

# Name of Blue Advantage Policy: DURYSTA (bimatoprost implant)

Policy #: 735 Latest Review Date: July 2020

Category: Pharmacy Policy Grade: C

### **BACKGROUND:**

Blue Advantage medical policy does not conflict with Local Coverage Determinations (LCDs), Local Medical Review Policies (LMRPs) or National Coverage Determinations (NCDs) or with coverage provisions in Medicare manuals, instructions or operational policy letters. In order to be covered by Blue Advantage the service shall be reasonable and necessary under Title XVIII of the Social Security Act, Section 1862(a)(1)(A). The service is considered reasonable and necessary if it is determined that the service is:

- 1. Safe and effective;
- 2. Not experimental or investigational\*;
- 3. Appropriate, including duration and frequency that is considered appropriate for the service, in terms of whether it is:
  - Furnished in accordance with accepted standards of medical practice for the diagnosis or treatment of the patient's condition or to improve the function of a malformed body member;
  - Furnished in a setting appropriate to the patient's medical needs and condition;
  - Ordered and furnished by qualified personnel;
  - One that meets, but does not exceed, the patient's medical need; and
  - At least as beneficial as an existing and available medically appropriate alternative.

In accordance with Title XVIII of the Social Security Act, Section 1862 (a)(10) cosmetic surgery or expenses incurred in connection with such surgery is not covered except as required for the prompt repair of accidental injury or for improvement of the functioning of a malformed body member.

\*Routine costs of qualifying clinical trial services with dates of service on or after September 19, 2000 which meet the requirements of the Clinical Trials NCD are considered reasonable and necessary by Medicare. Providers should bill **Original Medicare** for covered services that are related to **clinical trials** that meet Medicare requirements (Refer to Medicare National Coverage Determinations Manual, Chapter 1, Section 310 and Medicare Claims Processing Manual Chapter 32, Sections 69.0-69.11).

### **POLICY:**

Blue Advantage will treat **Durysta** (bimatoprost implant) as a **noncovered** benefit and as **investigational** for all indications, including when used for the treatment of open angle glaucoma or ocular hypertension.

Blue Advantage does not approve or deny procedures, services, testing, or equipment for our members. Our decisions concern coverage only. The decision of whether or not to have a certain test, treatment or procedure is one made between the physician and his/her patient. Blue Advantage administers benefits based on the members' contract and medical policies. Physicians should always exercise their best medical judgment in providing the care they feel is most appropriate for their patients. Needed care should not be delayed or refused because of a coverage determination.

### DESCRIPTION OF PROCEDURE OR SERVICE

Durysta (bimatoprost implant) is described as the first intracameral biodegradable sustained release implant designed to lower intraocular pressure in patients with conditions such as open angle glaucoma or ocular hypertension. The active ingredient involved is bimatoprost, which is a prostaglandin analog medication used to treat glaucoma and lower high eye pressure. Durysta is composed of biodegradable polymers designed to release bimatoprost in a non-pulsatile, steady-state manner over a 90-day period.

The standard of care treatment for open angle glaucoma or ocular hypertension is eye drops that are self-administered using the following technique:

- Wash your hands before use
- Take out contact lenses before using this medicine
- Do not touch the container tip to the eye, lid, or other skin
- Tilt your head back and drop drug into the eye.
- After use, keep your eyes closed. Put pressure on the inside corner of the eye. Do this for one to two minutes. This keeps the drug in your eye.

A large number of patients report non-compliance with self-administering eye drops due to either forgetfulness or side effects. Durysta, ocular implant device, has been developed to combat this non-compliance rate.

Durysta is delivered via a disposable single-use applicator that is inserted into the anterior chamber of the affected eye. Insertion is performed under magnification in an office or ambulatory surgery center. The presence of Durysta implants has been associated with corneal adverse reactions and increased risk of corneal endothelial cell loss. Per the FDA recommendation, administration of Durysta should be limited to a single implant per eye without retreatment. Caution should be used when prescribing Durysta in patients with limited corneal endothelial cell reserve.

## **KEY POINTS**

This policy was developed with medical literature review through July 17, 2020.

