

Policy Name	Clinical Policy - Laser Peripheral Iridotomy
Policy Number	1322.00
Department	Clinical Strategy
Subcategory	Medical Management
Original Approval Date	04/25/2018
Current MPC/CCO Approval Date	04/09/2025
Current Effective Date	06/01/2025

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

FDA	Food and Drug Administration
YAG	Yttrium Aluminum Garnet

# PURPOSE

To provide clinical criteria to support the indication(s) for laser peripheral. Applicable procedure codes are also defined.

## POLICY

### A. BACKGROUND

Laser iridotomy is an ophthalmic surgical procedure for angle closure glaucoma, pupillary block, misdirected aqueous (ciliary block or malignant glaucoma), or iris bombe. The procedure creates a small hole in the far periphery of the iris with a focused laser beam, either argon or Q-switched Neodymium: YAG. This opening allows the flow of aqueous humor between the posterior and anterior chambers by by bypassing the pupil. This may, depending upon the amount of prior trabecular damage and the degree of angle obstruction, decrease the intraocular pressure (IOP) and risk of acute angle-closure attack or progressive damage in eyes susceptible to acute angle closure attacks. Additionally, iridotomy can be used as a diagnostic tool if one is unsure whether the pathology is misdirected aqueous or plateau iris syndrome.



#### **B. Medically Necessary**

- Laser iridotomy may be medically necessary for primary angle closure suspects, primary angle closure, or primary angle closure glaucoma<sup>1</sup> where the procedure is necessary to reverse the appositional angle closure and it prevents or retards formation of peripheral anterior synechiae.<sup>2</sup>
- 2. Iridotomy by laser surgery may be considered medically necessary to treat primary angle closure suspects, primary angle closure and angle closure glaucoma.<sup>3 4</sup>
- 3. Laser iridotomy may be medically necessary to treat primary angle closure suspect when a narrow angle has been confirmed by gonioscopic exam in any of the following circumstances:
  - a. Evidence of progressive narrowing or synechia on gonioscopy;<sup>5</sup>
  - b. Medication that increases risk of angle closure or pupillary block;<sup>6</sup>
  - c. Presence of symptoms suggesting intermittent angle closure;<sup>7</sup>
  - d. Health status, occupation, or psychosocial situation that limits access to immediate ophthalmic care
  - e. Poor adherence with follow-up visits;
  - f. Need for frequent dilated eye exams for treatment or monitoring of a condition such as diabetes;<sup>8</sup>
  - g. Fellow eye of a patient who had angle closure glaucoma or angle closure glaucoma crisis in the alternate eye;
  - h. Family history of angle closure or narrow angle closure glaucoma.
- 4. When a prior medically necessary laser iridotomy is not patent.

#### C. Documentation

Medical necessity is supported by adequate and complete documentation in the patient's medical record that describes the procedure and the medical rationale. Documentation requires at a minimum all the following items. All items must be available upon request. For any retrospective review, a full operative report and the clinical 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). Services provided or ordered must be

<sup>5 6 7</sup> Emanuel, 2014

<sup>&</sup>lt;sup>1</sup> Foster, 2002

<sup>&</sup>lt;sup>2</sup> Baskaran, 2022.

<sup>&</sup>lt;sup>3</sup> Baskaran, 2022.

<sup>&</sup>lt;sup>4</sup> AAO, Primary Angle Closure Disease PPP 2020

<sup>&</sup>lt;sup>8</sup> Foster, 2002



authenticated by the physician's handwritten or electronic signature. Stamped signatures are not acceptable.

The required documentation to demonstrate medical necessity includes:

- 1. Eye exam with description of medical justification for laser iridotomy surgery and absence of contraindications for the surgery. This examination must include a gonioscopy documenting narrow angles that warrant peripheral laser iridotomy.
- 2. Allied diagnostic testing with physician's order, medical rational, findings, interpretation, and report.
- 3. Use of a laser that is FDA approved for iridotomy.
- 4. Detailed operative report that incorporates:
  - a. Indications; and,
  - b. Procedure description including wavelength, duration, site of iridotomy, spot size, energy, and number of laser applications.

