Corporate Medical Policy

Intravitreal Implant

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Description of Procedure or Service

An intravitreal implant is a drug delivery system, injected or surgically implanted in the vitreous of the eye, for sustained release of a pharmacologic agent to the posterior and intermediate segments of the eye. Four intravitreal corticosteroid implants, ie, fluocinolone acetonide 0.59 mg (Retisert®), fluocinolone acetonide 0.19 mg (Iluvien®), fluocinolone acetonide 0.18 mg (Yutiq™), and dexamethasone 0.7 mg (Ozurdex®) are reviewed herein. Fluocinolone acetonide implants are nonerodible and deliver drug up to 30 to 36 months while dexamethasone implants are bioerodible and last up to 6 months.

Background

Intravitreal Implants
Intravitreal implants deliver a continuous concentration of drug over a prolonged period. Intravitreal corticosteroid implants are being studied for a variety of eye conditions that lead to macular edema, including uveitis, diabetic retinopathy and retinal venous occlusions. The goal of therapy is to reduce inflammation in the eye while minimizing the adverse effects of the therapeutic regimen.

Selection of the route of corticosteroid administration (topical, systemic, or by periocular or intraocular injection) is based on the cause, location, and severity of the disease. Each therapeutic approach has its own drawbacks. For example, topical corticosteroids require frequent (e.g., hourly) administration and may not adequately penetrate the posterior segment of the eye due to their poor ability to penetrate ocular tissues. Systemically administered drugs penetrate poorly into the eye because of the blood-retinal barrier, and high dose or long-term treatments may be necessary. Long-term systemic therapies can be associated with substantial adverse effects such as hypertension and osteoporosis, while repeated (every 4-6 weeks) intraocular corticosteroid injections may result in pain, intraocular infection, globe perforation, fibrosis of the extraocular muscles, reactions to the delivery vehicle, increased intraocular pressure, and cataract development.

Corticosteroid implants are biodegradable or non-biodegradable. Nonbiodegradable systems are thought to be preferable for treating chronic, long-term disease, while biodegradable products may be preferred for conditions that require short-term therapy. Although the continuous local release of steroid with an implant may reduce or eliminate the need for intravitreal injections and/or long-term systemic therapy, surgical implantation of the device carries its own risks, and the implant could potentially increase ocular toxicity due to increased corticosteroid concentrations in the eye over a longer duration. With any route of administration, cataracts are a frequent complication of long-term corticosteroid therapy.

Intraocular corticosteroid implants being evaluated include:

- Retisert (non-biodegradable fluocinolone acetonide intravitreal implant; Bausch & Lomb) sterile implant consists of a tablet containing 0.59 mg fluocinolone acetonide, a synthetic corticosteroid that is less soluble in aqueous solution than dexamethasone. The tablet is encased in a silicone elastomer cup with a release orifice and membrane; the entire elastomer cup assembly is attached to a suture tab. Following implantation (via pars plana incision and suturing) in the vitreous, the

implant releases the active drug at a rate of 0.3–0.4 mcg/day over a period of approximately 2.5 years.

- Iluvien (non-biodegradable injectable intravitreal implant with fluocinolone acetonide; Alimera Sciences, Inc.) is a rod-shaped device made of polyimide and polyvinyl alcohol (PVA). It is small enough to be placed using an inserter with a 25-gauge needle and is expected to provide sustained delivery of fluocinolone acetonide for up to 3 years.

- Ozurdex (biodegradable dexamethasone intravitreal implant; Allergan, Irvine, CA.) is composed of a biodegradable copolymer of lactic acid and glycolic acid with micronized dexamethasone. This implant is placed into the vitreous cavity through the pars plana using a customized, single-use, 22-gauge applicator. The implant provides intravitreal dexamethasone for up to 6 months. The mean number of Ozurdex injections reported in the literature is 4.2 injections per year, and more than 6 consecutive injections have been reported.

