

# Intravitreal Corticosteroid Implants

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[Instructions for Use](#)

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Commercial Policy
<ul style="list-style-type: none"> <li><a href="#">Intravitreal Corticosteroid Implants</a></li> </ul>

## Application

This Medical Benefit Drug Policy does not apply to the states listed below; refer to the state-specific policy/guideline, if noted:

State	Policy/Guideline
Indiana	None
Kansas	None
Louisiana	None

## Coverage Rationale

This policy provides information about the use of certain specialty pharmacy medications administered by the intravitreal route for certain ophthalmologic conditions.

This policy refers to the following intravitreal corticosteroid implant products:

- Iluvien® (fluocinolone acetonide intravitreal implant)
- Ozurdex® (dexamethasone intravitreal implant)
- Retisert® (fluocinolone acetonide intravitreal implant)
- Yutiq® (fluocinolone acetonide intravitreal implant)

Iluvien is proven and medically necessary when all of the following criteria are met:

- Diagnosis of diabetic macular edema (DME); and
- Both of the following:
  - Member has been previously treated with a course of corticosteroids; and
  - Member did not have a clinically significant rise in intraocular pressure
 and
- Prescribed by or in consultation with an ophthalmologist; and
- Dose does not exceed one implant per eye; and
- Authorization is for no more than one month

Ozurdex is proven and medically necessary when all of the following criteria are met:

- Diagnosis of one of the following:
  - Macular edema following branch retinal vein occlusion (BRVO); or
  - Macular edema following central retinal vein occlusion (CRVO); or
  - Non-infectious uveitis affecting the posterior segment of the eye; or
  - Diabetic macular edema (DME)
- and
- Prescribed by or in consultation with an ophthalmologist; and
- Dose does not exceed one implant per eye; and
- Authorization is for no more than one month

Retisert is proven and medically necessary when all of the following criteria are met:

- Diagnosis of chronic non-infectious uveitis affecting the posterior segment of the eye; and
- Prescribed by or in consultation with an ophthalmologist; and
- Dose does not exceed one implant per eye; and
- Authorization is for no more than one month

Yutiq is proven and medically necessary when all of the following criteria are met:

- Diagnosis of chronic non-infectious uveitis affecting the posterior segment of the eye; and
- Prescribed by or in consultation with an ophthalmologist; and
- Dose does not exceed one implant per eye; and
- Authorization is for no more than one month

Intravitreal Corticosteroid Implant products are unproven and not medically necessary for the treatment any other indication due to insufficient evidence of efficacy including, but not limited to the following:

- Cystoid macular edema after cataract surgery
- Radiation retinopathy

## Applicable Codes

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this policy does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by federal, state, or contractual requirements and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

HCPCS Code	Description
J7311	Injection, fluocinolone acetonide, intravitreal implant (retisert), 0.01 mg
J7312	Injection, dexamethasone, intravitreal implant, 0.1 mg
J7313	Injection, fluocinolone acetonide, intravitreal implant (Iluvien), 0.01 mg
J7314	Injection, fluocinolone acetonide, intravitreal implant (Yutiq), 0.01 mg

Diagnosis Code	Description
H30.001	Unspecified focal chorioretinal inflammation, right eye
H30.002	Unspecified focal chorioretinal inflammation, left eye
H30.003	Unspecified focal chorioretinal inflammation, bilateral
H30.009	Unspecified focal chorioretinal inflammation, unspecified eye
H30.011	Focal chorioretinal inflammation, juxtapapillary, right eye
H30.012	Focal chorioretinal inflammation, juxtapapillary, left eye
H30.013	Focal chorioretinal inflammation, juxtapapillary, bilateral
H30.019	Focal chorioretinal inflammation, juxtapapillary, unspecified eye