#### D. Procedural Detail

CPT Codes		
66761	Iridotomy/iridectomy by laser surgery (e.g., for glaucoma) (per session)	
66762	Iridoplasty by photocoagulation	
Required Modifiers		
RT	Right side	
LT	Left side	
50	Bilateral procedure	

# DISCLAIMER and COPYRIGHTS

This clinical policy is provided for information purposes only and does not constitute medical advice. Versant Health, Inc., and its affiliates (the "Company") do not provide health care services and cannot guarantee any results or outcomes. Treating doctors are solely responsible for determining what services or treatments to provide to their patients. Patients (members) should always consult their doctor before making any decisions about medical care.

Subject to applicable law, compliance with this clinical policy is not a guarantee of coverage or payment. Coverage is based on the terms of an individual's particular benefit plan document, which may not cover the service(s) or procedure(s) addressed in this clinical policy. The terms of the individual's specific benefit plan are always determinative.



Every effort has been made to ensure that the information in this clinical policy is accurate and complete, however the Company does not guarantee that there are no errors in this policy or that the display of this file on a website is without error. The company and its employees are not liable for any errors, omissions, or other inaccuracies in the information, product, or processes disclosed herein.

Neither the Company nor the employees represent that use of such information, products, or processes will infringe on privately owned rights. In no event shall the Company be liable for direct, indirect, special, incidental, or consequential damages arising out of the use of such information, product, or process.

**COMPANY'S COPYRIGHT STATEMENT** Except for any copyrights described below, this clinical policy is confidential and proprietary. No part of this clinical policy may be copied, distributed, or used without Versant Health, or its applicable affiliates, expressing prior written approval.

AMA COPYRIGHT STATEMENT CPT© is the 2002-2025 copyright of the Americ n Medical Association. All Rights Reserved. CPT<sup>™</sup> is a registered trademark of the American Medical Association. Applicable FARS/DFARS Apply to Government Use. Fee schedules, relative value units, conversion factors and/or related components are not assigned by the AMA, are not part of CPT, and the AMA is not recommending their use. The AMA does not directly or indirectly practice medicine or dispense medical services. The AMA assumes no liability for data contained or not contained herein.

RELATED POLICIES AND PROCEDURES		
n/a		

DOCUMENT HISTORY				
Approval Date	Revision	Effective Date		
04/25/2018	Initial policy	04/25/2018		
12/18/2019	Annual review; no criteria changes.	01/01/2020		
10/28/2020	Annual review; no criteria changes.	03/01/2021		
10/06/2021	Deletion of some requirements for provider records submission for medical necessity review.	04/01/2022		
04/06/2022	Annual review; no criteria changes.	05/01/2022		
04/12/2023	Annual review; no criteria changes.	07/01/2023		
04/03/2024	Clarified procedure as diagnostic to differentiate misdirected aqueous or plateau iris syndrome; updated glaucoma status terms; removed contraindication of severe corneal edema.	07/01/2024		



04/09/2025	Add indication of primary angle closure suspects; delete requirement for dark adaptation testing; delete	06/01/2025
	requirement for occludable angles; for family history risk.	