- Yutiq (non-biodegradable injectable intravitreal implant with fluocinolone acetonide; EyePoint Pharmaceuticals US, Inc.) is a sterile implant consisting of fluocinolone acetonide 0.18 mg within a 36-month sustained-release drug delivery system. Yutiq is preloaded into a single-dose applicator and injected directly into the vitreous. It is designed to release fluocinolone acetonide at an initial rate of 0.25 mcg/day.

Eye Conditions

Uveitis

Uveitis encompasses a variety of conditions, of either infectious or noninfectious etiologies, that are characterized by inflammation of any part of the uveal tract of the eye (iris, ciliary body, choroid). Infectious etiologies include syphilis, toxoplasmosis, cytomegalovirus retinitis, and candidiasis. Noninfectious etiologies include sarcoidosis, Behçet's syndrome, and "white dot" syndromes such as multifocal choroiditis or "birdshot" choreoretinopathy. Uveitis may also be idiopathic, have a sudden or insidious onset, a duration that is limited (less than 3 months) or persistent, and a course that may be acute, recurrent or chronic.

The classification scheme recommended by the Uveitis Study Group and the Standardization of Uveitis Nomenclature (SUN) Working Group is based on anatomic location. Patients with anterior uveitis typically develop symptoms such as light sensitivity, pain, tearing, and redness of the sclera. In posterior uveitis, which comprises approximately 5% to 38% of all uveitis cases in the U.S., the primary site of inflammation is the choroid or retina (or both). Patients with intermediate or posterior uveitis typically experience minimal pain, decreased visual acuity, and the presence of floaters (bits of vitreous debris or cells that cast shadows on the retina). Chronic inflammation associated with posterior segment uveitis can lead to cataracts and glaucoma and to structural damage to the eye resulting in severe and permanent vision loss. The primary goal of therapy for uveitis is to preserve vision. Noninfectious uveitis typically responds well to corticosteroid treatment. Immunosuppressive therapy (e.g., antimetabolites, alkylating agents, T-cell inhibitors, and tumor necrosis factor [TNF]-inhibitors) may also be utilized to control severe uveitis. Immunosupressive therapy is typically reserved for patients who require chronic high-dose systemic steroids to control their disease. While effective, immunosupressants may have serious and potentially life-threatening adverse effects, including renal and hepatic failure and bone marrow suppression.

Macular Edema After Retinal Vein Occlusion

Retinal vein occlusions are classified by whether the central retinal vein or one of its branches is obstructed. Central retinal vein occlusion (CRVO) and branch retinal vein occlusion (BRVO) differ in pathophysiology, clinical course, and therapy. CRVOs are categorized as ischemic or nonischemic. Ischemic CRVOs are referred to as severe, complete, or total vein obstruction, and account for 20% to

25% of all CRVOs. Macular edema and permanent macular dysfunction occur in virtually all patients with ischemic CRVO, and in many patients with nonischemic CRVO. Intravitreal injections of triamcinolone are used to treat macular edema associated with CRVO, with a modest beneficial effect on visual acuity. The treatment effect lasts about 6 months, and repeat injections may be necessary. Cataracts are a common side effect, and steroid-related pressure elevation occurs in about one-third of patients, with 1% requiring filtration surgery.

BRVO is a common retinal vascular disorder in adults between 60 and 70 years of age and occurs approximately 3 times more often than CRVO. Macular photocoagulation with grid laser improves vision in BRVO but is not recommended for CRVO. Although intravitreal injections of triamcinolone have also been used for BRVO, the serious adverse effects have stimulated the evaluation of new treatments, including intravitreal steroid implants or the intravitreal injection of anti-vascular endothelial growth factor.

