

ILUVIEN[®]
(fluocinolone acetonide
intravitreal implant) 0.19mg

INDICATION

ILUVIEN[®] (fluocinolone acetonide intravitreal implant) 0.19 mg 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.



A guide for administering ILUVIEN



Please review the complete ILUVIEN administration video prior to administering ILUVIEN.

<https://hcp.iluvien.com/using-iluvien/administration/>

For additional information about ILUVIEN, please refer to the Important Safety Information on inside cover and the full Prescribing Information on pages 12 through 15.

Indication and Important Safety Information

INDICATION

ILUVIEN® (fluocinolone acetonide intravitreal implant) 0.19 mg 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.

IMPORTANT SAFETY INFORMATION

CONTRAINDICATIONS

- ILUVIEN is contraindicated in patients with active or suspected ocular or periocular infections including most viral disease of the cornea and conjunctiva including active epithelial herpes simplex keratitis (dendritic keratitis), vaccinia, varicella, mycobacterial infections and fungal diseases.
- ILUVIEN is contraindicated in patients with glaucoma who have cup to disc ratios of greater than 0.8.
- ILUVIEN is contraindicated in patients with known hypersensitivity to any components of this product.

WARNINGS AND PRECAUTIONS

- Intravitreal injections, including those with ILUVIEN, have been associated with endophthalmitis, eye inflammation, increased intraocular pressure, and retinal detachments. Patients should be monitored following the intravitreal injection.
- Use of corticosteroids including ILUVIEN may produce posterior subcapsular cataracts, increased intraocular pressure and glaucoma. Use of corticosteroids may enhance the establishment of secondary ocular infections due to bacteria, fungi, or viruses. Corticosteroids are not recommended to be used in patients with a history of ocular herpes simplex because of the potential for reactivation of the viral infection.
- Patients in whom the posterior capsule of the lens is absent or has a tear are at risk of implant migration into the anterior chamber.

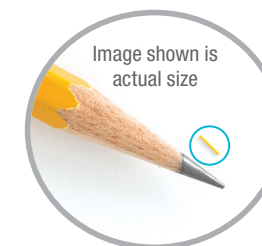
ADVERSE REACTIONS

- In controlled studies, the most common adverse reactions reported were cataract development (ILUVIEN 82%; sham 50%) and intraocular pressure elevation of ≥ 10 mm Hg (ILUVIEN 34%; sham 10%).

THE ILUVIEN CONTINUOUS MICRODOSING™ DELIVERY IMPLANT IS INSERTED INTO THE VITREOUS CAVITY VIA A 25-GAUGE NEEDLE

EACH IMPLANT:

- ▶ Contains 0.19 mg of fluocinolone acetonide (FAC)
- ▶ Is engineered to provide a submicrogram release at an initial rate of 0.25 $\mu\text{g}/\text{day}$ lasting 36 months¹
- ▶ Measure approximately 3.5 mm x 0.37 mm in size



Each sterile, single-use, preloaded custom applicator is packaged in a sealed tray that should be stored at room temperature between 59°F and 86°F.

IN PREPARATION FOR THE ILUVIEN INJECTION

The intravitreal injection procedure should be carried out under aseptic conditions, which include use of sterile gloves, a sterile drape, a sterile caliper, and a sterile eyelid speculum (or equivalent). Adequate anesthesia and a broad-spectrum microbicide should be given prior to the injection.



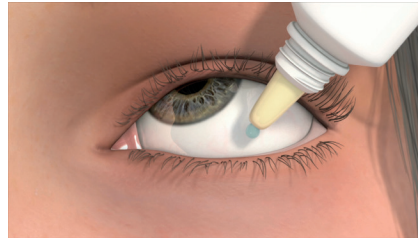
For additional information about ILUVIEN, please refer to the full Prescribing Information on pages 12 through 15.

Preparing for the ILUVIEN injection

STEP 1 // PATIENT PREP

Just prior to injection, administer topical anesthesia over the injection site (inferotemporal quadrant recommended).

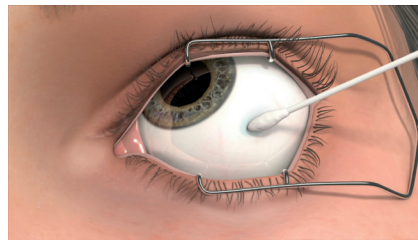
Administer 2-3 drops of adequate topical antiseptic into the lower fornix. The lids may be scrubbed with cotton-tipped applicators soaked with an adequate topical antiseptic.