## REFERENCES AND SOURCES

- Adetunji MO, Meer E, Whitehead G, et al. Self-identified Black Race is a Risk Factor for Intraocular Pressure Elevation and Iritis Following Prophylactic Laser Peripheral Iridotomy. J Glaucoma. 2022 Feb 4. doi: 10.1097/IJG.0000000000001995. Epub ahead of print. PMID: 35131983.
- Balas M, Mathew DJ. Dysphotopsia and location of laser iridotomy: a systematic review. Eye (Lond). 2024 Jan 9. doi: 10.1038/s41433-023-02913-1. Epub ahead of print. PMID: 38195925.
- 3. Baskaran M, Yang E, Trikha S et al. Residual Angle Closure One Year After Laser Peripheral Iridotomy in Primary Angle Closure Suspects. Am J Ophthalmol. 2017 Nov; 183:111-117. doi: 10.1016/j.ajo.2017.08.016. Epub 2017 Sep 6. PMID: 28887116.
- 4. Baskaran M, Kumar RS, Friedman DS, et al. The Singapore Asymptomatic Narrow Angles Laser Iridotomy Study: Five-Year Results of a Randomized Controlled Trial. Ophthalmology. 2022;129(2):147-158. doi:10.1016/j.ophtha.2021.08.017.
- Bayliss JM, Ng WS, Waugh N, et al. Laser peripheral iridoplasty for chronic angle closure. Cochrane Database Syst Rev. 2021 Mar 23;3(3):CD006746. doi: 10.1002/14651858.CD006746.pub4. PMID: 33755197; PMCID: PMC8094583.
- Betts TD, Sims JL, Bennett SL, et al. Outcome of peripheral iridotomy in subjects with uveitis. Br J Ophthalmol. 2020 Jan;104(1):8-10. doi: 10.1136/bjophthalmol-2019-314221. Epub 2019 Jul 9. PMID: 31289035.
- Chan PP, Tang FY, Leung DY, et al. Ten-Year Clinical Outcomes of Acute Primary Angle Closure Randomized to Receive Early Phacoemulsification Versus Laser Peripheral Iridotomy. J Glaucoma. 2021 Apr 1;30(4):332-339. doi: 10.1097/IJG.0000000000001799. PMID: 33769358.
- Cho A, Xu BY, Friedman DS, Foster PJ, Jiang Y, Pardeshi AA, Jiang Y, Aung T, He M. Role of Static and Dynamic Ocular Biometrics Measured in the Dark and Light as Risk Factors for Angle Closure Progression. Am J Ophthalmol. 2023 Dec; 256:27-34. doi: 10.1016/j.ajo.2023.07.032. Epub 2023 Aug 6. PMID: 37549818; PMCID: PMC10840898.
- Conrady Cho A, Xu BY, Friedman DS, et.al. Role of Static and Dynamic Ocular Biometrics Measured in the Dark and Light as Risk Factors for Angle Closure Progression. Am J Ophthalmol. 2023 Dec; 256:27-34. doi: 10.1016/j.ajo.2023.07.032. Epub 2023 Aug 6. PMID: 37549818; PMCID: PMC10840898. CD, Young BK, Besirli C. Worsening Angle Closure After Successful Laser Peripheral Iridotomy. JAMA Ophthalmol. 2022 Feb 10. doi: 10.1001/jamaophthalmol.2021.4988. Epub ahead of print. PMID: 35142818.
- Emanuel ME, Parrish RK 2nd, Gedde SJ. Evidence-based management of primary angle closure glaucoma. Curr Opin Ophthalmol. 2014 Mar;25(2):89-92. doi: 10.1097/ICU.0000000000028. PMID: 24463418.
- Foster PJ, Buhrmann R, Quigley HA, Johnson GJ. The definition and classification of glaucoma in prevalence surveys. Br J Ophthalmol. 2002 Feb;86(2):238-42. doi: 10.1136/bjo.86.2.238. PMID: 11815354; PMCID: PMC1771026.