Diabetic Macular Edema

Diabetic retinopathy is a common microvascular complication of diabetes and a leading cause of blindness in adults. The two most serious complications for vision are diabetic macular edema and proliferative diabetic retinopathy. At its earliest stage (nonproliferative retinopathy), microaneurysms occur. As the disease progresses, blood vessels that provide nourishment to the retina are blocked, triggering the growth of new and fragile blood vessels (proliferative retinopathy). Severe vision loss with proliferative retinopathy arises from leakage of blood into the vitreous. Diabetic macular edema is characterized by swelling of the macula due to gradual leakage of fluids from blood vessels and breakdown of the blood-retinal barrier. Moderate vision loss can arise from the fluid accumulating in the center of the macula (macular edema) during the proliferative or nonproliferative stages of the disease. Although proliferative disease is the main blinding complication of diabetic retinopathy, macular edema is more frequent and is the leading cause of moderate vision loss in people with diabetes.

Tight glycemic and blood pressure control is the first line of treatment to control diabetic retinopathy, followed by laser photocoagulation for patients whose retinopathy is approaching the high-risk stage. Although laser photocoagulation is effective at slowing the progression of retinopathy and reducing visual loss, it does not restore lost vision. Currently, the dexamethasone intravitreal steroid implant (Ozurdex®) is FDA approved for the treatment of diabetic macular edema in patients who are pseudophakic or are phakic and scheduled for cataract surgery. Angiostatic agents, which block some stage in the pathway leading to new blood vessel formation (angiogenesis) are also being evaluated for the treatment of diabetic macular edema.

Age-Related Macular Degeneration

Age-related macular degeneration (AMD) is a degenerative disease of retina that results in loss of central vision with increasing age. Two distinctively different forms of degeneration, known as dry and wet, may be observed. The dry form (also known atrophic or areolar) is more common and is often a precursor to the wet form (also known as exudative neovascular or disciform). The wet form is more devastating and characterized by serous or hemorrhagic detachment of the retinal pigment epithelium and development of choroidal neovascularization (CNV), which greatly increases the risk of developing severe irreversible loss of vision. CNV is categorized as classic or occult. Effective specific therapies for exudative or wet AMD are intravitreous injection of a vascular endothelial growth factor inhibitor, possibly thermal laser photocoagulation (in selected patients), and photodynamic therapy.

Regulatory Status

In 2009, Ozurdex (dexamethasone 0.7 mg intravitreal implant; Allergan) was approved by the U.S. Food and Drug Administration (FDA) for the treatment of macular edema following branch retinal vein occlusion or central retinal vein occlusion. Subsequently, in September 2010, the indication was expanded to include treatment of noninfectious uveitis affecting the posterior segment of the eye. In 2014, the indication was again expanded to include treatment of diabetic macular edema.

In September 2014, Iluvien (fluocinolone acetonide 0.19 mg intravitreal implant; Alimera Sciences) was approved by FDA for the treatment of diabetic macular edema in patients previously treated with a course of corticosteroids and without a clinically significant rise in intraocular pressure.

In November 2014, Retisert (fluocinolone acetonide 0.59 mg intravitreal implant; Bausch & Lomb) was approved by FDA for the treatment of chronic noninfectious uveitis affecting the posterior segment of the eye.

In October 2018, Yutiq (fluocinolone acetonide 0.18 mg intravitreal implant; EyePoint Pharmaceuticals) was approved by the FDA for the treatment of chronic noninfectious uveitis affecting the posterior segment of the eye.

******Note: This Medical Policy is complex and technical. For questions concerning the technical language and/or specific clinical indications for its use, please consult your physician.***

Policy

BCBSNC will provide coverage for intravitreal implant when it is determined to be medically necessary because the medical criteria and guidelines shown below are met.

Benefits Application

This medical policy relates only to the services or supplies described herein. Please refer to the Member's Benefit Booklet for availability of benefits. Member's benefits may vary according to benefit design; therefore member benefit language should be reviewed before applying the terms of this medical policy.

