Molina Clinical Policy
Durysta (bimatoprost implant): Policy No. 370

Last Approval: 6/14/2023
Next Review Due By: June 2024

DISCLAIMER

This Molina Clinical Policy (MCP) is intended to facilitate the Utilization Management process. Policies are not a supplementation or recommendation for treatment; Providers are solely responsible for the diagnosis, treatment, and clinical recommendations for the Member. It expresses Molina's determination as to whether certain services or supplies are medically necessary, experimental, investigational, or cosmetic for purposes of determining appropriateness of payment. The conclusion that a particular service or supply is medically necessary does not constitute a representation or warranty that this service or supply is covered (e.g., will be paid for by Molina) for a particular Member. The Member's benefit plan determines coverage – each benefit plan defines which services are covered, which are excluded, and which are subject to dollar caps or other limits. Members and their Providers will need to consult the Member's benefit plan to determine if there are any exclusion(s) or other benefit limitations applicable to this service or supply. If there is a discrepancy between this policy and a Member's plan of benefits, the benefits plan will govern. In addition, coverage may be mandated by applicable legal requirements of a State, the Federal government or CMS for Medicare and Medicaid Members. CMS's Coverage Database can be found on the CMS website. The coverage directive(s) and criteria from an existing National Coverage Determination (NCD) or Local Coverage Determination (LCD) will supersede the contents of this MCP and provide the directive for all Medicare members. References included were accurate at the time of policy approval and publication.

OVERVIEW

Open-angle glaucoma (OAG) is a chronic, progressive, and irreversible multifactorial optic neuropathy that is characterized by open angle of the anterior chamber, typical optic nerve head changes, progressive loss of peripheral vision (typical visual field changes) followed by central visual field loss (blindness) for which intraocular pressure (IOP) is an important risk factor. Lowering IOP is the primary goal of therapy and has been shown to reduce the progression of visual field loss. The target IOP and subsequent monitoring intervals depends on several factors, including the extent of optic nerve damage, whether there is recent progression of damage, the stability of IOP, and the level of patient adherence. A target IOP ≥ 25 to 30% below initial IOP is cited a reasonable initial target. Lowering of IOP has been shown as the major modifiable risk factor for both glaucoma and OHT.

Ocular hypertension (OHT) is distinguished from glaucoma in that there are no detectable changes in vision, no evidence of visual field loss, and no damage to the optic nerve. OHT is defined as consistently elevated IOP, greater than 21mmHg, in one or both eyes in the absence of clinical evidence of optic nerve damage, visual field defect or other pathology (the defined normal range in the general population pressure is between 10 mm Hg and 21 mm Hg). Among patients with OHT, treatment to lower IOP may delay or prevent the onset of OAG. A clinical management strategy that targets a 20% reduction in IOP in people with OHT has been shown to delay or prevent the onset of glaucoma (Kass et al.; OHTS). Patients diagnosed with OHT are typically asymptomatic and managed either by treating the condition or by regular observation.

Pharmacologic therapy, laser therapy (trabeculoplasty), and/or surgery (trabeculectomy) have been shown to lower IOP. Pharmacologic or laser therapy is usually the first-line treatment. Surgical therapy is a first-line approach only for patients with severe visual field loss at baseline and a second-line approach for patients with advanced OAG who do not respond to medications or laser therapy. Topical IOP-lowering medication remains the mainstay of glaucoma therapy, with topical prostaglandins recommended as first-line pharmacologic therapy. Meta-analyses have found prostaglandins are more effective at lowering IOP than beta blockers, carbonic anhydrase inhibitors, and alpha-adrenergic agonists for the treatment of OAG. (Li et al. 2016; van der et al. 2005; Fung et al. 2007). When monotherapies do not reach the target IOP, combination therapy from different classes (i.e., beta blocker plus prostaglandin or beta blocker plus carbonic anhydrase inhibitor) results in a greater reduction in the IOP.

Durysta (bimatoprost implant), an intracameral, biodegradable, sustained-release implant, was approved by the FDA on March 4, 2020 to lower IOP in patients with OAG or OHT. Bimatoprost is a synthetic structural analog of prostaglandin with ocular hypotensive effect. It is thought to lower IOP via increasing aqueous humor outflow through both the trabecular meshwork and the uveoscleral pathways. The implant contains 10 g of bimatoprost, a prostaglandin analog, and comes in a preloaded, single-use applicator for delivery directly into the anterior chamber of the eye. The insertion is performed under magnification in an office or ambulatory surgery center. Durysta is a biodegradable implant intended for a single administration and should not be re-administered to an eye that has previously received Durysta.