Diagnosis Code	Description
H30.021	Focal chorioretinal inflammation of posterior pole, right eye
H30.022	Focal chorioretinal inflammation of posterior pole, left eye
H30.023	Focal chorioretinal inflammation of posterior pole, bilateral
H30.029	Focal chorioretinal inflammation of posterior pole, unspecified eye
H30.031	Focal chorioretinal inflammation, peripheral, right eye
H30.032	Focal chorioretinal inflammation, peripheral, left eye
H30.033	Focal chorioretinal inflammation, peripheral, bilateral
H30.039	Focal chorioretinal inflammation, peripheral, unspecified eye
H30.041	Focal chorioretinal inflammation, macular or paramacular, right eye
H30.042	Focal chorioretinal inflammation, macular or paramacular, left eye
H30.043	Focal chorioretinal inflammation, macular or paramacular, bilateral
H30.049	Focal chorioretinal inflammation, macular or paramacular, unspecified eye
H30.101	Unspecified disseminated chorioretinal inflammation, right eye
H30.102	Unspecified disseminated chorioretinal inflammation, left eye
H30.103	Unspecified disseminated chorioretinal inflammation, bilateral
H30.109	Unspecified disseminated chorioretinal inflammation, unspecified eye
H30.111	Disseminated chorioretinal inflammation of posterior pole, right eye
H30.112	Disseminated chorioretinal inflammation of posterior pole, left eye
H30.113	Disseminated chorioretinal inflammation of posterior pole, bilateral
H30.119	Disseminated chorioretinal inflammation of posterior pole, unspecified eye
H30.121	Disseminated chorioretinal inflammation, peripheral right eye
H30.122	Disseminated chorioretinal inflammation, peripheral, left eye
H30.123	Disseminated chorioretinal inflammation, peripheral, bilateral
H30.129	Disseminated chorioretinal inflammation, peripheral, unspecified eye
H30.131	Disseminated chorioretinal inflammation, generalized, right eye
H30.132	Disseminated chorioretinal inflammation, generalized, left eye
H30.133	Disseminated chorioretinal inflammation, generalized, bilateral
H30.139	Disseminated chorioretinal inflammation, generalized, unspecified eye
H30.891	Other chorioretinal inflammations, right eye
H30.892	Other chorioretinal inflammations, left eye
H30.893	Other chorioretinal inflammations, bilateral
H30.899	Other chorioretinal inflammations, unspecified eye
H30.90	Unspecified chorioretinal inflammation, unspecified eye
H30.91	Unspecified chorioretinal inflammation, right eye
H30.92	Unspecified chorioretinal inflammation, left eye
H30.93	Unspecified chorioretinal inflammation, bilateral
E08.311	Diabetes mellitus due to underlying condition with unspecified diabetic retinopathy with macular edema
E08.3211	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, right eye
E08.3212	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, left eye
E08.3213	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, bilateral

Diagnosis Code	Description
E08.3219	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye
E08.3311	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, right eye
E08.3312	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, left eye
E08.3313	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, bilateral
E08.3319	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye
E08.3411	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema, right eye
E08.3412	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema, left eye
E08.3413	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema, bilateral
E08.3419	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye
E08.3511	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema, right eye
E08.3512	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema, left eye
E08.3513	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema, bilateral
E08.3519	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema, unspecified eye
E09.311	Drug or chemical induced diabetes mellitus with unspecified diabetic retinopathy with macular edema
E09.3211	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye
E09.3212	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye
E09.3213	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral
E09.3219	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye
E09.3311	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye
E09.3312	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye
E09.3313	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral
E09.3319	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye
E09.3411	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye
E09.3412	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye
E09.3413	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral
E09.3419	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye

Diagnosis Code	Description
E09.3511	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye
E09.3512	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye
E09.3513	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral
E09.3519	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye
E10.311	Type 1 diabetes mellitus with unspecified diabetic retinopathy with macular edema
E10.3211	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye
E10.3212	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye
E10.3213	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral
E10.3219	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye
E10.3311	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye
E10.3312	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye
E10.3313	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral
E10.3319	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye
E10.3411	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye
E10.3412	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye
E10.3413	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral
E10.3419	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye
E10.3511	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye
E10.3512	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye
E10.3513	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral
E10.3519	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye
E11.311	Type 2 diabetes mellitus with unspecified diabetic retinopathy with macular edema
E11.3211	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye
E11.3212	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye
E11.3213	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral
E11.3219	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye
E11.3311	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye
E11.3312	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye
E11.3313	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral
E11.3319	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye
E11.3411	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye
E11.3412	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye
E11.3413	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral

Diagnosis Code	Description
E11.3419	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye
E11.3511	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye
E11.3512	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye
E11.3513	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral
E11.3519	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye
E13.311	Other specified diabetes mellitus with unspecified diabetic retinopathy with macular edema
E13.3211	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye
E13.3212	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye
E13.3213	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral
E13.3219	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye
E13.3311	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye
E13.3312	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye
E13.3313	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral
E13.3319	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye
E13.3411	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye
E13.3412	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye
E13.3413	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral
E13.3419	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye
E13.3511	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye
E13.3512	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye
E13.3513	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral
E13.3519	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye
H35.81	Retinal edema

## Background

Corticosteroids inhibit inflammatory responses to many different inciting agents, such as inflammatory cytokines to inhibit edema, fibrin deposition, capillary dilation, leukocyte migration, capillary proliferation, fibroblast proliferation, deposition of collagen, and scar formation associated with inflammation. Corticosteroids can produce a rise in intraocular pressure. Corticosteroids are thought to act by the induction of phospholipase A2 inhibitory proteins. These proteins control the biosynthesis of potent mediators of inflammation such as prostaglandins and leukotrienes by inhibiting the release of their common precursor arachidonic acid. Arachidonic acid is released from membrane phospholipids by phospholipase A2.<sup>1-4</sup>

Intravitreal corticosteroid implants are drug delivery systems resulting in sustained release of corticosteroid when surgically implanted into the eye:



- Iluvien is non-bioerodible intravitreal implant containing 0.19 mg fluocinolone acetonide in a sustained-release drug delivery system. Iluvien is designed to release fluocinolone acetonide at an initial rate of 0.25 µg/day over a 36-month period.<sup>1</sup>
- Ozurdex is a biodegradable intravitreal implant containing dexamethasone 0.7 mg in the NOVADUR® solid polymer sustained-release drug delivery system. Ozurdex is designed to release dexamethasone up to a 6 months period.<sup>2</sup>
- Retisert is a non-biodegradable intravitreal implant containing 0.59 mg fluocinolone acetonide. Retisert is designed to release fluocinolone acetonide at a nominal initial rate of 0.6 mcg/day, decreasing over the first month to a steady state between 0.3-0.4 mcg/day over approximately 30 months.<sup>3</sup>
- Yutiq is a non-bioerodible intravitreal implant containing 0.18 mg fluocinolone acetonide in a sustained-release drug delivery system. Yutiq is designed to release fluocinolone acetonide at an initial rate of 0.25 mcg/day over a 36-month period.<sup>4</sup>

## Clinical Evidence

### Diabetic Macular Edema

Iluvien and Ozurdex are indicated for the treatment of diabetic macular edema (DME).

*Campochiaro et. al.*, assessed the efficacy and safety of intravitreal inserts releasing 0.2 µg/day (low dose) or 0.5 µg/day (high dose) fluocinolone acetonide (FA) in patients with diabetic macular edema (DME) in two parallel, prospective, randomized, sham injection-controlled, double-masked multicenter clinical trials. Patients with persistent DME despite use of at least 1 macular laser treatment were randomized in a 1:2:2 ratio (sham injection (n = 185), low-dose insert (n = 375), or high-dose insert (n = 393). The primary outcome was the percentage of patients with improvement from baseline best-corrected visual acuity (BCVA) in Early Treatment Diabetic Retinopathy Trial (ETDRS) letter score of 15 or more at month 24. Secondary outcomes included other parameters of foveal thickness (FTH) and visual function. The percentage of patients with improvement from baseline ETDRS letter score of 15 or more at month 24 was 28.7 and 28.6 in the low- and high-dose insert groups, respectively, compared with 16.2 in the sham group (P = 0.002 for each), with benefit occurring for both doses at 3 weeks and all subsequent time points, compared to sham. The mean improvement in BCVA letter score between baseline and month 24 was 4.4 and 5.4 in the low- and high-dose groups, compared to 1.7 in the sham group (P = 0.02 and P = 0.016). Glaucoma requiring incisional surgery occurred in 3.7%, 7.6%, and 0.5% of the low-dose, high-dose, and sham groups, respectively. The authors concluded that both low- and high-dose FA inserts significantly improved BCVA in patients with DME over 2 years, and the risk-to-benefit ratio was superior for the low-dose insert.<sup>5</sup>