- Furuya T, Kashiwagi K. Longitudinal Change in Peripheral Anterior Chamber Depth of Eyes with Angle Closure after Laser Iridotomy. J Ophthalmol. 2018 Dec 24; 2018:9106247. doi: 10.1155/2018/9106247. PMID: 30671261; PMCID: PMC6323459.
- Filippopoulos T, Danias J, Karmiris E, et.al. Rethinking Prophylactic Laser Peripheral Iridotomy in Primary Angle-Closure Suspects: A Review. Ophthalmol Glaucoma. 2023 Nov-Dec;6(6):657-667. doi: 10.1016/j.ogla.2023.06.004. Epub 2023 Jun 13. PMID: 37321374.
- Gao X, Zhou Y, Zuo C, et al. Predictive Equation for Angle Opening Distance at 750 μm After Laser Peripheral Iridotomy in Primary Angle Closure Suspects. Front Med (Lausanne). 2021 Aug 12; 8:715747. doi: 10.3389/fmed.2021.715747. PMID: 34458290; PMCID: PMC8387715.
- 15. Greenfield JA, Smiddy WE, Greenfield DS. Malignant Glaucoma after Laser Peripheral Iridotomy. *J Glaucoma*. 2019;28(3): e44-e45. doi:10.1097/IJG.00000000001145.
- He M, Jiang Y, Huang S, et.al. Laser peripheral iridotomy for the prevention of angle closure: a single-centre, randomised controlled trial. Lancet. 2019 Apr 20;393(10181):1609-1618. doi: 10.1016/S0140-6736(18)32607-2. Epub 2019 Mar 14. PMID: 30878226.
- 17. Hoyos CER, Ferreira MC, Libreros-Peña L, et.al. Plateau iris syndrome: Epidemiology, diagnosis, and treatment: A narrative review. Oman J Ophthalmol. 2023 Oct 18;16(3):415-420. doi: 10.4103/ojo.ojo\_238\_22. PMID: 38059089; PMCID: PMC10697250.
- Hu R, Wang X, Wang Y, et al. Occult lens subluxation related to laser peripheral iridotomy: A case report and literature review. Medicine (Baltimore). 2017 Mar;96(10): e6255. doi: 10.1097/MD.00000000006255. PMID: 28272229; PMCID: PMC5348177.
- Imai K, Sawada H, Hatase T, et al. Iridocorneal contact as a potential cause of corneal decompensation following laser peripheral iridotomy. Jpn J Ophthalmol. 2021 Jul;65(4):460-471. doi: 10.1007/s10384-021-00830-y. Epub 2021 Mar 16. PMID: 33728544.
- Jiang Y, Chang DS, Zhu H, et.al. Longitudinal changes of angle configuration in primary angle-closure suspects: the Zhongshan Angle-Closure Prevention Trial. Ophthalmology. 2014 Sep;121(9):1699-1705. doi: 10.1016/j.ophtha.2014.03.039. Epub 2014 May 15. PMID: 24835757; PMCID: PMC4624262.
- 21. Koh V, Keshtkaran MR, Hernstadt D, et.al. Predicting the outcome of laser peripheral iridotomy for primary angle closure suspect eyes using anterior segment optical coherence tomography. *Acta Ophthalmol.* 2019;97(1): e57-e63. doi:10.1111/aos.13822
- Kurysheva NI, Lepeshkina LV. Selective Laser Trabeculoplasty Protects Glaucoma Progression in the Initial Primary Open-Angle Glaucoma and Angle-Closure Glaucoma after Laser Peripheral Iridotomy in the Long Term. Biomed Res Int. 2019 Dec 21; 2019:4519412. doi: 10.1155/2019/4519412. PMID: 31930122; PMCID: PMC6942792.
- 23. Le JT, Rouse B, Gazzard G. Iridotomy to slow progression of visual field loss in angleclosure glaucoma. *Cochrane Database Syst Rev.* 2018;6(6):CD012270. Published 2018 Jun 13. doi: 10.1002/14651858.CD012270.pub2.
- Liu YM, Hu D, Zhou LF, et al. Associations of lens thickness and axial length with outcomes of laser peripheral iridotomy. Int J Ophthalmol. 2021 May 18;14(5):714-718. doi: 10.18240/ijo.2021.05.11. PMID: 34012886; PMCID: PMC8077006.
- 25. Mou DP, Liang YB, Fan SJ, et al. Progression rate to primary angle closure following laser peripheral iridotomy in primary angle-closure suspects: a randomised study. Int J Ophthalmol. 2021 Aug 18;14(8):1179-1184. doi: 10.18240/ijo.2021.08.07. PMID: 34414081; PMCID: PMC8342280.
- 26. Ng WS, Ang GS, Azuara-Blanco A. Laser peripheral iridoplasty for angle-closure. Cochrane Database Syst Rev. 2012 Feb 15;2012(2):CD006746. doi:



10.1002/14651858.CD006746.pub3. Update in: Cochrane Database Syst Rev. 2021 Mar 23;3:CD006746. PMID: 22336823; PMCID: PMC7390262.