COVERAGE POLICY

Durysta (bimatoprost implant) for the treatment of adults with open-angle glaucoma (OAG) or ocular hypertension (OHT) **may be considered medically necessary** when **ALL** of the following clinical criteria are met:

1. Diagnosis of **OAG** (i.e., primary OAG, pseudoexfoliation glaucoma, pigmentary glaucoma) OR **OHT** requiring intraocular pressure-lowering treatment.

AND

2. Inadequate response, intolerance, contraindication, or clinical rationale supporting the inappropriateness to **ALL** of the following anti-glaucoma medications (at least ONE drug from each class). Documentation of ALL therapy with dates of failed therapy or clinical events.

    a. Ophthalmic prostaglandins (e.g., latanoprost, bimatoprost, travoprost); **AND**
    Informational Note: The topical prostaglandins are increasingly chosen as initial monotherapy in OAG and have been consistently shown to be effective at lowering IOP and well tolerated. Prostaglandins have the advantage of once-daily dosing and do not have the risk of systemic side effects seen with topical beta blockers (2021).

    b. Beta-adrenergic blocker or combination product (e.g., carteolol, levobunolol, metipranolol, timolol, betaxolol, dorzolamide plus timolol); **AND**

    c. Alpha-2-agonists (brimonidine).

    MOLINA REVIEWER: Review profile for anti-glaucoma drug claims and enter an authorization if applicable. Notify Prescriber if an authorization is entered.

AND

3. Documentation/attestation required:
    a. Member has an inability to manage regular glaucoma eye drop use (e.g., due to age, dexterity, or comorbidities including visual impairment), **AND**
    b. Member has not received prior Durysta administration to the affected eye(s). NOTE: Durysta should not be re-administered to an eye that received a prior Durysta; **AND**
    c. Member does not have ANY of the following conditions (exclusions):
        i. Previous eye surgery (including cataract surgery) and/or any eye laser surgery within the past 6 months in the affected eye; OR
        ii. History of glaucoma surgery; OR
        iii. Anticipated need for laser eye surgery within one year

CONTINUATION OF THERAPY
Retreatment will not be authorized due to insufficient evidence of therapeutic value since clinical benefit beyond one implant for the same eye has not been established.

LIMITATIONS AND EXCLUSIONS
The following are considered **contraindications/exclusions** based on insufficient evidence:
1. Hypersensitivity to bimatoprost or any of the other components of the therapy.
2. Active or suspected ocular or periocular infection.
3. Diagnosis of corneal endothelial cell dystrophy (e.g., Fuchs endothelial dystrophy).
4. Prior corneal transplantation or endothelial cell transplants (e.g., Descemet stripping automated endothelial keratoplasty [DSAEK]).
5. Absence or rupture of posterior lens capsule owing to the risk of implant migration into the posterior segment.
NOTE: Laser posterior capsulotomy in pseudophakia (not contraindicated if the intraocular lens fully covers the posterior capsule opening)
6. Previous eye surgery (including cataract surgery) and/or any eye laser surgery within the past 6 months in the affected eye.
7. History of glaucoma surgery.
8. Anticipated need for laser eye surgery within one year.

The following are considered **experimental, investigational, and unproven** based on insufficient evidence:
1. Any indications other than those listed above
2. Repeat administration in the same eye

DURATION OF APPROVAL: ONE time authorization for one implant per eye

PRESCRIBER REQUIREMENTS: Prescribed by, or in consultation with, a board-certified specialist in glaucoma and/or neuro-ophthalmology, or ophthalmologist experienced in the administration of intracameral biodegradable implant. Submit consultation notes if applicable.

AGE RESTRICTIONS: 18 years of age or older

DOSING CONSIDERATIONS: Insert 1 implant (10 µg) intracamerally in anterior chamber of affected eye. Limit to a single implant per eye; do not re-administer to an eye that has received a prior implant

Warnings and Precautions: Due to possible corneal endothelial cell loss, administration of Durysta should be limited to a single implant per eye without retreatment. Durysta has been associated with corneal adverse reactions and risks are increased with multiple implants. Use caution in patients with limited corneal endothelial cell reserve.

