

Policy Name	Clinical Policy - Iris Prosthesis
Policy Number	1340.00
Department	Clinical Strategy
Subcategory	Medical Management
Original Approval Date	07/07/2021
Current MPC/CCO Approval Date	07/09/2025
Current Effective date	10/01/2025

# **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	
AAO	American Academy of Ophthalmology®
FDA	U.S. Food and Drug Administration

# PURPOSE

To provide the evaluation methodology for iris prosthesis. Applicable procedure codes are also defined.

POLICY	

## A. SUMMARY

Versant Health considers the use of prosthetic iris devices to be investigational. There is insufficient evidence in the form of randomized clinical trials or high quality meta analysis to confirm safety, efficacy and improved health outcomes.



## B. Methodology for evaluating medical necessity

Articles from peer reviewed literature were evaluated, plus information from AAO, FDA, and the manufacturer. The organizing methodology to evaluate the quality of medical evidence is referenced by the American Academy of Ophthalmology (2020) and is consistent with the work of Guyatt in the 2008 GRADE study.¹ It states that randomized, controlled, double masked studies and/or systematic reviews with meta-analysis provide the best evidence regarding the efficacy of any intervention. Cohort studies, case-controlled studies, case series, and case reports provide lower levels of confidence in the efficacy of an intervention. The quality of the medical evidence will inform an evaluation of how this technology affects patient health outcomes, the magnitude of that effect and its applicability to clinical practice.

## C. Conclusion on medical necessity

The literature reviewed contained individual case reports, small case samples of non-randomized retrospective and prospective cohort analyses. There are no randomized controlled clinical trials which were suitably masked. Additionally, there were no reports in the peer review literature of meta-analyses or multicenter randomized trials. For these reasons, Versant Health considers prosthetic iris devices to be investigational and may not be medically necessary.

## D. PROCEDURE DETAIL

CPT/HCPCS Codes		
C1839	Iris prosthesis	
66683	Implantation of iris prosthesis, including suture fixation and repair or removal of iris, when performed	

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<sup>&</sup>lt;sup>1</sup> Guyatt, 2010.



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RELATED POLICIES AND PROCEDURES	
1323	Experimental & Investigational Services

DOCUMENT HISTORY				
Approval Date	Revision	Effective Date		
07/07/2021	Initial policy; designates device as investigational.	01/01/2022		
07/06/2022	Annual review; no criteria changes.	08/01/2022		
07/12/2023	Add CPT C1839; all procedures and devices remain investigational status.	10/01/2023		
07/10/2024	Annual review; no criteria changes.	09/01/2024		
07/09/2025	Remove CMS deleted CPT codes 0616T, 0617T, 0618T and add new CMS CPT code 66683.	10/01/2025		



