Subject: Dexycu (dexamethasone intraocular suspension)	Original Effective Date: 5/29/2019
Policy Number: MCP-342	Revision Date(s):
Review Date: Q2 2020; 4/5/2021	
P&T Approval Date: Q2 2020	
MCPC Approval Date: 4/5/2021	

Contents

DISCLAIMER

This Medical Policy is intended to facilitate the Utilization Management process. 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 (i.e., 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 Molina medical coverage policy (MCP) document and provide the directive for all Medicare members.

RECOMMENDATION

This policy addresses **dexamethasone intraocular suspension 9% (Dexycu) for intraocular administration** for the treatment of adult patients with **for the treatment of postoperative inflammation** when appropriate criteria are met.

Molina Healthcare reserves the right to update this policy and revise coverage criteria to include or omit any off-label condition(s) as necessary based on medical literature and clinical studies that may become available.

DESCRIPTION OF PROCEDURE/SERVICE/PHARMACEUTICAL

Post-operative Inflammation following Cataract Surgery

An estimated 3.7 million cataract surgeries were performed annually in the United States (Ianchulev et al) with data suggesting that the incidence of cataract surgery will continue to increase (Gollogly et al). Mechanical trauma during ocular surgery, such as membrane disruption and tissue injury, induces an inflammatory response. Inadequately controlled inflammation increases the risk of postoperative pain, edema, erythema, anterior chamber cells and flare, secondary glaucoma, posterior synechia, and, potentially, cystoid macular edema (Aptel et al.; Salinger et al.). Controlling postoperative inflammation is important for achieving a successful outcome after cataract surgery.

The current standard of care for treating post-operative inflammation generally involves multiple postoperative eye drops after surgery, including combination of steroids, antibiotics and non-steroidal eye drops with a duration of four to six weeks. However, cataract surgery patients are predominantly elderly and may have patient-related challenges with administration of several postoperative eye drops due to dexterity, poor eyesight after cataract surgery, or compromised cognitive function. Although the current standard of care, a regimen of multiple postoperative eye drops with a complex regimen may create a significant burden on patients and lead to non-adherence of the postoperative regimen.

While the most common treatment route for postoperative inflammation is topical steroids, there are alternative routes of administration of steroids including intravitreal, intracameral, subtenon, and subconjunctival. Intracameral dexamethasone has the advantage of the delivery of a corticosteroid using a single administration after the completion of surgery and eliminating the potential for compliance problems that can compromise postoperative treatment outcomes when patients self-administer eye drops. However, there are several adverse effects associated with intracameral administration that are not factors in non-invasive topical administration such as when placing a biodegradable sustained-release system, and may include the possibility of iris prolapse, surgical hyphema, focal peripheral anterior synechiae, and implant migration. While intracameral dexamethasone is not a replacement for topical medications as the standard management for postoperative inflammation, it provides another option to control postoperative inflammation after routine cataract surgery.

Dexycu (dexamethasone intraocular suspension) 9% for intraocular administration

Single-dose, sustained-release, intracameral steroid for the treatment of postoperative inflammation

Dexycu is a long-acting, intracameral biodegradable, extended-release formulation of dexamethasone 9% that provides the cataract surgeon the option of a single administration of a corticosteroid. Dexycu treatment is applied as a single intracameral injection using the Verisome™ drug delivery technology to deliver a tapering dose of steroid post-surgery. This is advantageous to patients with dexterity issues who are prohibited from using corticosteroid eye drops and individuals who have previously failed, or has a contraindication to post-operative treatment with corticosteroid ophthalmic drops. Non-compliance and dosing errors associated with the conventional practice of self-administraton of medicated eye drops multiple times a day is also eliminated. **However, despite the benefits of convenience, there is a lack of evidence and data to confirm the effectiveness of Dexycu over other more cost-effective interventions (Donnenfeld, et al. 2018).**

U.S. FOOD AND DRUG ADMINISTRATION (FDA)

FDA-approved indication does not alone dictate coverage. Molina Clinical Policy may not recommend coverage for all FDA-approved indications. Please review this Policy in its entirety for indications covered by Molina Healthcare.