When Intravitreal Implant is covered

A fluocinolone acetonide intravitreal implant 0.59 mg (i.e., Retisert) may be considered medically necessary for the treatment of:

- chronic noninfectious intermediate, posterior, or panuveitis

A dexamethasone intravitreal implant 0.7 mg (i.e., Ozurdex) may be considered medically necessary for the treatment of:

- non-infectious ocular inflammation, or uveitis, affecting the intermediate or posterior segment of the eye, **OR**
- macular edema following branch or central retinal vein occlusion, **OR**
- diabetic macular edema

A fluocinolone acetonide intravitreal implant 0.19 mg (i.e., Iluvien) may be considered medically necessary for the treatment of:

- diabetic macular edema in patients who have been previously treated with a course of corticosteroids and did not have a clinically significant rise in intraocular pressure

A fluocinolone acetonide intravitreal implant 0.18 mg (i.e., Yutiq) may be considered medically necessary for the treatment of:

- chronic noninfectious uveitis affecting the posterior segment of the eye

When Intravitreal Implant is not covered

When the above criteria are not met.

A fluocinolone acetonide intravitreal implant 0.59 mg (Retisert), 0.19 mg (Iluvien), or 0.18 mg (Yutiq), or dexamethasone intravitreal implant 0.7 mg (Ozurdex) is considered **investigational** for the treatment of:

- Birdshot retinochoroidopathy
- Cystoid macular edema related to retinitis pigmentosa
- Idiopathic macular telangiectasia type 1
- Postoperative macular edema
- Circumscribed choroidal hemangiomas
- Proliferative vitreoretinopathy
- Radiation retinopathy

All other uses of a corticosteroid intravitreal implant are considered **investigational.**

Policy Guidelines

Uveitis

For individuals with chronic noninfectious intermediate or posterior uveitis who receive an intravitreal fluocinolone acetonide implant (0.59 mg), the evidence includes 4 randomized controlled trials (RCTs). Relevant outcomes are symptoms, change in disease status, functional outcomes, quality of life, and treatment-related morbidity. Two of the 4 RCTs compared 2 doses of implants and 2 trials compared implants with systemic steroids (and immunosuppression when indicated). All trials supported the efficacy of intravitreal fluocinolone acetonide implants in preventing recurrence and improving visual acuity over 4-year follow-up. The head-to-head trial comparing implants with systemic corticosteroids did not show substantial superiority in the overall effectiveness of either approach. After 24 and 54 months of follow-up, visual acuity improved from baseline in the implant groups compared to the systematic therapy groups by +6.0 and +3.2 letters (p=0.16) and +2.4 and 3.1 letters (p=0.073), respectively. However, nearly all phakic patients receiving implants developed cataracts and required cataract surgery. Further, most also developed glaucoma, with 75% of patients requiring intraocular pressure (IOP) lowering medications and 35% requiring filtering surgeries. Systemic adverse events such as hyperlipidemia, diabetes, osteoporosis, fractures, and blood count/chemistry abnormalities were infrequent and not statistically distinguishable between groups. The incidence of hypertension was greater in the systemic therapy group (27%) compared to the implant group (13%), but rates of antihypertensive treatment initiation did not differ. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

For individuals with noninfectious intermediate or posterior uveitis who receive an intravitreal dexamethasone implant (0.7 mg), the evidence includes 1 RCT. Relevant outcomes are symptoms, change in disease status, functional outcomes, quality of life, and treatment-related morbidity. Results of this trial at 8 weeks showed that the implant was effective in reducing inflammation (the proportion of eyes with no inflammation was 47% and 12% with implant and sham, respectively) and resulted in clinically meaningful improvement in vision at week 8 compared to sham controls (the proportion of patients with a gain of ≥15 letters in best-corrected visual acuity [BCVA] from baseline was ≈40% with implants and 10% with sham). Further, at week 26, patients treated with implants reported meaningful increases in vision-related functioning. The major limitation of this trial was its lack of long-term follow-up. Use of implants resulted in higher incidences of cataracts and elevated IOP. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