## **REFERENCES AND SOURCES**

- 1. Ang M, Tan D. Anterior segment reconstruction with artificial iris and Descemet membrane endothelial keratoplasty: a staged surgical approach. Br J Ophthalmol. 2022 Jul;106(7):908-913. doi: 10.1136/bjophthalmol-2020-317906. Epub 2021 Feb 26. PMID: 33637621.
- 2. Ayres BD, Fant BS, Landis ZC, et al. Results of the United States Food and Drug Administration Clinical Trial of the CustomFlex Artificial Iris. Ophthalmology. 2022 Feb 5: S0161-6420(22)00089-6. doi: 10.1016/j.ophtha.2022.01.029. Epub ahead of print. PMID: 35131359.
- 3. Bahadur GG, Miller KM. Artificial iris exchange. J Cataract Refract Surg. 2020 Dec;46(12):1630-1636. doi: 10.1097/j.jcrs.00000000000321. PMID: 32842080.
- 4. Bonnet C, Miller KM. Safety and efficacy of custom foldable silicone artificial iris implantation: prospective compassionate-use case series. J Cataract Refract Surg. 2020 Jun;46(6):893-901. doi: 10.1097/j.jcrs.00000000000172. PMID: 32176161.
- 5. Burk SE, Da Mata AP, Snyder ME et al. Prosthetic iris implantation for congenital, traumatic, or functional iris deficiencies. J Cataract Refract Surg 2001; 27:1732–1740
- 6. Dalby M, Kristianslund O, Drolsum L. Long-Term Outcomes after Surgery for Late In-The-Bag Intraocular Lens Dislocation: A Randomized Clinical Trial. Am J Ophthalmol. 2019 Nov; 207:184-194. doi: 10.1016/j.ajo.2019.05.030. Epub 2019 Jun 10. PMID: 31194950.
- 7. Firl KC, Montezuma SR, Chronic post-operative Iris Prosthesis Endophthalmitis in a patient with traumatic aniridia: A Case Report. BMC Ophthalmol, 16 (1), 197. Nov 2016.
- 8. Fontanarosa J, Treadwell JR, Samson DJ, et al. Retinal prostheses in the Medicare Population. Rockville (MD): Agency for Healthcare Research and Quality (US); 2016 Sep 30. (Technology Assessments, No. 103.
- 9. Frisina R, De Biasi CS, Tozzi L, et al. Reper intraocular lens with artificial iris: implantation techniques and outcomes. Eur J Ophthalmol. 2021 May;31(3):1469-1474. doi: 10.1177/11206721211005693. Epub 2021 Mar 28. PMID: 33779347.
- 10. Guyatt G, Oxman AD, Akl EA, et al. GRADE guidelines: 1. Introduction-GRADE evidence profiles and summary of findings tables. J Clin Epidemiol. 2011;64(4):383-394. doi:10.1016/j.jclinepi.2010.04.026.
- 11. Karatza EC, Burk SE, Snyder ME, et. al. Outcomes of prosthetic iris implantation in patients with albinism, J cataract Refract Surg 2007;33:1783-1789.
- 12. Koch KR, Heindl LM, Cursiefen C, et. al., Artificial iris devices: Benefits, limitations, and management of complications, J Cataract Refract Surg 2014;40: 376-382
- 13. Magnus J, Trau R, Mathysen DGP, et. al. Safety of an artificial iris in a phakic eye. J Cataract Refract Surg 2012; 38:1097–1100 .
- Mavrikakis I, Casey JMH, Phacoemulsification and Endocapsular Implantation of an Artificial Iris Intraocular Lens in Traumatic Cataract and Aniridia, J Cataract Refract Surg, Vol 28, July 2002, 1088-1091.
- 15. Mavrikakis I, Mavrikakis E, Syam PP, et. al. Surgical management of iris defects with prosthetic iris devices. Eye 2005; 19:205–209.
- 16. Mayer CS, Baur ID, Storr J, et al. Bilateral Artificial Iris implantation in patients with bilateral iris defects. Am J Ophthalmol Case Rep. 2021 Apr 30; 22:101108. doi: 10.1016/j.ajoc.2021.101108. PMID: 34027229; PMCID: PMC8121880.
- 17. Miller, KM. AAO Annual Meeting. 2019 Kelman Lecture: The Case for artificial iris. Oct 14, 2019. https://www.aao.org/eyenet/academy-live/detail/2019-kelman-lecture-case-artificial-iris.



- 18. Romano D, Bremond-Gignac D, Barbany M, et.al. Artificial iris implantation in congenital aniridia: A systematic review. Surv Ophthalmol. 2023 Jul-Aug;68(4):794-808. doi: 10.1016/j.survophthal.2022.11.001. Epub 2022 Nov 12. PMID: 36379301.
- 19. Spitzer MS, Nessmann A, Wagner J, et.al. Customized human optics silicone iris prosthesis in eyes with posttraumatic iris loss: outcomes and complications. Acta Ophthalmol. 2016 May;94(3):301-6. Doi: 10.1111/aos.12946. Epub 2016 Jan 25. PubMed PMID: 26805757.
- 20. Weissbart SB, Ayres BD. Management of Aniridia and Iris Defects: An update on iris prosthesis options. Curr Opin Ophthalmol, 27 (3), 244-9. May 2016.
- 21. Wolf A, Shajari M. Slip-and-slide technique for combined small-incision artificial iris and IOL implantation. J Cataract Refract Surg. 2020 Oct;46(10):1433-1435. doi: 10.1097/j.jcrs.000000000000254. PMID: 32483078.
- 22. Wong VW, Lam PT, Lai TY et. al. Black diaphragm aniridia intraocular lens for aniridia and albinism. Graefes Arch Clin Exp Ophthalmol 2005; 243:501–4.

## **SOURCES**

- 2. CustomFlex Artificial Iris; Human Optics. https://www.humanoptics.com/en/physicians/artificialiris/ Accessed 4/j2024.
- 3. Favorable findings for the artificial iris. Journal Highlights, AAO Ophthalmology, June 2022. <a href="https://www.aao.org/eyenet/article/favorable-findings-for-the-artificial-iris">https://www.aao.org/eyenet/article/favorable-findings-for-the-artificial-iris</a> Accessed 5/2025.
- 4. US FDA Approval Letter, CustomFlex Artificial Iris, premarket. May 30, 2018; <a href="https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpma/pma.cfm?id=P170039">https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpma/pma.cfm?id=P170039</a>. Accessed 5/2025.