Dexycu (dexamethasone intraocular suspension 9%)
For the treatment of inflammation associated with cataract surgery

Available as: 9% intraocular suspension equivalent to dexamethasone 103.4 mg/mL in a single-dose vial provided in a kit

FDA Approved: February 9, 2018

Black Box Warnings/REMS: None at the time of this writing

Warnings/Precautions: Increase in intraocular pressure; Delayed healing; Exacerbation of infection; Cataract progression

CLASSIFICATION: Ophthalmic-- Anti-inflammatory; Corticosteroid

COVERAGE CRITERIA FOR INITIAL AUTHORIZATION

Dexamethasone intraocular suspension 9% (Dexycu) may be authorized for members who meet **ALL** of the following criteria:

1. **Prescriber specialty**

   ❒ Prescribed by board-certified ophthalmologists or retinal specialist, retinal surgeon experienced in the administration of intravitreal injections

2. **Diagnosis/Indication**
   Prescriber submit ALL supporting documentation and clinical rationale (*includes clinical notes from the member's medical records including any applicable labs and/or tests, supporting the diagnosis*):

   ❒ Prescribed for member who will undergo ocular surgery and requires treatment for postoperative inflammation

3. **Age/Gender/Restrictions**

   ❒ 18 years of age or older

4. **Conventional Therapy/Concurrent Therapy/Other Requirements**
Documentation for ALL of the following must be submitted for review:

- ❒ Member is unable to use corticosteroid eye drops due to ONE (1) of the following:
  - ❍ Post-operative treatment with corticosteroid ophthalmic drops has previously failed or is contraindicated; or
  - ❍ Dexterity issues prohibiting member from using corticosteroid eye drops, or
  - ❍ Other medical/clinical rationale supported by documentation

5. **Exclusions/Discontinuations**
**There are no contraindications listed in the manufacturer's labeling*

Authorization for dexamethasone intraocular suspension 9% (Dexycu) will not be authorized if ANY of the following conditions apply [ANY]

- ❒ Hypersensitivity to dexamethasone, other corticosteroids, or any component of the formulation

6. **Labs/Reports/Documentation required [ALL]**
All documentation for determination of medical necessity must be submitted for review. Prescriber to submit documentation as indicated in the criteria above, including but not limited to chart notes, applicable lab values and/or tests, adverse outcomes, treatment failures, or any other additional clinical information or clinical notes from the member's medical records supporting the diagnosis. Letters of support and/or explanation are often useful, but are not sufficient documentation unless ALL specific information required by this MCP is included.

- ❒ Member has been informed about the potential adverse effects of a corticosteroid intravitreal implant, including cataracts, increased intraocular pressure, or hypotony, endophthalmitis, and risk of need for additional surgical procedures.

- ❒ Requested for affected eye: [APPLICABLE]
  - ❍ Right eye
  - ❍ Left eye

NOTE: Additional documentation, rationale, and/or supporting evidence may be requested for review as deemed necessary or appropriate by Molina Medical/Pharmacy staff.

REAUTHORIZATION/CONTINUATION OF THERAPY

Reauthorization is not allowed for this single dose, dexamethasone intraocular suspension 9% (Dexycu) treatment. All requests must meet initial therapy criteria.

ADMINISTRATION, QUANTITY LIMITATIONS, AUTHORIZATION PERIOD

Consult the manufacturer's labeling for more detailed information on dosage and administration of this drug, cautions, precautions, contraindications, potential drug interactions, laboratory test interferences, and monitoring.

1. Recommended Dosage [ONE]

- ❒ Ocular post-operative inflammation (9% suspension), intraocular: One intraocular injection of 0.005 mL (517 mcg) of 9% dexamethasone (equivalent to 517 micrograms) administered into the posterior chamber inferiorly behind the iris at the end of ocular surgery.

