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| Policy Name | Clinical Policy – Laser Photocoagulation and Cryotherapy |
| Policy Number | 1326.00 |
| Department | Clinical Strategy |
| Subcategory | Medical Management |
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| Current Effective Date | 10/01/2025 |

Company Entities Supported (Select All that Apply)

☒ Superior Vision Benefit Management
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☒ Superior Vision of New Jersey, Inc.
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☒ Davis Vision
 (Collectively referred to as 'Versant Health' or 'the Company')

ACRONYMS

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| AMD | Age Related Macular Degeneration |
| BVO | Branch Vein Occlusion |
| CME | Cystoid Macula Edema |
| CNVM | Choroidal Neovascular Membrane |
| CVO | Central Vein Occlusion |
| DME | Diabetic Macula Edema |
| FA | Fluorescein Angiogram |
| NPDR | Non-Proliferative Diabetic Retinopathy |
| OCT | Optical Coherence Tomography |
| OPT | Ocular Photodynamic Therapy |
| PDR | Proliferative Diabetic Retinopathy |
| PRC | Pan retinal Cryotherapy |
| PRP | Pan retinal Photocoagulation |
| RD | Retinal detachment |
| ROP | Retinopathy of Prematurity |
| TTT | Trans pupillary thermotherapy |

PURPOSE

To provide the medical necessity criteria to support the indications for laser photocoagulation and cryotherapy of the retina and choroid procedures. Applicable procedure codes are also defined.

POLICY**A. BACKGROUND**

This policy does not apply to children aged one year or less with diagnoses of retinopathy of prematurity.

Laser treatment of the retina and choroid is an effective treatment for certain disorders of the eye to prevent vision loss and/or improve vision. While commonly used in diabetic eye disease, other ophthalmic conditions may benefit from laser photocoagulation including macular edema (in branch or central vein occlusions), central serous chorioretinopathy, retinal holes, retinal tears, retinal detachments, and tumors of the retina or choroid. Infrequently, laser photocoagulation is used to treat exudative macular degeneration. In some ophthalmic conditions retinal cryotherapy may also be used.

B. Medically Necessary

1. Pan retinal photocoagulation or cryotherapy¹ may be medically necessary for the treatment of rubeosis irides,² proliferative retinopathy,³ pre-proliferative retinopathy, and related etiologies of retinovitreal neovascularization.
2. Focal laser treatment of localized lesion may be medically necessary for the following lesions and conditions:
 - a. Localized lesions of the retina or choroid (e.g., choroidal neovascularization, macro aneurysm, retinal or choroidal tumors, central serous choroidopathy).⁴
 - b. Macular edema from retinal vein occlusion and diabetic retinopathy;⁵
 - c. Retinal holes which are at risk to progressing to retinal detachment;⁶
 - d. For treatment of, or prophylaxis for retinal detachment.⁷
3. Trans pupillary thermotherapy (TTT) may be medically necessary for the following indications:

¹ Ng, 2001.

² Rehak, 1992.

³ Myslík, 2024.

⁴ Rolfe, 2024.

⁵ Thomley, 2021

⁶ Wilkinson, 2014

⁷ Wilkinson, 2014.

- a. Retinoblastoma⁸ involving less than 50% of the retina, and without associated vitreal or subretinal seeds at the time of thermotherapy; or,
- b. Choroidal melanomas in the posterior globe.
- c. Choroidal vascular tumors
- d. Other primary retinal or choroidal tumors

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 all the listed items. For retrospective reviews, the full operative report and medical plan of care are required.

All items listed below must be available upon request to initiate or sustain previous payments. Every page of the record must be legible and include appropriate patient identification information (e.g., complete name, date(s) of service). The physician must sign all services ordered and provided using either a handwritten or electronic signature. Stamped signatures are not acceptable.

1. A complete examination of the eye with dilated pupils that includes:
 - a. An examination of the anterior segment and posterior segment with documented pertinent findings; and,
 - b. the interpretation and report from the most recent and previous tests performed including B-scan, OCT, and FA, where indicated; and,
 - c. the covered condition, the need for the treatment contemplated, and the absence of contraindications for the surgery; and,
2. Other allied diagnostic testing supportive of the treatment plan with physician's order, medical rationale, findings, interpretation, and report; and,
3. Use of a laser that is FDA approved for the procedure; and,
4. Documentation, including dates, and outcomes of the preceding retinal laser photocoagulation performed to either the right and or left eye; and,
5. The detailed operative report is provided upon request. The operative report should include the procedure description including wavelength, duration, energy and number of applications of laser for the patient's specific indications.