Table 1. Clinical Outcomes of Durysta (Bimatoprost Implant) Use											
ClinicalTrials.gov	Author,	Study	Population	Interventions	Comparators	Clinical					
Identifier, study	year,	Design	Characteristics			Outcomes,					
name	country	G				Length of					
						Follow up					
NCT01157364:	Allergan	Interventional	109 participants	SR	topical	A single					
	(sponsor)	Randomized	(56 female, 53	bimatoprost	bimatoprost	administration					
"Safety and	, -		male) with	treatment	treatment	of					
Efficacy of a New	Craven et	Allocation:	diagnosis of			bimatoprost					
Ophthalmic	al, 2020,	Randomized;	OAG or OCH			sustained-					
Formulation of	US	Intervention				release					
Bimatoprost in		Model:				implant					
Patients With		Parallel				(Bimatoprost					
Open Angle		Assignment;				SR) lowered					
Glaucoma and		Masking:				intraocular					
Ocular		Triple				pressure for					
Hypertension"		(Participant,				up to 1 year in					
		Investigator,				40% of					
		Outcomes				patients and					
		Assessor);				up to 2 years					
		Primary				in 28%, with					
		Purpose:				no additional					
		Treatment				treatment.					
						Efficacy of					
						re-					
						administration					
						with a second					
						implant of					
						Bimatoprost					
						SR was					
						similar to that					
						with the first					
						implant.					
						The safety					
						profile of					
						Bimatoprost					
						SR was					
						favorable					
						during the 24-					
270000000000000000000000000000000000000		-				month study.					
NCT02247804:	Allergan	Interventional	594 participants	Bimatoprost	Timolol 0.5%	This study					
"Ecc 1	(sponsor),	Randomized	(288 female,	SR	administered	was designed					
"Efficacy and	2020, US	A 11	306 male) with	administered	once in	to evaluate					
Safety Study of		Allocation:	diagnosis of	on Day 1,	morning and	the efficacy					

	1					
Bimatoprost Sustained-Release (SR) in Participants With Open-angle Glaucoma or Ocular Hypertension"		Randomized Intervention Model: Parallel Assignment Masking: Quadruple (Participant, Care Provider, Investigator, Outcomes Assessor) Primary Purpose: Treatment	either OAG or OCH in each eye and both eye require IOP lowering treatment	Day 16, Week 32 with timolol vehicle (placebo) administered once in the morning and once in the evening for up to 20 months	once in the evening for up to 20 months with sham (applicator without needle) administered on Day 1, Day 16, and Week 32	and safety of bimatoprost SR in participants with openangle glaucoma or ocular hypertension. The study includes a 12-month treatment period with an 8-month extended follow-up.  Noninferiority is deduced with relative safety.  No publication association with this study is reported.
NCT02250651:  "Safety and Efficacy of Bimatoprost Sustained-Release (SR) in Patients With Open-Angle Glaucoma or Ocular Hypertension"	Allergan (sponsor), 2020, US	Interventional Randomized  Allocation: Randomized Intervention Model: Parallel Assignment Masking: Triple (Participant, Investigator, Outcomes Assessor) Primary Purpose: Treatment	527 participants	Bimatoprost SR administered on Day 1, Day 16, Week 32 with timolol vehicle (placebo) administered once in the morning and once in the evening for up to 20 months	Timolol 0.5% administered once in morning and once in the evening for up to 20 months with sham (applicator without needle) administered on Day 1, Day 16, and Week 32	NR.  No publication association with this study is reported.

OAG: open angle glaucoma; OHT: ocular hypertension; IOP: intraocular pressure; SR: sustained release; US: United States; NR: not reported

### **Summary of Evidence**

The FDA approval of Durysta is based on results from two 20-month (including 8-month extended follow up) Phase 3 ARTEMIS studies evaluating 1,122 subjects on the efficacy and safety of Durysta versus twice daily topical timolol drops, an FDA accepted comparator for registrational clinical trials, in patients with OAG or OHT. In the two Phase 3 ARTEMIS studies, Durysta reduced IOP by approximately 30 percent from baseline over the 12-week primary efficacy period, meeting the predefined criteria for non-inferiority to the study comparator. There are several ongoing studies that have not yet been completed.