  NOTE: Dexycu not a part of the actual ocular surgical procedure, which is complete cataract removal and placement of an intraocular lens in the capsular bag.

2. Authorization Limit [ALL]

- ❒ Quantity limit: Treatment consists of one intraocular injection 0.005 mL of 9% dexamethasone (equivalent to 517 micrograms) as a single dose per eye per surgery
- ❒ Reauthorization is not allowed for this single dose, intraocular treatment. All requests must meet initial therapy criteria.
- ❒ 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.
- ❒ Refer to Specialty Medication Administration Site of Care Policy: MHI Pharm 11

3. Route of Administration [ALL]

- ❒ Dexycu should be administered by cataract surgeons and ophthalmologists in ambulatory surgery centers and other outpatient surgical settings.
  - *Refer to manufacturer's prescribing information for preparation and administration technique.*
- ❒ Intraocular administration. Documentation of the following information required for review and submission of requests for subsequent treatment(s):
  - ❍ Name of the intravitreal therapy
  - ❍ Dose
  - ❍ Treated eye: right eye, left eye, or both eyes

LIMITATIONS

All other uses of **dexamethasone intraocular suspension 9% (Dexycu)** that are not an FDA-approved indication or not included in the 'Coverage Criteria' section of this policy are considered not medically necessary. This is subject to change based on research and medical literature, or at the discretion of Molina Healthcare.

The following are not FDA indications of dexamethasone intraocular suspension 9% (Dexycu). It is noted that there are case series and case reports concerning the use of intravitreal dexamethasone for several disease processes, however, there are no long-term well conducted studies to demonstrate safety and efficacy of Dexycu for these indications at this time; therefore, this Clinical Policy recommends coverage exclusions of the following conditions:

- ❒ Non-infectious iritis/Uveitis or Panuveitis
- ❒ Cystoid macular edema not related to post-cataract surgery
- ❒ Diabetic macular edema
- ❒ Macular edema associated with retinal vein occlusion or radiation related retinopathy
- ❒ Toxoplasmic retinochoroiditis

SUMMARY OF CLINICAL EVIDENCE

The safety and efficacy of dexamethasone intraocular suspension 9% (Dexycu) for intracameral administration in two dosages in patients undergoing cataract surgery was evaluated in a randomized, double-masked, placebo-controlled trial. The study included 394 patients (n=394) who received either Dexycu 342 mcg (n=158) or 517 mcg (n=156), or a placebo (n=80) administered by a physician at the end of the surgical procedure (Donnenfeld et al. 2018). Use of ocular, periocular, or systemic corticosteroids, immunomodulators, alkylating agents, or ocular topical non-steroidal anti-inflammatory drugs (NSAIDs) was not allowed through day 30 unless necessary; glaucoma and other ocular medications (including topical cyclosporine but excluding ocular topical NSAIDs) could be administered peri- and postoperatively as indicated. Patients who received corticosteroids or immunosuppressants for any condition (ocular or systemic) were observed for 90 days after surgery. The primary outcome measure was anterior chamber cell clearing at postoperative day 8. Secondary measures were anterior chamber flare and anterior chamber cell plus flare clearing in the study eyes. Adverse events were also assessed.

- The trial reported the percentage of Dexycu patients with anterior chamber cell clearing on post-op day eight was 57% in the 342µg and and 60% in the 517µg (n=94/156) Dexycu groups, and 20% in the placebo group (n=16/80). In addition, the percentage of patients receiving rescue medication of ocular steroid or a nonsteroidal anti-inflammatory drug was significantly lower at day 3, 8, 15 and 30 in the 342 and 517 mcg treatment groups vs. placebo
- Adverse events were similar among the three groups with no serious adverse events reported up to postoperative day 90. Intraocular pressure (IOP) increase of at least 10mmHg from baseline was observed among 29% of Dexycu-treated eyes vs. 13% in placebo-treated eyes. IOP did not exceed 21mmHg at any measurement in any group. Other treatment-emergent adverse events, including corneal edema, pain, inflammation in the anterior chamber, and dry eye, occurred in < 15% of eyes. Inflammatory adverse events including macular edema, eye inflammation, and iritis were more common in placebo-treated eyes. CME as diagnosed by OCT was seen in 3.8% of placebo-treated and 3.2% of Dexycu-treated eyes.