In 2014, *Boyer et. al.*, assessed safety and efficacy of dexamethasone intravitreal implant (Ozurdex, DEX implant) 0.7 and 0.35 mg in the treatment of patients with DME in two randomized, multicenter, masked, sham-controlled, phase III clinical trials with identical protocols. Patients were randomized in a 1:1:1 ratio to study to study treatment with DEX implant 0.7 mg (n = 351), DEX implant 0.35 mg (n = 347), or a sham procedure (n = 350) and followed for 3 years (or 39 months for patients treated at month 36) at ≤ 40 scheduled visits. The primary efficacy endpoint was achievement of ≥ 15-letter improvement in BCVA from baseline at study end. Safety measures included adverse events and intraocular pressure (IOP). The percentage of patients with improvement from baseline BCVA was greater in the DEX implant 0.7 mg group (22.2%) and Dex implant 0.35 mg group (18.4%), compared to sham (12%; p ≤ 0.018). Mean average reduction in CRT from baseline was greater with DEX implant 0.7 mg (-111.6 µm) and DEX implant 0.35 mg (-107.9 µm) than sham (-41.9 µm; P < 0.001). Rates of cataract-related adverse events in phakic eyes were 67.9%, 64.1%, and 20.4% in the DEX implant 0.7 mg, DEX implant 0.35 mg, and sham groups, respectively. The authors concluded that the DEX implant 0.7 mg and 0.35 mg met the primary efficacy endpoint for improvement in BCVA and that the safety profile was acceptable.<sup>6</sup>

### Macular Edema following Retinal Vein Occlusion

Ozurdex is indicated for the treatment of macular edema following branch retinal vein occlusion (BRVO) or central retinal vein occlusion (CRVO).

In 2010, *Haller et. al.*, evaluated the safety and efficacy of dexamethasone intravitreal implant 0.7 mg compared with sham in eyes with vision loss due to macular edema associated with BRVO or CRVO in two identical, multicenter, masked, randomized, 6-month, sham-controlled clinical trials. 1267 patients were randomized for a single treatment with DEX implant 0.7 mg (n 427), DEX implant 0.35 mg (n = 414), or sham (n = 426). The primary outcome was time to achieve a ≥ 15-letter improvement in BCVA. Secondary endpoints included BVCA, central retinal thickness, and safety. The study found that after a single administration, the time to achieve a ≥ 15-letter improvement in BCVA was significantly less in both treatment groups,

compared to sham ( $P < 0.001$ ). The percent of eyes with a  $\geq 15$ -letter loss in BCVA was significantly lower in the DEX implant 0.7 mg group compared with sham in all follow-up visits ( $P \leq 0.006$ ). Additionally, improvement in mean BCVA was greater in both treatment groups, compared with sham at all follow-up visits ( $P \leq 0.006$ ). The percentage of DEX implant-treated eyes with intraocular pressure (IOP) of  $\geq 25$  mmHg peaked at 16% at day 60 (both doses) and was not different from sham by day 180. There was no significant between-group difference in the occurrence of cataract or cataract surgery. The authors concluded that dexamethasone intravitreal implant can reduce the risk of vision loss and improve the speed/incidence of visual improvement in eyes with macular edema secondary to BRVO or CRVO.<sup>7</sup>

## Non-Infectious Uveitis

Ozurdex, Retisert, and Yutiq are indicated for the treatment of non-infectious uveitis affecting the posterior segment of the eye.

