



Policy Name	Clinical Policy – Durysta bimatoprost implant
Policy Number	1343.00
Department	Clinical Product & Development
Subcategory	Medical Management
Original Approval Date	01/06/2021
Current MPC/CCO Approval Date	01/08/2025
Current Effective Date	05/01/2025

Company Entities Supported (Select All that Apply): <input checked="" type="checkbox"/> Superior Vision Benefit Management <input checked="" type="checkbox"/> Superior Vision Services <input checked="" type="checkbox"/> Superior Vision of New Jersey, Inc. <input checked="" type="checkbox"/> Block Vision of Texas, Inc. d/b/a Superior Vision of Texas <input checked="" type="checkbox"/> Davis Vision (Collectively referred to as 'Versant Health' or 'the Company')
--

ACRONYM	
IOL	Intraocular
IOP	Intraocular pressure

PURPOSE

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

POLICY

A. BACKGROUND

Durysta, bimatoprost SR (sustained release), implant may replace complex standard topical therapies¹ while effectively reducing intraocular pressure. The implant is inserted through a stylet into the anterior chamber. This may be done either as an office-based procedure or in an operating room. Prior to Durysta implant, the eye must have open angles confirmed by gonioscopy.

Six-month results from phase I/II clinical trials documented a mean intraocular pressure reduction from baseline of 7.4 millimeters of mercury². Neither rescue nor retreatment was

¹ Newman-Casey, 2015; Sleath, 2011.

² Mederios, 2022

required in 91% of patients at four months, and 71% of patients at six months. The primary adverse effect identified during the study³ was that more than 10% of subjects had greater than 20% endothelial cell loss,⁴ thus, the FDA approval is restricted to only one implant per eye with no retreatment.⁵ The long term beneficial effects of Durysta continue to be measured. At one year follow up, a single administration of bimatoprost implant SR lowered intraocular pressure in 40% of patients to a degree comparable to bimatoprost topical therapy. At two years 28% of patients had sustained lowered intraocular pressure at a level consistent with topical bimatoprost therapy.⁶

B. Medically Necessary

Durysta (bimatoprost implant 10mcg) may be medically necessary if all the following criteria are met.

1. The patient has primary open angle glaucoma or ocular hypertension with grade 3 (Shaeffer) or greater angles confirmed by gonioscopy;⁷ and,
2. The patient has failed to maintain acceptable intra-ocular pressure after laser trabeculoplasty (SLT);^{8, 9} and,
3. The patient has had a satisfactory IOP lowering with a topical prostaglandin analogue;¹⁰ and,
4. The patient has no ocular surface disease.¹¹

C. Not Medically Necessary

The use of Durysta may not be medically necessary in patients who do not meet the above criteria or have any one of the following:

1. Corneal endothelial dystrophy; or,
2. Prior corneal transplantation; or,
3. Active or suspected ocular/periocular infections; or,
4. Posterior capsular tear secondary to cataract surgery.
5. Durysta is FDA approved for one implant per eye.
6. Due to Durysta's novel status, safety outcomes for use after other drugs (e.g. iDose) are unknown. Any combination use of Durysta and iDose may not meet medical necessity.

³ Lewis, 2017

⁴ Sirinek, 2021.

⁵ Craven, 2019

⁶ Craven, 2019

⁷ Lim, 2022.

⁸ FDA adverse events reporting system. The glaucoma experts of Versant Health MPC determined that safety profile of Durysta is not yet determined and that the less risky SLT procedure is required prior to use.

⁹ Realini, 2008.

¹⁰ Brown, 2019; Winkler, 2014

¹¹ Tsuge, 2019.

D. Documentation

Medical necessity must be supported by adequate and complete documentation in the patient’s medical record that describes the procedure and the medical rationale for it as in the requirements above. All items must be available upon request to initiate or sustain previous payments. For any retrospective review, a full operative report 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/ordered must be authenticated by the physician, in a handwritten or electronic signature. Stamped signatures are not acceptable.

E. Procedural Detail

HCPCS/CPT Codes	
J7351	Injection, bimatoprost, intracameral implant, 10 micrograms
66030	Injection, anterior chamber of eye (separate procedure); medication
Required Modifiers	
RT	Right Side
LT	Left Side

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 the use of such information, products, or processes will not 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, and 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 American Medical Association. All Rights Reserved. CPT™ 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	
1350	iDose TR

DOCUMENT HISTORY		
<i>Approval Date</i>	<i>Revisions</i>	<i>Effective Date</i>
01/06/2021	Initial policy	06/01/2021
01/05/2022	Annual review; no criteria changes	02/01/2022
01/04/2023	Annual review; no criteria changes	04/01/2023
09/20/2023	Administrative review for CMS 2024 final rule Medicare Part C equity: no changes.	n/a
01/03/2024	Added indication for ocular hypertension, ocular surface disease, poor compliance/intolerance to topical therapy.	05/01/2024
01/08/2025	Added FDA limitation of one implant per eye.	05/01/2025