For individuals with chronic noninfectious posterior uveitis affecting the posterior segment of the eye and who receive intravitreal fluocinolone acetonide implant (0.18 mg, Yutiq), the evidence includes 2 pivotal RCTs. Relevant outcomes are symptom improvement, change in disease status, functional status and quality of life. Harmful outcomes of interest are treatment-related morbidity. Both RCTs consistently

found statistically significantly lower uveitis recurrence rates for intravitreal fluocinolone acetonide implant (0.18 mg, Yutiq) at both 6 and 12 months. However, serious limitations of these findings include inconsistency in the magnitude of the benefit at 12 months (odds ratio 67.09; 95% confidence interval 8.81-511.06 in published RCT and odds ratio 3.04; 95% confidence interval 1.52, 6.08 in the unpublished RCT) and, with more imputed recurrences in the sham groups than the treatment groups, we also can't rule out an overestimation of the treatment effect. For the remainder of key outcomes, results were inconsistent between RCTs, appearing more favorable in the published trial. Most notable were the differences between RCTs in mean change in best-corrected visual acuity at 12 months (higher for fluocinolone acetonide in the published trial, lower in the unpublished trials) and risk of increased intraocular pressure within 12 months (increased risk in the unpublished trial, but not in the published trial). Due to these inconsistencies and serious methodological limitations, the evidence is insufficient to determine the effects of the technology on health outcomes.

Macular Edema
For individuals with macular edema after retinal vein occlusion who receive an intravitreal dexamethasone implant (0.7 mg), the evidence includes 2 RCTs. Relevant outcomes are symptoms, change in disease status, functional outcomes, quality of life, and treatment-related morbidity. Compared to sham controls, implants resulted in clinically meaningful improvements in visual acuity within 1 to 3 months postimplant and improvement in vision occurred faster. The difference in the proportion of patients with gain of 15 or more letters in BCVA from baseline was more than 10% in favor implants versus sham in both studies at 30, 60 and 90 days, but not at 180 days postimplant. Use of implants resulted in higher incidences of cataracts and elevated IOP. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

For individuals with macular edema after retinal vein occlusion who receive an intravitreal fluocinolone acetonide implant (0.59 mg), no studies were identified. Relevant outcomes are symptoms, change in disease status, functional outcomes, quality of life, and treatment-related morbidity. The evidence is insufficient to determine the effects of the technology on health outcomes.

Diabetic Macular Edema
For individuals with refractory (persistent or recurrent) diabetic macular edema (DME) who receive an intravitreal fluocinolone acetonide implant (0.59 mg), the evidence includes 1 RCT. Relevant outcomes are symptoms, change in disease status, functional outcomes, quality of life, and treatment-related morbidity. Compared to standard of care (as needed laser or observation), a greater proportion of patients with implants reported clinically significant improvement in vision at 6 months (1.4% vs 16.8% respectively) and subsequent time points assessed but not at or beyond 30 months of follow-up. Ninety percent of patients with phakic eyes who received implants required cataract surgery and 60% developed elevated IOP. Due to the substantial increase in adverse events and availability of agents with safer tolerability profiles (eg, anti-vascular endothelial growth factor [anti-VEGF] inhibitors), implant use in DME is questionable. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals with DME who receive an intravitreal fluocinolone acetonide implant (0.19 mg), the evidence includes 2 RCTs. Relevant outcomes are symptoms, change in disease status, functional outcomes, quality of life, and treatment-related morbidity. Implant-treated eyes showed in clinically meaningful improvements in vision at 2 and 3 years postimplant. The percentage of patients who gained 15 letters or more was 28.7% in the implant group versus 18.9% in the sham group at 3 years. Subgroup analysis showed greater improvements in visual acuity in patients who were pseudophakic compared to those who were phakic (difference in mean change in number of letters at 2 years from baseline was 5.6 letters in pseudophakic patients vs 1 letter in phakic patients). A major limitation of these implants is that nearly 80% all phakic patients will develop cataracts and will require cataract surgery. Further, IOP was elevated in 34% of patients who received this implant compared with 10% of controls. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