To evaluate the safety and efficacy of 2 doses of dexamethasone (DEX) intravitreal implant for treatment of noninfectious intermediate or posterior uveitis, *Lowder et al.*, conducted a 26-week trial, randomized, parallel, masked trial ( $n = 229$ ) (NCT00333814). Study participants were randomized to a single treatment with a 0.7 mg DEX implant ( $n = 77$ ), 0.35 mg DEX implant ( $n = 76$ ), or sham procedure ( $n = 76$ ). The primary endpoint was the proportion of eyes with a vitreous haze score of 0 at week 8. The authors found that the proportion of eyes with a vitreous haze score of 0 at week 8 was 47% and 36% with the 0.7 mg DEX implant and the 0.35 mg DEX implant, respectively, and 12% with the sham ( $P < 0.001$ ), with the benefit persisting through week 26. A gain of 15 or more letters from baseline BCVA was seen in significantly more eyes in the DEX implant groups than the sham group at all study visits. The authors also found that intraocular pressure (IOP) of 25 mmHg or more peaked at 7.1% and 8.7% for the 0.7 mg and 0.35 mg DEX implant, compared to 4.2% for sham ( $P > 0.05$  at any visit). The authors concluded that patients with noninfectious intermediate or posterior uveitis had significantly improved intraocular inflammation and visual acuity persisting for 6 months.<sup>8</sup>

*Pavesio et al.*, evaluated the safety and efficacy of an intravitreal acetonide (FA) implant compared to standard therapy in those with noninfectious posterior uveitis (NIPU) (NCT00468871) in a randomized, controlled, phase 2b/3, open-label multicenter superiority trial. 140 study participants with either unilateral or bilateral NIPU were treated with either a 0.59 mg FA intravitreal implant ( $n = 66$ ) or standard of care ( $n = 74$ ) with either systemic prednisolone or equivalent corticosteroid as monotherapy, or, if appropriate, combination therapy with an immunosuppressive agent plus a lower dose prednisolone or equivalent corticosteroid. Primary endpoint was time to first recurrence of uveitis. Results revealed that eyes that received the FA intravitreal implant had delayed onset of observed recurrence of uveitis ( $P < 0.01$ ) and lower rate of recurrence (18.2% vs 63.5%;  $P \leq 0.01$ ) compared with standard of care. Adverse events included elevated IOP requiring IOP-lowering surgery (occurring in 21.2% of implanted eyes) and cataracts requiring extraction (occurring in 87.8% of phakic implanted eyes). The authors concluded that the FA intravitreal implant provided better control of inflammation in patients with uveitis compared with standard of care, but IOP and lens clarity of implanted eyes required close monitoring.<sup>9</sup>

In 2020, *Jaffe et al.*, examined the 36-month efficacy and safety of a 0.2  $\mu\text{g}/\text{day}$  fluocinolone acetonide insert (FAi) to treat noninfectious uveitis of the posterior segment (NIU-PS) in a phase 3, prospective, double-masked, multicenter study (NCT01694186). Study population included adults with a diagnosis of NIU-PS in  $\geq 1$  eye for  $\geq 1$  year and  $\geq 2$  recurrences of uveitis, requiring systemic corticosteroid, immunosuppressive treatment, or intraocular corticosteroids. Participants were randomized 2:1 ( $n = 87$  FAi-treated vs  $n = 42$  sham-treated). The primary outcome was the difference between the proportion of patients who had uveitis recurrence between treatment arms. Secondary outcomes included time to first recurrence, number of recurrences, best-corrected visual acuity (BCVA) change from baseline, resolution of macular edema, and number of adjunctive treatments. Results showed cumulative uveitis recurrences were significantly reduced with FAi compared with sham (65.5% vs. 97.6%, respectively;  $P < 0.001$ ) over 36 months of treatment. Additionally, cumulative uveitis recurrences were significantly reduced with FAi compared with sham (65.5% vs. 97.6%, respectively;  $P < 0.001$ ) and significantly lower recurrences per eye in the FAi-treated compared to sham (mean 1.7 vs. 5.3, respectively,  $P < 0.001$ ). Author concluded that fluocinolone acetonide insert-treated eyes had significantly reduced uveitis recurrence rates, increased recurrence-free durations, and fewer episodes among those with recurrences.<sup>10</sup>

## U.S. Food and Drug Administration (FDA)

This section is to be used for informational purposes only. FDA approval alone is not a basis for coverage.