Lowering of IOP is the only proven method to decrease risk of development and/or worsening glaucomatous optic neuropathy. Topical medical therapy is an effective strategy, but many patients are non-adherent to medications. Barriers to adherence are multifold and include forgetfulness, difficulty with drop instillation, need for frequent administration. Durysta could make an impact on non-compliance glaucoma management issue. There are risks to using Durysta, such as, eye pain, eye irritation, lacrimation, and conjunctival hemorrhage. Studies have shown that Durysta is an effective treatment for glaucoma, but not superior to the standard of care. The FDA clearance is for single use per each eye. In the studies reviewed, Durysta was implanted every four months for one year. At this time the existing evidence is insufficient to prove the medical necessity of this technology.

### **Practice Guidelines and Position Statements American Academy of Ophthalmology**

The 2015 Primary Open-Angle Glaucoma practice guidance from the American Academy of Ophthalmology recommends switching eye-drop agents or adding on for combination therapy when target IOP is not achieved with one drug alone. The practice guidance has not been updated to include the use of Durysta in its recommendations at the time of this review.

# **U.S. Preventive Services Task Force Recommendations** Not applicable.

### **KEY WORDS**

Durysta, bimatoprost, biodegradable implant, ocular implant, Allergan, OAG, open angle glaucoma, OHT, ocular hypertension, intracameral administration

### APPROVED BY GOVERNING BODIES

On March 4, 2020, the U.S. Food and Drug Administration (FDA) approved Allergan's Durysta (bimatoprost implant) 10 mcg for intracameral administration to treat open-angle glaucoma (OAG) or ocular hypertension (OHT). As per the FDA labeled package insert, Durysta (bimatoprost implant) is a biodegradable implant intended for a single administration and should not be re-administered to an eye that received a prior Durysta (bimatoprost implant).

### **BENEFIT APPLICATION**

Coverage is subject to member's specific benefits. Group specific policy will supersede this policy when applicable.

### **CURRENT CODING**

**HCPCS Codes** 

J3490 Unclassified drugs

### REFERENCES

- 1. American Academy of Ophthalmology Preferred Practice Pattern Glaucoma Panel, Hospkins Center for Quality Eye Care. Primary Open-Angle Glaucoma 2015. Available at www.aao.org/preferred-practice-pattern/primary-open-angle-glaucoma-suspect-ppp-2015. Accessed on July 16, 2020.
- 2. Aref, Ahmad A. Bimatoprost Implant (Durysta). eyewiki.org/Bimatoprost\_Implant\_ (Durysta) #cite\_note-:0-4. Accessed July 16, 2020.
- 3. Craven ER, Walters T, Christie WC, Day DG, Lewis RA, Goodkin ML, Chen M, Wangsadipura V, Robinson MR, Bejanian M; 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.
- 4. Delfaro, A. Week in review: Eye tick, acid attack, AMD style. Available at /www.aao.org/headline/week-in-review-eye-tick-acid-attack-amd-style. Accessed July 16, 2020.
- 5. Kolomeyer, Natasha N. Top 7 Things to Know About First Sustained-Release Glaucoma Medication. www.aao.org/young-ophthalmologists/yo-info/article/top-7-things-to-know-about-first-sustained-release. Accessed July 16, 2020.
- 6. 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.
- 7. Rajan, K. Biodegradable bimatoprost implant gains FDA approval. Available at www.aao.org/headline/biodegradable-bimatoprost-implant-gains-fda-approv. Accessed July 16, 2020.

### **POLICY HISTORY**

Medical Policy Panel, July 2020: New policy created.

This medical policy is not an authorization, certification, explanation of benefits, or a contract. Eligibility and benefits are determined on a case-by-case basis according to the terms of the member's plan in effect as of the date services are rendered. All medical policies are based on (i) research of current medical literature and (ii) review of common medical practices in the treatment and diagnosis of disease as of the date hereof. Physicians and other providers are solely responsible for all aspects of medical care and treatment, including the type, quality, and levels of care and treatment.

This policy is intended to be used for adjudication of claims (including pre-admission certification, pre-determinations, and pre-procedure review) in Blue Cross and Blue Shield's administration of plan contracts.