REFERENCES AND SOURCES

1. Aref AA. Sustained drug delivery for glaucoma: current data and future trends. *Curr Opin Ophthalmol.* 2017; 28:169–74.
2. Bacharach J, Tatham A, Ferguson G, et.al. ARTEMIS 2 Study Group. Phase 3, Randomized, 20-Month Study of the Efficacy and Safety of Bimatoprost Implant in Patients with Open-Angle Glaucoma and Ocular Hypertension (ARTEMIS 2). *Drugs.* 2021 Nov;81(17):2017-2033. doi: 10.1007/s40265-021-01624-9. Epub 2021 Nov 1. PMID: 34724172; PMCID: PMC8602154.
3. Brandt JD, DuBiner HB, Benza R, et.al. Long-term safety and efficacy of a sustained release bimatoprost ocular ring. *Ophthalmology.* 2017; 124:1565–6.

4. Brown GC, Brown MM. Patient Preference-Based Comparative Effectiveness and Cost-Utility Analysis of the Prostaglandin Analogs for Open-Angle Glaucoma. *J Ocul Pharmacol Ther.* 2019 Apr;35(3):145-160. doi: 10.1089/jop.2018.0114. Epub 2019 Mar 28. PMID: 30920338.
5. Cantor LB, Katz LJ, Cheng JW, et al. Economic evaluation of medication, laser trabeculectomy and filtering surgeries in treating patients with glaucoma in the US. *Curr Med Res Opin* 2008; 24:2905–18.
6. Craven E.R., Walters T., Christie W.C., 24-Month Phase I/II Clinical Trial of Bimatoprost Sustained-Release Implant (Bimatoprost SR) in Glaucoma Patients, <https://doi.org/10.1007/s40265-019-01248-0>, 2019.
7. Garg A., Vickerstaff V., Nathwani N., et. al., on behalf of the Laser in Glaucoma and Ocular Hypertension Trial Study Group, Efficacy of Repeat Selective Laser Trabeculectomy in Medication-Naïve Open-Angle Glaucoma and Ocular Hypertension during the LIGHT Trial, *Ophthalmology* 2020;127:467-476.
8. Heijl A, Leske MC, Bengtsson B, et.al, Early Manifest Glaucoma Trial Group. Reduction of intraocular pressure and glaucoma progression: results from the Early Manifest Glaucoma Trial. *Arch Ophthalmol* 2002; 120:1268-79.
9. Henry D. Jampel, MD, MHS, Kuldev Singh, MD, MPH, Shan C. Lin, MD, et. al., Assessment of Visual Function in Glaucoma, *Ophthalmic Technology Assessment, Ophthalmology* 2011;118:986–1002 © 2011.
10. Kass MA, Heuer DK, Higginbotham EJ, et al. The Ocular Hypertension Treatment Study: a randomized trial determines that topical ocular hypotensive medication delays or prevents the onset of primary open-angle glaucoma. *Arch Ophthalmol* 2002; 120:701-13; discussion 829-30.
11. Khouri AS, Lari HB, Berezina TL, Maltzman B, Fechtner RD. Long term efficacy of repeat selective laser trabeculectomy. *J Ophthalmic Vis Res.* 2014 Oct-Dec;9(4):444-8. doi: 10.4103/2008-322X.150814. PMID: 25709769; PMCID: PMC4329704.
12. Kim J, Kudisch M, Mudumba S, et.al. Biocompatibility and pharmacokinetic analysis of an intracameral polycaprolactone drug delivery implant for glaucoma. *Invest Ophthalmol Vis Sci.* 2016; 57:4341–6.
13. Lee PP, Walt JG, Doyle JJ, et al. A multicenter, retrospective pilot study of resource use and costs associated with severity of disease in glaucoma. *Arch Ophthalmol* 2006;124(1):12–19.
14. Lewis RA, Christie WC, Day DG, et al. Bimatoprost sustained-release implants for glaucoma therapy: 6-month results from a phase I/II clinical trial. *Am J Ophthalmol.* 2017; 175:137–47.
15. Lim KS, Nau CB, O'Byrne MM et. al. Mechanism of action of bimatoprost, latanoprost, and travoprost in healthy subjects. A crossover study. *Ophthalmology.*2008;115(790–5): e4.
16. Lim R. The surgical management of glaucoma: A review. *Clin Exp Ophthalmol.* 2022;50(2):213-231. doi:10.1111/ceo.14028.
17. Medeiros FA, Walters TR, Kolko M, et.al; ARTEMIS 1 Study Group. Phase 3, Randomized, 20-Month Study of Bimatoprost Implant in Open-Angle Glaucoma and Ocular Hypertension (ARTEMIS 1). *Ophthalmology.* 2020 Dec;127(12):1627-1641. doi: 10.1016/j.ophtha.2020.06.018. Epub 2020 Jun 13. PMID: 32544560.
18. Medeiros FA, Sheybani A, Shah MM, et.al. Single Administration of Intracameral Bimatoprost Implant 10 µg in Patients with Open-Angle Glaucoma or Ocular Hypertension. *Ophthalmol Ther.* 2022 Aug;11(4):1517-1537. doi: 10.1007/s40123-022-00527-6. Epub 2022 May 28. PMID: 35643967; PMCID: PMC9253216.
19. Newman-Casey PA, Robin AL, Blachley T, et al. The most common barriers to glaucoma medication adherence: a cross-sectional survey. *Ophthalmology.*2015;122:1308–16.

