%20Collagen%20Cross-linking&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1)

Photochemical corneal collagen cross linkage using riboflavin and ultraviolet A for keratoconus and keratectasia. (2013, Sep 25). Retrieved Dec 29, 2021, from National Institute for Health and Care Excellence (NICE): <https://www.nice.org.uk/guidance/ipg466>

Transepithelial versus epithelium-off corneal crosslinking for progressive keratoconus. (2021, Mar 25). Retrieved Dec 28, 2021, from Cochrane Library: <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013512.pub2/full?highlightAbstract=collagen%7Ccross%7Clink%7Ccorneal%7Clinking>

Vision Manual. (2021). Retrieved Dec 28, 2021, from DMAS Provider Manuals: [https://www.virginiamedicaid.dmas.virginia.gov/wps/portal/ProviderManual!ut/p/z1/04\\_Sj9CPykssy0xPLMnMz0vMAfljo8zivQJMHA2dDAx9DVzdDA0cjR1NXYAcIwMfE\\_1wsAIDHMDRQD-KGP14FEThNz5cP4qQkoLc0AiDdEVFALarFmY!dz/d5/L2dBISEvZ0FBIS9nQSEh/p0/Iz7\\_JP4A1B01M0EF10A3A5D01M](https://www.virginiamedicaid.dmas.virginia.gov/wps/portal/ProviderManual!ut/p/z1/04_Sj9CPykssy0xPLMnMz0vMAfljo8zivQJMHA2dDAx9DVzdDA0cjR1NXYAcIwMfE_1wsAIDHMDRQD-KGP14FEThNz5cP4qQkoLc0AiDdEVFALarFmY!dz/d5/L2dBISEvZ0FBIS9nQSEh/p0/Iz7_JP4A1B01M0EF10A3A5D01M)

---

## Codes

[Return to top of SHP Corneal Cross-Linking - AC](#)

**CPT® : 0402T**

*CPT copyright 2022 American Medical Association. All rights reserved.*

---

MCG Health  
Ambulatory Care 26th Edition