For individuals with DME who receive an intravitreal dexamethasone implant (0.7 mg), the evidence includes 3 RCTs. Relevant outcomes are symptoms, change in disease status, functional outcomes, quality of life, and treatment-related morbidity. Compared to sham control, 2 identically designed RCTs showed clinically meaningful improvements in vision with dexamethasone implants that peaked at 3 months and maintained 39 months (with retreatment). The difference in proportion of patients with a gain of 15 or more letters in BCVA from baseline was 9.3% and 13.0% in the 2 trials, respectively, favoring implant versus sham at 39 months postimplant. Subgroup analysis of these trials showed greater improvements in visual acuity in patients who were pseudophakic compared to those who were phakic. Results of 1 small RCT showed that, compared to bevacizumab, implant-treated patients at 1 year had similar improvement rates on the primary end point, but experienced greater rates of vision loss (0% vs 10.9%), greater frequency of side effects such as cataracts (4.8% vs 13%), and elevated IOP (0% vs 19.6%), all respectively. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

For individuals with DME who receive an intravitreal dexamethasone implant (0.7 mg) plus anti-VEGF therapy, the evidence includes 1 RCT. Relevant outcomes are symptoms, change in disease status, functional outcomes, quality of life, and treatment-related morbidity. One small RCTs with a 1-year follow-up demonstrated that combination implants plus bevacizumab compared to bevacizumab alone resulted in similar gain in visual acuity (5.4 letters vs 4.9 letters), but greater frequency of side effects with combined treatment. Use of dexamethasone implants resulted in higher incidence of cataracts and elevated IOP. A larger RCT with adequate power is needed to confirm these findings. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals with DME who receive an intravitreal dexamethasone implant (0.7 mg) plus laser photocoagulation, the evidence includes 1 RCT. Relevant outcomes are symptoms, change in disease status, functional outcomes, quality of life, and treatment-related morbidity. One RCT with 1-year follow-up demonstrated that combination implants plus laser photocoagulation compared to laser photocoagulation alone resulted in better visual acuity (as measured by gain of ≥10 letters) at 9 months but not at 12 months. However, the generally acceptable standard outcome measure for change is 15 or more letters and it was not used in this trial. The use of dexamethasone implants resulted in higher incidences of cataracts and elevated IOP Further, a differential loss to follow-up, lack of power calculations for sample size estimation, and lack of intention-to-treat analysis preclude interpretation of results. A larger RCT with adequate power is needed to confirm these findings.. The evidence is insufficient to determine the effects of the technology on health outcomes.

Age-Related Macular Degeneration

For individuals with age-related macular degeneration who receive an intravitreal dexamethasone implant (0.7 mg) plus anti-VEGF inhibitor, the evidence includes 1 RCT. Relevant outcomes are symptoms, change in disease status, functional outcomes, quality of life, and treatment-related morbidity. Results of this trial did not demonstrate clinically meaningful reductions in the ranibizumab injection-free interval between combined treatments (34 days) and anti-VEGF alone (29 days; p=0.016). Further, IOP was elevated in a greater proportion of patients receiving implants without any additional clinical benefit. The evidence is insufficient to determine the effects of the technology on health outcomes.