QUANTITY LIMITATIONS: ONE implant (10 µg) per eye (lifetime total)

ADMINISTRATION:
1. May be authorized in an ophthalmologist's office or at a surgery center. Routine administration in a hospital or hospital outpatient setting (other than physician office or ambulatory surgical center) will not be authorized.
2. If member meets all criteria and approval for therapy is granted, medication will be dispensed by a specialty pharmacy vendor at the discretion of Molina Healthcare.
3. Refer to MHI Policy & Procedure (P&P): Specialty Medication Administration Site of Care Policy: MHI Pharm 11

DOCUMENTATION REQUIREMENTS. Molina Healthcare reserves the right to require that additional documentation be made available as part of its coverage determination; quality improvement; and fraud; waste and abuse prevention processes. Documentation required may include, but is not limited to, patient records, test results and credentials of the provider ordering or performing a drug or service. Molina Healthcare may deny reimbursement or take additional appropriate action if the documentation provided does not support the initial determination that the drugs or services were medically necessary, not investigational, or experimental, and otherwise within the scope of benefits afforded to the member, and/or the documentation demonstrates a pattern of billing or other practice that is inappropriate or excessive.

DRUG INFORMATION

ROUTE OF ADMINISTRATION: Intracameral implant

DRUG CLASS: Antiglaucoma, Prostaglandin analog

FDA-APPROVED USES: Elevated IOP: Reduction of elevated IOP in patients with OAG or OHT

COMPENDIAL APPROVED OFF-LABELED USES: None

SUMMARY OF MEDICAL EVIDENCE

FDA approval of Durysta is based on results from two Phase 3 multicenter, randomized, parallel-group, controlled, 20-month (including an 8-month extended follow-up) studies of Durysta compared to twice-daily topical timolol 0.5% drops in patients with OAG or OHT. ARTEMIS 1 and 2 were two identical, multicenter, randomized, parallel-group, controlled, 20-month studies with an extended follow-up of 8 months. The ARTEMIS studies compared the efficacy of Durysta was compared to topical timolol 0.5% drops administered twice daily in 1,122 patients with OAG or OHT. In the ARTEMIS trials, the Durysta implant reduced IOP by approximately 30% from a baseline mean of 24.5 mmHg (lowering IOP by 5 to 8 mmHg) over a 12-week period, meeting the specified criteria for non-inferiority to the study comparator. Durysta reduced mean IOP more than timolol at all time points (hours 0 and 2, weeks 2, 6, and 12) and was found to be non-inferior to timolol at all time points.

The most commonly reported adverse event (AE) is conjunctival hyperemia (27%). Other adverse events (5% to 10%) include foreign body sensation, eye pain, photophobia, conjunctival hemorrhage dry eye, eye irritation, increased IOP, corneal endothelial cell loss, blurred vision, iritis, and headache.

ARTEMIS 1 assessed the IOP-lowering efficacy and safety of 10- and 15-µg bimatoprost implants in patients with OAG and OHT following initial and recurring doses. Participants were assigned to one of three treatment groups: 10-µg bimatoprost implant (n=198), 15-µg bimatoprost implant (n = 198) or BID timolol drops (n = 198). The mean age of the participants in the study was 62.5 years. Primary OAG was detected in the majority of the studied eyes (78.1%). The mean IOP in the study eyes was comparable across treatment groups. 90.4 % (10 µg), 79.3 % (15 µg), and 86.9% completed the study (timolol groups). There were 3 administration cycles: week 1, week 16, and week 32. The primary endpoints were IOP and the change in IOP from baseline to week 12. After the last bimatoprost implant or sham administration, participants were to be followed for at least 12 months, or until month 20. Corneal endothelial cell loss and corneal edema were the most common treatment-emergent adverse events (TEAE) that led to early withdrawal from the bimatoprost implant treatment groups. TEAEs, primarily corneal endothelial cell loss and edema, resulted in the removal of implants in 7 participants (3.6%) in the 10 µg bimatoprost implant group and 16 patients (8.3%) in the 15-µg bimatoprost implant group.

Bimatoprost implants (10- and 15-µg) were shown to be noninferior to timolol in decreasing IOP through week 12. IOP was controlled in most participants after 3 administrations and no further treatment was required after a year. The risk-benefit analysis indicated that the 10 µg implant was preferable to the 15-µg implant. Durysta is an effective treatment for glaucoma, however it is not superior to standard of care. Durysta was implanted every four months for a year.