⁸ Rao, 2017

D. Procedural Detail

| CPT and HCPCS Codes | |
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| 67101 | Repair of retinal detachment, including drainage of subretinal fluid, when performed; cryotherapy |
| 67105 | Repair of retinal detachment, including drainage of subretinal fluid when performed; photocoagulation |
| 67141 | Prophylaxis of retinal detachment (e.g., retinal break, lattice degeneration) without drainage, 1 or more sessions; cryotherapy, diathermy |
| 67145 | Prophylaxis of retinal detachment (e.g., retinal break, lattice degeneration) without drainage, 1 or more sessions; photocoagulation |
| 67208 | Destruction of localized lesion of retina (e.g., macular edema, tumors), 1 or more sessions; cryotherapy, diathermy |
| 67210 | Destruction of localized lesion of retina (e.g., macular edema, tumors), one or more sessions; photocoagulation |
| 67218 | Destruction of localized lesion of retina (e.g., macular edema, tumors), 1 or more sessions; radiation by implantation of source (includes removal of source) |
| 67220 | Destruction of localized lesion of choroid (e.g., choroidal neovascularization); photocoagulation (e.g., laser), one or more sessions |
| 67227 | Destruction of extensive or progressive retinopathy (e.g., diabetic retinopathy), cryotherapy, diathermy |
| 67228 | Treatment of extensive or progressive retinopathy (e.g., diabetic retinopathy), photocoagulation |
| 67299 | Unlisted posterior segment procedure (used for retinal lasers in cryotherapy or thermotherapy procedures) |
| G0186 | Destruction of localized lesion of choroid (for example, choroidal neovascularization); photocoagulation, feeder vessel technique (one or more sessions) |

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| RELATED POLICIES AND PROCEDURES | |
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| 1305 | YAG Capsulotomy |
| 1317 | Intravitreal Injections |
| 1345 | Verteporfin (Visudyne) |

| DOCUMENT HISTORY | | |
|-----------------------------|--|------------------------------|
| <i>Approval Date</i> | <i>Revisions</i> | <i>Effective Date</i> |
| 05/01/2018 | Initial policy | 05/01/2018 |
| 07/25/2019 | Code additions; no substantive criteria change | 08/01/2019 |
| 12/18/2019 | No substantive criteria change | 01/01/2020 |
| 06/03/2020 | Removed indications for pediatric retinopathy of prematurity. | 12/01/2020 |
| 01/06/2021 | Removed criteria for A-VEGF therapy as a pre-requisite treatment for diabetic macular edema. | 07/01/2021 |

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| 10/06/2021 | Added indication pre proliferative retinopathy to . criteria for pan retinal photocoagulation. For pan retinal cryotherapy removed extraneous diagnoses (variations of neovascularization); clarified wording for indications for focal laser treatment of localized lesion; removed criteria for ocular photodynamic, as redundant of policy 1345; removed extraneous listings in documentation requirements. Added CPT code 67229, deleted CPT codes J3396, 67221, 67225. | 04/01/2022 |
| 07/06/2022 | Criteria for photocoagulation and cryotherapy rewritten for retinovitreal neovascularization. Criteria for focal laser specifies macular edema from retinal vein occlusion and diabetic retinopathy. | 01/01/2023 |
| 07/12/2023 | Add indication of primary retinal or choroidal tumors to TTT procedure; remove required measure of spot size. | 10/01/2023 |
| 07/10/2024 | Add indication rubeosis irides; remove measurement requirements for choroidal melanomas and choroidal vascular tumors. | 10/01/2024 |
| 07/09/2025 | Expanded the indication of retinal detachment to include both the actual detachment and the prophylaxis of detachment. | 10/01/2025 |

REFERENCES and SOURCES

1. Aaberg TM Jr, Bergstrom CS, Hickner ZJ, et.al. Long-term results of primary trans pupillary thermal therapy for the treatment of choroidal malignant melanoma. *Br J Ophthalmol*. 2008; 92(6):741-746.
2. Bressler NM, Beck RW, Ferris FL 3rd. Panretinal photocoagulation for proliferative diabetic retinopathy. *N Engl J Med*. 2011 Oct 20;365(16):1520-6. doi: 10.1056/NEJMct0908432. PMID: 22010918.
3. Gross JG, Glassman AR, Jampol LM, et.al. Panretinal Photocoagulation vs Intravitreal Ranibizumab for Proliferative Diabetic Retinopathy: A Randomized Clinical Trial. *JAMA*. 2015 Nov 24;314(20):2137-2146. doi: 10.1001/jama.2015.15217. Erratum in: *JAMA*. 2016 Mar 1;315(9):944. Erratum in: *JAMA*. 2019 Mar 12;321(10):1008. PMID: 26565927; PMCID: PMC5567801.
4. Jefferies, Ann L. Retinopathy of prematurity: An update on screening and management, *Pediatr Child Health*, Mar 2016; 21 (2): 101-104 doi [10.1093/pch/21.2.101](https://doi.org/10.1093/pch/21.2.101).
5. Myslík M, Kateřina. Central Serous Chorioretinopathy. A Review. *Cesk Slov Oftalmol*. 2024;80(2):59-75. English. doi: 10.31348/2023/27. PMID: 38531681.
6. Ng EY, Connolly BP, McNamara JA, et.al. A comparison of laser photocoagulation with cryotherapy for threshold retinopathy of prematurity at 10 years: part 1. Visual function and