Other Conditions

For individuals with birdshot retinochoroidopathy refractory or intolerant to standard therapy who receive an intravitreal fluocinolone acetonide implant (0.59 mg) or intravitreal dexamethasone implant (0.7 mg), the evidence includes multiple observational studies. Relevant outcomes are symptoms, change in disease status, functional outcomes, quality of life, and treatment-related morbidity. Multiple observational studies have noted improvements in anatomic and visual acuity outcomes. Long-term follow-up for efficacy and safety is limited. RCTs are needed to permit conclusions on the efficacy of corticosteroid implants in refractory or intolerant patients with birdshot retinopathy. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals with cystoid macular edema related to retinitis pigmentosa who receive an intravitreal dexamethasone implant (0.7 mg), the evidence includes multiple case reports. Relevant outcomes are symptoms, change in disease status, functional outcomes, quality of life, and treatment-related morbidity. Case reports have noted mix results for anatomic and visual acuity outcomes. Long-term follow-up for efficacy and safety is limited. Larger RCTs are needed to permit conclusions on the efficacy of corticosteroid implants in patients with cystoid macular edema related to retinitis pigmentosa. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals with idiopathic macular telangiectasia type 1 who receive an intravitreal dexamethasone implant (0.7 mg), the evidence includes multiple case reports. Relevant outcomes are symptoms, change in disease status, functional outcomes, quality of life, and treatment-related morbidity. Case reports have noted mix results for visual acuity and inflammation-related outcomes. Long-term follow-up for efficacy and safety is limited. Better quality studies with long-term follow-up are needed to permit conclusions on the efficacy of corticosteroid implants in patients with idiopathic macular telangiectasia type 1. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals with postoperative chronic macular edema who receive an intravitreal dexamethasone implant (0.7 mg), the evidence includes multiple observational studies. Relevant outcomes are symptoms, change in disease status, functional outcomes, quality of life, and treatment-related morbidity. Of multiple observational studies, 1 large retrospective analysis of 100 patients showed that 2 of every 5 patients experienced clinically meaningful improvements in vision at 1-year follow-up. An RCT is needed to confirm the efficacy of corticosteroid implants in patients with postoperative chronic macular edema. The evidence is insufficient to determine the effects of the technology on health outcomes.
For individuals with circumscribed choroidal hemangiomas who receive an intravitreal dexamethasone implant (0.7 mg) plus photodynamic therapy, the evidence includes a 1 case report. Relevant outcomes are symptoms, change in disease status, functional outcomes, quality of life, and treatment-related morbidity. Results of the case report do not permit conclusions about the efficacy and safety of adding dexamethasone implants for circumscribed choroidal hemangiomas to photodynamic therapy. RCTs are needed to permit conclusions on the efficacy of corticosteroid implants in patients with circumscribed choroidal hemangiomas. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals with proliferative vitreoretinopathy who receive an intravitreal dexamethasone implant (0.7 mg), the evidence includes 1 case series and 1 case report. Relevant outcomes are symptoms, change in disease status, functional outcomes, quality of life, and treatment-related morbidity. These studies have reported multiple interventions, including dexamethasone implants in conjunction with surgery and laser for preventing proliferative retinopathy after retinal detachment surgery. RCTs are needed to permit conclusions on the efficacy of corticosteroid implants in patients with proliferative retinopathy. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals with radiation retinopathy who receive an intravitreal dexamethasone implant (0.7 mg), the evidence includes multiple observational studies. Relevant outcomes are symptoms, change in disease status, functional outcomes, quality of life, and treatment-related morbidity. Multiple observational studies have noted improvements in anatomic and visual acuity outcomes. Long-term follow-up for efficacy and safety is limited. RCTs are needed to permit conclusions on the efficacy of corticosteroid implants in patients with radiation retinopathy. The evidence is insufficient to determine the effects of the technology on health outcomes.

Billing/Coding/Physician Documentation Information

This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at www.bcbsnc.com. They are listed in the Category Search on the Medical Policy search page.

Applicable service codes: *67027, 67028, J7311, J7312, J7313, J7314*

BCBSNC may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all specific information needed to make a medical necessity determination is included.

Scientific Background and Reference Sources

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Specialty Matched Consultant Advisory Panel review- 6/2020

Policy Implementation/Update Information

12/7/10	New policy issued. A fluocinolone acetonide intravitreal implant may be considered medically necessary for the treatment of chronic noninfectious posterior uveitis, in one or both eyes. All other uses of a fluocinolone acetonide intravitreal implant are investigational. Notification given 12/7/10. Effective date 3/15/11. Reviewed with Medical Director. (lpr)
3/15/11	Deleted CPT code C9256. Removed the P from Ozurdex since that P was dropped during the drug approval process and the product is only available as Ozurdex. (lpr)

7/19/11 Specialty Matched Consultant Advisory Panel review 6/29/2011. Description section extensively revised. Under "When Covered" section added: "a dexamethasone intravitreal implant (i.e., Ozurdex™) may be considered medically necessary for the treatment of non-infectious ocular inflammation, or uveitis, affecting the posterior segment of the eye, OR macular edema following branch or central retinal vein occlusion." References added. (lpr)