- 27. Nicholas MP, Vaz T, Idrees S, et al. McCannel Suture Technique Resolves Persistent Dysphotopsia Following Laser Peripheral Iridotomy in Phakic Eyes. J Glaucoma. 2021 Jul 1;30(7): e344-e346. doi: 10.1097/IJG.000000000001841. PMID: 33826601.
- 28. Ono T, lida M, Sakisaka T, et.al. Effect of laser peripheral iridotomy using argon and neodymium-YAG lasers on corneal endothelial cell density: 7-year longitudinal evaluation. *Jpn J Ophthalmol.* 2018;62(2):216-220. doi:10.1007/s10384-018-0569-6
- 29. Qiu L, Yan Y, Wu L. Appositional angle closure and conversion of primary angle closure into glaucoma after laser peripheral iridotomy. Br J Ophthalmol. 2020 Mar;104(3):386-391. doi: 10.1136/bjophthalmol-2018-312956. Epub 2019 Jun 3. PMID: 31160423.
- Rouse B, Le JT, Gazzard G. Iridotomy to slow progression of visual field loss in angleclosure glaucoma. Cochrane Database Syst Rev. 2023 Jan 9;1(1):CD012270. doi: 10.1002/14651858.CD012270.pub3. PMID: 36621864; PMCID: PMC9827451.
- Shakrawal J, Dada T, Mahalingam K. Multimodality imaging aided diagnosis of early zonular dehiscence following laser peripheral iridotomy. BMJ Case Rep. 2020 Aug 25;13(8): e236689. doi: 10.1136/bcr-2020-236689. PMID: 32843464; PMCID: PMC7449267.
- Yunard A, Oktariana VD, Artini W, et al. Comparison of Intraocular Pressure and Anterior Chamber Angle Changes between Pilocarpine and Laser Peripheral Iridotomy. J Curr Glaucoma Pract. 2019 Jan-Apr;13(1):32-36. doi: 10.5005/jp-journals-10078-1245. PMID: 31496559; PMCID: PMC6710935.
- 33. Wang L, Huang W, Han X, et al. The Impact of Pharmacological Dilation on Intraocular Pressure in Primary Angle Closure Suspects. Am J Ophthalmol. 2022 Mar; 235:120-130. doi: 10.1016/j.ajo.2021.06.018. Epub 2021 Jun 29. PMID: 34197780.
- Xu BY, Friedman DS, Foster PJ, et al. Anatomic Changes and Predictors of Angle Widening after Laser Peripheral Iridotomy: The Zhongshan Angle Closure Prevention Trial. Ophthalmology. 2021 Aug;128(8):1161-1168. doi: 10.1016/j.ophtha.2021.01.021. Epub 2021 Jan 23. PMID: 33497730; PMCID: PMC8298586.
- 35. Yan C, Han Y, Yu Y, et al. Effects of lens extraction versus laser peripheral iridotomy on anterior segment morphology in primary angle closure suspect. *Graefes Arch Clin Exp Ophthalmol.* 2019;257(7):1473-1480. doi:10.1007/s00417-019-04353-8
- 36. Yang F, Wu H. Treatment Preferences and Factors Influencing the Management of Primary Angle-Closure Suspect in China: A National Survey Study. Ophthalmol Ther. 2024 Jan;13(1):113-125. doi: 10.1007/s40123-023-00828-4. Epub 2023 Oct 24. PMID: 37874535; PMCID: PMC10776512.
- Young SL, Cheng KKW, O' Connell N, et.al. PACS plus criteria: a retrospective cohort review of 612 consecutive patients treated with bilateral YAG peripheral iridotomies. Eye (Lond). 2023 Dec;37(18):3834-3838. doi: 10.1038/s41433-023-02626-5. Epub 2023 Jun 20. PMID: 37340048; PMCID: PMC10698168.
- 38. Yuan Y, Wang W, Xiong R, et al. Fourteen-Year Outcome of Angle-Closure Prevention with Laser Iridotomy in the Zhongshan Angle-Closure Prevention Study: Extended Follow-up of a Randomized Controlled Trial [published correction appears in Ophthalmology. 2024 Jan;131(1):126. doi: 10.1016/j.ophtha.2023.10.029.]. Ophthalmology. 2023;130(8):786-794. doi:10.1016/j.ophtha.2023.03.024.



# SOURCES

- 1. American Academy of Ophthalmology Laser Peripheral Iridotomy in Primary Angle Closure, Ophthalmic Technology Assessment committee, July 2018. https://www.aaojournal.org/article/S0161-6420(18)30108-8/fulltext Accessed 2/2025.
- American Academy of Ophthalmology, Glaucoma Summary Benchmarks, Preferred Practice Patterns Hoskins Center for Quality Eye Care, 2024. <u>https://www.aao.org/education/summary-benchmark-detail/glaucoma-summarybenchmarks-2020.</u> Accessed 2/2025.
- 3. American Academy of Ophthalmology, Primary Angle Closure (Preferred Practice Patterns), 2024. https://www.aao.org/education/preferred-practice-pattern/primary-angle-closure-disease-ppp.Accessed 2/2024.