Donnenfeld, et al. (2018) evaluated the safety and efficacy of dexamethasone (IBI-10090) intraocular suspension compared to prednisolone acetate 1.0% ophthalmic drops for the treatment of inflammation after cataract surgery. 126 dexamethasone patients and 55 prednisolone patients were included in the safety analysis. Patients were randomized 2:1 to receive a 5 µL injection of 517 µg dexamethasone in the anterior eye chamber or topical prednisolone 1.0% drops (1 drop 4 times daily for 3 weeks). The post-operative follow-up was 90 days. The primary outcome was safety, evaluated by the incidence and severity of adverse events. By 8 days post-operative, 51.6% of IBI-10090 eyes and 50.9% of prednisolone eyes had anterior chamber cell clearing and more than 98% of eyes had clearing at 90 days. The anterior chamber flare and anterior chamber cell-flare clearing results were similar. Of dexamethasone patients, 68.7% strongly agreed that not having to use eyedrops was very convenient; 39.2% using prednisolone 1.0% strongly stated they would have preferred dropless therapy. Two serious adverse events unrelated to treatment were reported. The decrease in endothelial cell density was not significantly different between the two groups. The most common adverse events were increased intraocular pressure (11.1%), iritis (6.3%) and systemic (7.9% IBI-10090 group; 10.9% prednisolone group). The study found that safety and efficacy of IBI-10090 and prednisolone 1.0% were similar; however, patients preferred the use of extended-release IBI-10090 over topical steroid drops. **The results of this trial confirms similar efficacy of Dexycu and interventions that are more cost-effective.**

Professional Guidelines/Consensus

Corticosteroids and NSAIDs have traditionally been used to treat inflammation, prophylactically as well as post-operatively; however, currently there are no established guidelines or consensus for the treatment of inflammation induced by cataract surgery.

There is a lack of sufficient evidence from randomized controlled studies to establish a preferred postoperative regimen for control of inflammation and pain after cataract surgery and other intraocular surgeries (Aptel et al.; Olsen et al.).

DEFINITIONS

N/A

APPENDIX

N/A

CODING INFORMATION

The codes listed in this policy are for reference purposes only. Listing of a service or device code in this policy does not imply that the service described by this code is covered or non-covered. coverage is determined by the benefit document. this list of codes may not be all inclusive.

CPT	Description
NA	

HCPCS	Description
J1095	Injection, dexamethasone 9%, intraocular
C9034	Injection, dexamethasone 9 percent, intraocular, 1 microgram

REFERENCES

Government Agencies, Prescribing Information, Drug Compendia

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Policy History	**Approval**
Policy Developed IRO Specialist Peer Review: 5/6/2019. Practicing Physician. Board certified ophthalmologist	5/6/2019
Annual Review No coverage criteria changes with this annual review.	P&T Q2 2020
Annual Review The medical necessity criteria were not revised with this annual review. Content update includes: Added information on the phase 3 prospective randomized open-label study (Donnenfeld, et al. (2018) supporting criterion #4 of corticosteroid eye drops.	MCPC 4/5/2021

**All content, clinical evidence, coverage criteria, practice guidelines, appendices and reference sections reviewed and revised with the most recent medical literature and available evidence for both 'Annual Reviews' and 'Policy Revisions.' Annual Reviews without notable changes to coverage criteria or position may not require Peer Review. Policy Revisions include notable content updates or revisions that which may have affected criteria or requires review by a practicing specialist, Peer Reviewer.*