4/17/12 Added CPT code 67028 to the Billing/Coding section for consistency with BCBSA. Reviewed by medical director. (lpr)

7/10/12 Specialty Matched Consultant Advisory Panel review 6/20/2012. Medically necessary policy statement on uveitis expanded to include intermediate and panuveitis. Policy guidelines updated. Reference added. (lpr)

4/16/13 Reference added. No change to policy statement. (lpr)

7/16/13 Specialty matched consultant advisory panel review 6/19/2013. No change to policy statement. (lpr)

4/15/14 Reference updated. No change to policy statement. (lpr)

7/15/14 Specialty matched consultant advisory panel review meeting 6/24/2014. No change to policy statement. (lpr)

8/26/14 "Under "When Covered" section; added indication for diabetic macular edema in patients who are pseudophakic or phakic and scheduled for cataract surgery. Updated the Description section. References added. Senior medical director review 8/2014. (lpr)

11/25/14 Description section and policy guidelines updated. Under When Covered: added fluocinolone and dexamethasone inserts medically necessary for treatment of diabetic macular edema. Medical director review. Reference added. (lpr)

1/13/15 Under 'When Covered" section, separated the criteria for each product Retisert, Iluvien and Ozurdex in order to clarify when one product is covered vs another product. Senior medical director review. (lpr)

3/31/15 Added HCPCS code C9450 to "Billing/Coding" section. (lpr)

7/28/15 Specialty Matched Consultant Advisory Panel review 6/24/2015. No change to policy statement. (lpr)

11/24/15 Reference added. Added HCPCS code J7313 to the Billing/Coding section for effective date 1/1/2016. (lpr)

12/30/15 Deleted HCPCS code C9450 from the Billing/Coding section for effective date 1/1/2016. (lpr)

4/29/16 Updated Policy Guidelines. References added. Removed requirement that patients with diabetic macular edema be "pseudophakic or phakic and scheduled for cataract surgery" under When Covered section for Ozurdex bullet #3. Senior medical director review 3/2016. (lpr)

7/26/16 Specialty Matched Consultant Advisory Panel review 6/29/2016. No change to policy statement. (lpr)

4/28/17 Extensive revisions to Description and Policy Guidelines section as well as Regulatory status. Added the following statement and investigational indications to the "When Not Covered" section: A fluocinolone acetonide intravitreal implant 0.59 mg (Retisert®) or 0.19 mg (Iluvien®) or dexamethasone intravitreal implant 0.7 mg (Ozurdex™) is considered investigational for the treatment of Birdshot retinochoroidopathy, Cystoid macular edema related to retinitis pigmentosa, Idiopathic macular telangiectasia type 1, Postoperative macular edema, Circumscribed choroidal hemangiomas, Proliferative vitreoretinopathy, Radiation retinopathy. Reference added. Medical Director review 3/2017. (lpr)

7/28/17 Specialty Matched Consultant Advisory Panel review 6/28/2017. No change to policy statement. (lpr)

8/10/18 Updated Policy Guidelines section for clarity. Reference added. Specialty Matched Consultant Advisory Panel review 6/27/2018. No change to policy intent. (krc)

4/16/19 Added Yutiq (fluocinolone acetonide 0.18 mg intravitreal implant) to "When Covered" section with the following coverage statement: "fluocinolone acetonide intravitreal implant 0.18 mg (i.e., Yutiq) may be considered medically necessary for the treatment of chronic noninfectious uveitis affecting the posterior segment of the eye." Updated Description and Policy Guidelines to reflect addition of Yutiq to policy. References added. (krc)

7/16/19 Specialty Matched Consultant Advisory Panel review 6/19/2019. No change to policy statements. (krc)

10/1/19 Added HCPCS code J7314 to Billing/Coding section effective 10/1/19. (krc)

7/14/20 Added clinical trial evidence summary in Policy Guidelines for Yutiq. Minor typographical edits made. Reference added. Specialty Matched Consultant Advisory Panel review 6/17/2020. (krc)