20. Oldthoff C, Shouten JSAG, van de Borne VW, et.al. Noncompliance with ocular hypotensive treatment in patients with glaucoma or ocular hypertension. An evidence-based review. *Ophthalmology* 2005; 112:953-61.
21. Realini T. Selective laser trabeculoplasty: a review. *J Glaucoma*. 2008;17(6):497-502. doi:10.1097/IJG.0b013e31817d2386.
22. Reardon G, Kotak S, Schwartz GF. Objective assessment of compliance and persistence among patients treated for glaucoma and ocular hypertension: a systematic review. *Patient Prefer Adherence*.2011;5:441–63.
23. Robin AL, Novack GD, Covert DW, et. al. Adherence in glaucoma: objective measurements of once daily and adjunctive medication use. *Am J Ophthalmol*.2007;144:533–40.
24. Seal JR, Robinson MR, Burke J, et.al. Intracameral sustained release bimatoprost implant delivers bimatoprost to target tissues with reduced drug exposure to off target tissues. *J Ocul Pharmacol Ther*. 2019; 35:50–7.
25. Shirley, M. Bimatoprost implant: First approval. *Drugs & Aging* (2020) 37:457-462.
26. Sirinek, P. E., & Lin, M. M. (2021). Intracameral sustained release bimatoprost implants (Durysta). *Seminars in Ophthalmology*, 37(3), 385–390. <https://doi.org/10.1080/08820538.2021.1985145>
27. Sleath B, Blalock S, Covert D, et al. The relationship between glaucoma medication adherence, eye drop technique, and visual field defect severity. *Ophthalmology*. 2011; 118:2398–402.
28. Sommer, A. “Ocular Hypertension and Normal Tension Glaucoma” from *Archives of Ophthalmology*, Volume 129, #6, June 2011, page 785-786)—
29. Stone JL, Robin AL, Novack GD et.al., An Objective Evaluation of Eye Drop Instillation in Patients with Glaucoma *Arch Ophthalmol*. 2009;127(6):732-736
30. Stryker JE, Beck AD, Primo SA, et al. An exploratory study of factors influencing glaucoma treatment adherence. *J Glaucoma*. 2010; 19:66–72.
31. Tsuge K, Inazumi T, Shimamoto A, et.al. Molecular mechanisms underlying prostaglandin E2-exacerbated inflammation and immune diseases. *Int Immunol*. 2019;31(9):597-606. doi:10.1093/intimm/dxz021
32. Weinreb RN, Bacharach J, Brubaker JW, et.al. Bimatoprost Implant Biodegradation in the Phase 3, Randomized, 20-Month ARTEMIS Studies. *J Ocul Pharmacol Ther*. 2023 Jan-Feb;39(1):55-62. doi: 10.1089/jop.2022.0137. Epub 2022 Nov 15. PMID: 36378864; PMCID: PMC9885540.
33. Winkler NS, Fautsch MP. Effects of prostaglandin analogues on aqueous humor outflow pathways. *J Ocul Pharmacol Ther*.2014;30:102–9.

SOURCES

1. American Academy of Ophthalmology. Primary open-angle glaucoma suspect PPP 2020. <https://www.aao.org/education/preferred-practice-pattern/primary-open-angle-glaucoma-ppp>. . Accessed 12/2024.
2. Drugs.com. Durysta prices. <https://www.drugs.com/price-guide/durysta>. Accessed 10/2023.
3. FDA Adverse Events Reporting System Public Dashboard. Durysta events monitored 2023-2024. <https://fis.fda.gov/sense/app/95239e26-e0be-42d9-a960-9a5f7f1c25ee/sheet/45beeb74-30ab-46be-8267-5756582633b4/state/analysis>. Accessed 12/2024.
4. U.S. Food and Drug Administration. FDA NDA 211911/S-001. https://www.accessdata.fda.gov/drugsatfda_docs/label/2020/211911s001lbl.pdf. Accessed 9/2024.