## Iluvien (Fluocinolone Acetonide Intravitreal Implant)

Iluvien contains a corticosteroid and is indicated for the treatment of diabetic macular edema (DME) in patients who have been previously treated with a course of corticosteroids and did not have a clinically significant rise in intraocular pressure.<sup>1</sup>

## Ozurdex (Dexamethasone Intravitreal Implant)

Ozurdex is a corticosteroid indicated for the treatment of macular edema following branch retinal vein occlusion (BRVO) or central retinal vein occlusion (CRVO), non-infectious uveitis affecting the posterior segment of the eye, and diabetic macular edema (DME).<sup>2</sup>

## Retisert (Fluocinolone Acetonide Intravitreal Implant)

Retisert is a corticosteroid indicated for the treatment of chronic noninfectious uveitis affecting the posterior segment of the eye.<sup>3</sup>

## Yutiq (Fluocinolone Acetonide Intravitreal Implant)

Yutiq contains a corticosteroid and is indicated for the treatment of chronic non-infectious uveitis affecting the posterior segment of the eye.<sup>4</sup>

## References

1. Iluvien [Package Insert]. Alpharetta, GA: Alimera Sciences, Inc.; November 2016.
2. Ozurdex [Package Insert]. Madison, NJ: Allergan USA, Inc.; October 2020.
3. Retisert [Package Insert]. Bridgewater, NJ: Bausch Health US, LLC.; January 2021.
4. Yutiq [Package Insert]. Watertown, MA: EyePoint Pharmaceuticals US, Inc.; March 2021.
5. Campochiaro PA, Brown DM, Pearson A, et al. Long-term benefit of sustained-delivery fluocinolone acetonide vitreous inserts for diabetic macular edema. *Ophthalmology*. 2011;118(4):626-635.e2.
6. Boyer DS, Yoon YH, Belfort R Jr, et al. Three-year, randomized, sham-controlled trial of dexamethasone intravitreal implant in patients with diabetic macular edema. *Ophthalmology*. 2014;121(10):1904-1914.
7. Haller JA, Bandello F, Belfort R Jr, et al. Randomized, sham-controlled trial of dexamethasone intravitreal implant in patients with macular edema due to retinal vein occlusion. *Ophthalmology*. 2010;117(6):1134-1146.e3.
8. Lowder C, Belfort R Jr, Lightman S, et al. Dexamethasone intravitreal implant for noninfectious intermediate or posterior uveitis. *Arch Ophthalmol*. 2011;129(5):545-553.
9. Pavesio C, Zierhut M, Bairi K, Comstock TL, Usner DW; Fluocinolone Acetonide Study Group. Evaluation of an intravitreal fluocinolone acetonide implant versus standard systemic therapy in noninfectious posterior uveitis. *Ophthalmology*. 2010;117(3):567-575.e1.
10. Jaffe GJ, Pavesio CE; Study Investigators. Effect of a Fluocinolone Acetonide Insert on Recurrence Rates in Noninfectious Intermediate, Posterior, or Panuveitis: Three-Year Results. *Ophthalmology*. 2020;127(10):1395-1404.

## Policy History/Revision Information

Date	Summary of Changes
08/01/2021	<ul style="list-style-type: none"><li>• New Medical Benefit Drug Policy</li></ul>

## Instructions for Use

This Medical Benefit Drug Policy provides assistance in interpreting UnitedHealthcare standard benefit plans. When deciding coverage, the federal, state or contractual requirements for benefit plan coverage must be referenced as the terms of the federal, state or contractual requirements for benefit plan coverage may differ from the standard benefit plan. In the event of a conflict, the federal, state or contractual requirements for benefit plan coverage govern. Before using this policy, please check

the federal, state or contractual requirements for benefit plan coverage. UnitedHealthcare reserves the right to modify its Policies and Guidelines as necessary. This Medical Benefit Drug Policy is provided for informational purposes. It does not constitute medical advice.

UnitedHealthcare may also use tools developed by third parties, such as the InterQual<sup>®</sup> criteria, to assist us in administering health benefits. The UnitedHealthcare Medical Benefit Drug Policies are intended to be used in connection with the independent professional medical judgment of a qualified health care provider and do not constitute the practice of medicine or medical advice.