STEP 2 // PATIENT PREP

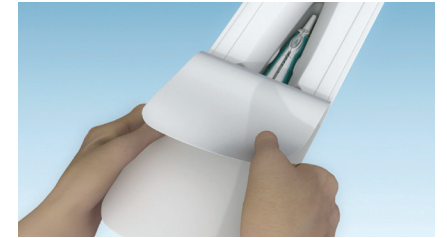
Place a sterile lid speculum. Have the subject look up and apply a cotton-tipped applicator soaked with an adequate antiseptic to the injection site.

Allow sufficient time for the anesthesia and antiseptic to exert effect prior to the insertion of ILUVIEN.



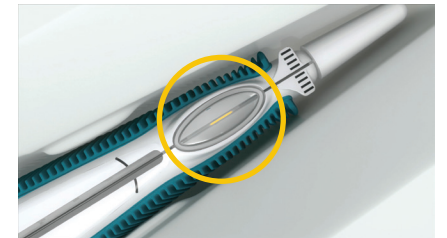
STEP 1 // APPLICATOR PREP

The exterior of the tray should not be considered sterile. Peel the lid from the tray without touching the interior surface.



STEP 2 // APPLICATOR PREP

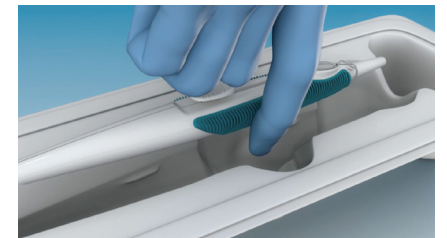
Visually check through the viewing window of the preloaded applicator to ensure that there is a drug implant inside.



STEP 3 // APPLICATOR PREP

Remove the applicator from the tray with sterile gloved hands touching only the sterile interior tray surface and applicator.

The protective cap on the needle should not be removed until the patient is ready to be injected.



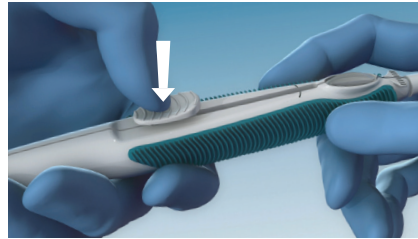
For additional information about ILUVIEN, please refer to the full Prescribing Information on pages 12 through 15.

Preparing for the ILUVIEN injection

STEP 4 // APPLICATOR PREP

⚠️ PRIOR TO INJECTION, THE APPLICATOR TIP MUST BE KEPT ABOVE THE HORIZONTAL PLANE.

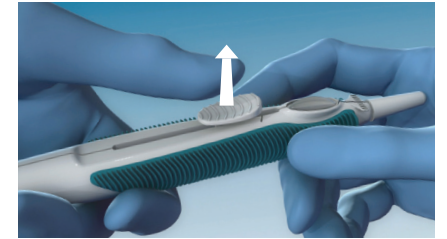
Incline the device with the tip pointing upwards. Using the thumb, press the button down.



STEP 6 // APPLICATOR PREP

⚠️ IF THE BUTTON DOES NOT RISE, DO NOT PROCEED.

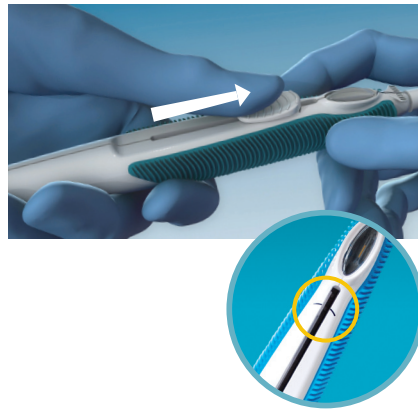
Release the button and it will rise into the UP position. The ILUVIEN applicator is now primed for the injection.



STEP 5 // APPLICATOR PREP

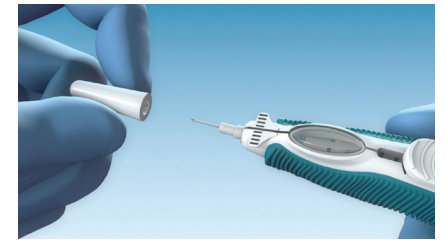
⚠️ THE BUTTON WILL COME TO A HARD STOP AT THE END OF THE TRACK.

With deliberate downward pressure, slide the button forward in one continuous motion until it stops at the curved black line.