- structural outcome. *Ophthalmology*. 2002 May;109(5):928-34; discussion 935. doi: 10.1016/s0161-6420(01)01017-x. PMID: 11986099.
7. Rao R, Honavar SG. Retinoblastoma. *Indian J Pediatr*. 2017 Dec;84(12):937-944. doi: 10.1007/s12098-017-2395-0. Epub 2017 Jun 16. PMID: 28620731.
 8. Reddy SV, Husain D. Panretinal Photocoagulation: A Review of Complications. *Semin Ophthalmol*. 2018;33(1):83-88. doi: 10.1080/08820538.2017.1353820. Epub 2017 Nov 27. PMID: 29172937.
 9. Reháč J. Rubeosis iridis and neovascular glaucoma: II. Our own experiences with the treatment by cryocoagulation. *Acta Univ Palacki Olomuc Fac Med*. 1992; 134:105-8. PMID: 1364952.
 10. Relhan N, Flynn HW Jr. The Early Treatment Diabetic Retinopathy Study historical review and relevance to today's management of diabetic macular edema. *Curr Opin Ophthalmol*. 2017 May;28(3):205-212. doi: 10.1097/ICU.0000000000000362. PMID: 28151747.
 11. Rolfe OJ, Stark AL, Hamilton HR et.al. Combined photodynamic therapy and transpupillary thermotherapy for small choroidal melanoma. *Can J Ophthalmol*. 2024 Feb 29; S0008-4182(24)00034-6. doi: 10.1016/j.jcjo.2024.02.001. Epub ahead of print. PMID: 38431268.
 12. Shields CL, Shields JA, DePotter P, et al. Trans pupillary thermotherapy in the management of choroidal melanoma. *Ophthalmology*. 1996; 103(10):1642-1650.
 13. Thomley ME, Gross CN, Preda-Naumescu A, et.al. Real-World Outcomes in Patients with Branch Retinal Vein Occlusion- (BRVO-) Related Macular Edema Treated with Anti-VEGF Injections Alone versus Anti-VEGF Injections Combined with Focal Laser. *J Ophthalmol*. 2021 May 19; 2021:6641008. doi: 10.1155/2021/6641008. PMID: 34104482; PMCID: PMC8159650.
 14. Virgili G, Michelessi M, Parodi MB, et al. Laser treatment of drusen to prevent progression to advanced age-related macular degeneration. *Cochrane Database Syst Rev*. 2015 Oct 23;10:CD006537.
 15. Wilkinson CP. Interventions for asymptomatic retinal breaks and lattice degeneration for preventing retinal detachment. *Cochrane Database Syst Rev*. 2014 Sep 5;2014(9):CD003170. doi: 10.1002/14651858.CD003170.pub4. PMID: 25191970; PMCID: PMC4423540.
 16. Yun SH, Adelman RA. Recent developments in laser treatment of diabetic retinopathy. *Middle East Afr J Ophthalmol*. 2015 Apr-Jun;22(2):157-63. doi: 10.4103/0974-9233.150633. PMID: 25949072; PMCID: PMC4411611.

SOURCES

1. American Academy of Ophthalmology PPP Diabetic Retinopathy, 2024. <https://www.aao.org/education/preferred-practice-pattern/diabetic-retinopathy-ppp>. Accessed 5/2025.
2. American Academy of Ophthalmology PPP. Idiopathic Macular Hole, PPP 2024. <https://www.aao.org/education/preferred-practice-pattern/idiopathic-macular-hole-ppp>. Accessed 5/2025.
3. American Academy of Ophthalmology PPP Posterior Vitreous Detachment, Retinal Breaks, and Lattice Degeneration, 2024. <https://www.aao.org/education/preferred-practice-pattern/posterior-vitreous-detachment-retinal-breaks-latti>. Accessed 5/2025.

4. American Academy of Ophthalmology PPP Retina and Ophthalmic Artery Occlusions, 2019. <https://www.aao.org/education/preferred-practice-pattern/retinal-ophthalmic-artery-occlusions-ppp>. Accessed 4/2024.
5. American Academy of Ophthalmology PPP. Age-Related Macular Degeneration 2024. <https://www.aao.org/education/preferred-practice-pattern/age-related-macular-degeneration-ppp>. <https://www.aao.org/education/preferred-practice-pattern/age-related-macular-degeneration-ppp>. Accessed 5/2025.
6. American Academy of Ophthalmology PPP Retinal Vein Occlusions, 2024. <https://www.aao.org/education/preferred-practice-pattern/retinal-vein-occlusions-ppp> . Accessed 5/2025.
7. CMS article A56550, “Billing and Coding: Panretinal (Scatter) Laser Photocoagulation.” <https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleId=56550>.