ARTEMIS 2. This phase 3 study included 528 participants with OAG or OHT and an open iridocorneal angle inferiorly (NCT02250651). Participants received 10 or 15 µg bimatoprost implanted or twice-daily topical timolol maleate 0.5% in the study eye. The primary endpoints were IOP and the change in IOP from baseline to week 12. TEAEs and corneal endothelial cell density were used as safety measures. Results supported the prior phase 3 bimatoprost implant research. The bimatoprost implant met the primary goal of lowering IOP. After the third dosage, most patients required no more treatment for 12 months. Benefit-risk assessment favored the 10g implant over the 15g implant. Other administration regimens with lower risk of corneal events are being studied.

ARGOS, a phase IV, prospective, 18-month study to assess the effectiveness and safety of bimatoprost intracameral implant (DURYSTA) in clinical practice is currently recruiting participants as of April 2023 (NCT04647214). This prospective observational study to collect data on the efficacy and safety of a bimatoprost intracameral implant in individuals with OAG or OHT is noted to be completed by June 30, 2023.

National and Specialty Organizations

American Academy of Ophthalmology (AAO)

The preferred practice guidelines(2015) for the treatment of primary OAG note that there are many considerations when choosing a target IOP, including the stage of the overall glaucoma damage as determined by the degree of structural optic nerve damage and/or functional visual field loss, the baseline IOP at which damage occurred, the age of the patient, and additional risk factors. The initial treatment choice may be influenced by potential cost, AE profile, and dosing schedule. The guidelines note prostaglandins as the most frequently used initial eye drops for lowering IOP in patients with glaucoma. The AAO does not prefer one prostaglandin over another. (Prum, 2015). Lowering the pretreatment IOP by ≥ 25% has been shown to slow the progression of primary OAG. If the target IOP is not achieved by one medication, switching, or adding medications should be considered, depending on whether the patient has responded to the first medication. The guideline recommends switching eye-drop agents or adding on for combination therapy when target IOP is not achieved with one drug alone. A more aggressive target (i.e., a lower target IOP) can be justified if there is more severe nerve damage or the damage is progressing rapidly; a less aggressive target IOP may be reasonable if the risks of treatment outweigh the benefits. **The practice guidance has not been updated to include the use of Durysta in its recommendations at the time of this review.** Note: The Primary OAG guideline was corrected as of May 2021; however, the intent of the guideline remains unchanged by the corrections.

SUPPLEMENTAL INFORMATION

Glaucoma: A group of eye diseases traditionally characterized by elevated IOP and more accurately defined as an optic neuropathy than a disease of high pressure. After cataracts, glaucoma is the second leading cause of blindness in the world.

IOP: A measurement of the fluid pressure inside the eye. When eye pressure increases and damages the optic nerve, glaucoma results. This damage reduces vision and if not treated can lead to total blindness.

CODING & BILLING INFORMATION

CPT	Description
66030	Injection, anterior chamber of eye (separate procedure); medication

HCPCS	Description
J7351	Injection, bimatoprost, intracameral implant, 1 mcg *Effective for dates of service on or after October 1, 2020, bill as 10 units

AVAILABLE DOSAGE FORMS: 10 µg intracameral implant; single-use applicator

CODING DISCLAIMER. Codes listed in this policy are for reference purposes only and may not be all-inclusive. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement. Listing of a service or device code in this policy does not guarantee coverage. Coverage is determined by the benefit document. Molina adheres to Current Procedural Terminology (CPT®), a registered trademark of the American Medical Association (AMA). All CPT codes and descriptions are copyrighted by the AMA; this information is included for informational purposes only. Providers and facilities are expected to utilize industry standard coding practices for all submissions. When improper billing and coding is not followed, Molina has the right to reject/deny the claim and recover claim payment(s). Due to changing industry practices, Molina reserves the right to revise this policy as needed.

APPROVAL HISTORY

06/14/2023 Policy reviewed and updated. No changes in coverage criteria. Updated References and Summary of Medical Evidence sections.
06/08/2022 Policy reviewed and updated. No changes in coverage criteria. Updated References.
06/09/2021 Policy reviewed and revised. Updated references. IRO Peer Review. 5/12/2021. Practicing Physician. Board certified in Ophthalmology. Content update includes:
- In initial coverage criteria section 'Step/Conservative Therapy/Other Condition Requirements' added *'or combination product'* to beta-adrenergic blocker [updated criterion: beta-adrenergic blocker or combination product (e.g., carteolol, levobunolol, metipranolol, timolol, betaxolol, dorzolamide plus timolol)]
- Reviewed and updated ongoing clinical trials

Q3 2020 P&T New policy. IRO Peer Review. 6/11/2020. Practicing Physician. Board certified in Ophthalmology.

REFERENCES

1. American Academy of Ophthalmology (AAO). Primary open-angle glaucoma. Published 2020. Accessed April 2023. https://www.aao.org/preferred-practice-pattern/primary-open-angle-glaucoma-ppp.
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.
3. Centers for Medicare and Medicaid Services (CMS). Medicare coverage database: National coverage determination (NCD) (search: Durysta, bimatoprost). No CMS NCDs for Durysta available as of April 2023. http://www.cms.gov/medicare-coverage-database/search/advanced-search.aspx.
4. Clinical Pharmacology, Elsevier. Published 2022. Accessed April 2023. http://www.clinicalkey.com/.
5. ClinicalTrials.gov. The efficacy and safety of Bimatoprost SR in patients with open-angle glaucoma or ocular hypertension. ClinicalTrials.gov Identifier: NCT02250651. Accessed April 2023. https://clinicaltrials.gov/ct2/show/NCT02250651.
6. Craven ER, Walters T, Christie WC, et al. Bimatoprost SR study group: 24-month phase I/II clinical trial of Bimatoprost sustained-release implant (Bimatoprost SR) in glaucoma patients. Drugs. 2020 Feb;80(2):167-179. doi: 10.1007/s40265-019-01248-0.
7. Durysta (bimatoprost) implant [prescribing information]. Madison, NJ: Allergan; November 2020.
8. DynaMed. Medications for Primary Open-angle Glaucoma. EBSCO Information Services. Accessed April 19, 2023. https://www.dynamed.com/management/medications-for-primary-open-angle-glaucoma.

9. Food and Drug Administration (FDA). Durysta (bimatoprost implant)—NDA approval. 2020. Accessed April 2023. https://www.accessdata.fda.gov/drugsatfda_docs/appletter/2020/211911Orig1s000ltr.pdf.
10. Fung AT, Reid SE, Jones MP, et al. Meta-analysis of randomized controlled trials comparing latanoprost with brimonidine in the treatment of open-angle glaucoma, ocular hypertension, or normal-tension glaucoma. Br J Ophthalmol 2007; 91:62. doi: 10.1136/bjo.2006.096693. Epub 2006 Sep 6.
11. Gedde SJ, Vinod K, Wright MM, Muir KW, Lind JT, Chen PP, Li T, Mansberger SL. American Academy of Ophthalmology Preferred Practice Pattern Glaucoma Panel. Primary Open-Angle Glaucoma Preferred Practice Pattern®. Ophthalmology. 2021 Jan;128(1):P71-P150. doi: 10.1016/j.ophtha.2020.10.022. Epub 2020 Nov 12. PMID: 34933745.
12. 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; 175:137–147. doi: 10.1016/j.ajo.2016.11.020. Epub 2016 Dec 22.
13. Medeiros FA, Walters TR, Kolko M, et al. Phase 3, randomized, 20-Month study of Bimatoprost implant in open-angle glaucoma and ocular hypertension (ARTEMIS 1). Ophthalmology. 2020 Jun 13:S0161-6420(20)30555-8. doi: 10.1016/j.ophtha.2020.06.018.
14. Li T, Lindsley K, Rouse B, et al. Comparative effectiveness of first-line medications for primary open-angle glaucoma: A systematic review and network meta-analysis. Ophthalmology 2016; 123:129. doi: 10.1016/j.ophtha.2015.09.005.
15. National Institute for Health and Clinical Excellence (NICE). Diagnosis and management of chronic open angle glaucoma and ocular hypertension. 2009. Published 2009. Accessed April 2023. https://www.ncbi.nlm.nih.gov/books/NBK61894/.
16. Prum BE Jr, Lim MC, Mansberger SL, Stein JD, Moroi SE, Gedde SJ, Herndon LW Jr, Rosenberg LF, Williams RD. Primary open-angle glaucoma suspect preferred practice pattern(®) guidelines. Ophthalmology. 2016 Jan;123(1):P112-51. doi: 10.1016/j.ophtha.2015.10.055. Epub 2015 Nov 12. Erratum in: Ophthalmology. 2018 Jun;125(6):949. PMID: 26581560.