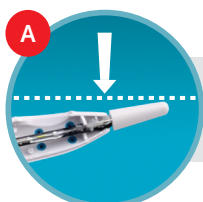
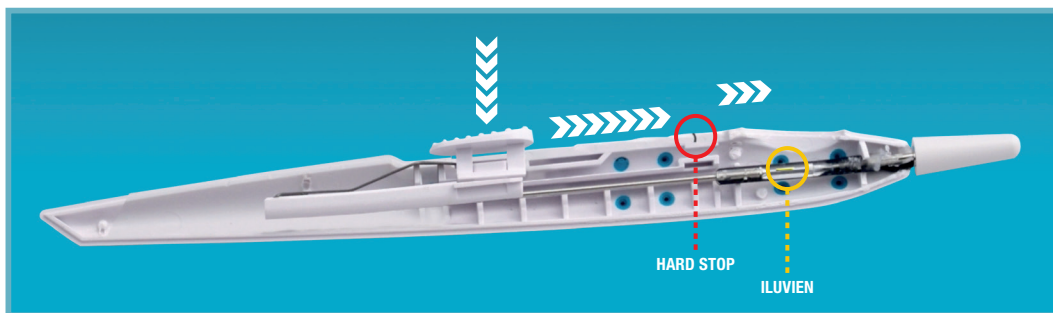


STEP 7 // APPLICATOR PREP

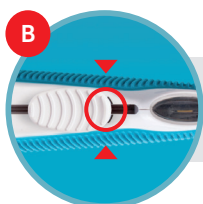
Maintain the injector tip above the horizontal plane. Carefully remove the protective cap from the needle and inspect the needle tip to ensure the implant has not protruded into the beveled opening at the needle tip.



INJECTOR // DETAILED CROSS SECTION



Prior to injection, the applicator tip must be kept above the horizontal plane.



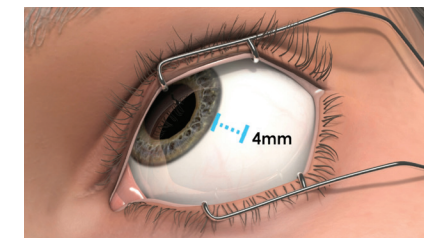
The button will STOP due to the plastic tab at the end of the track.



If the button does not rise at the end of the track, DO NOT PROCEED with this unit.

STEP 1 // INJECTION

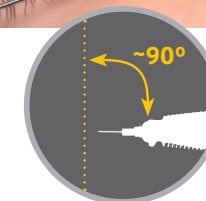
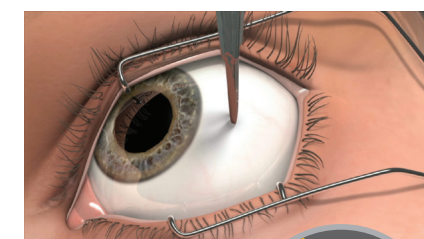
Optimal placement of the implant is inferior to the optic disc and posterior to the equator of the eye. Measure 4mm inferotemporal from the limbus with calipers.



STEP 2 // INJECTION

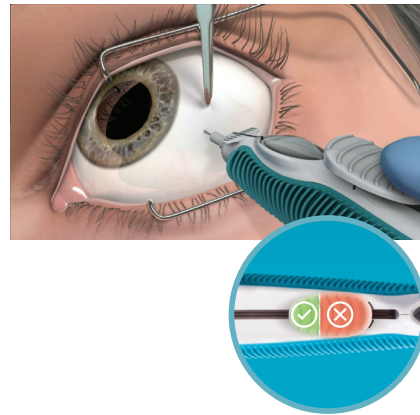
Gently displace the conjunctiva so that, after withdrawing the needle, the conjunctival and scleral entry sites will not align.

Insert needle nearly perpendicular to the sclera.



STEP 3 // INJECTION

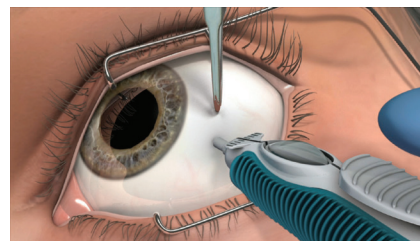
To release the implant, place finger over the bottom three lines (as illustrated in green), then slide forward until the button stops at the end of the track.



STEP 4 // INJECTION

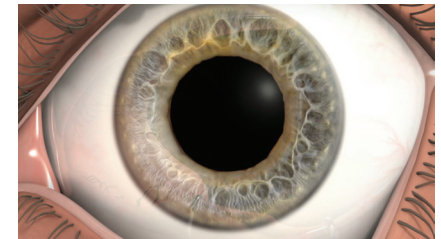
⚠ DO NOT MOVE THE BUTTON BACKWARD AFTER THE IMPLANT HAS BEEN INJECTED.

Remove finger from button and, after a brief pause, remove needle from the eye.



STEP 5 // INJECTION

Remove the lid speculum and perform indirect ophthalmoscopy to verify placement of the implant, adequate central retinal artery perfusion, and absence of any other complications.



PATIENT FOLLOW-UP

Following the injection, patients should be monitored for elevation in intraocular pressure and endophthalmitis between two and seven days post-injection. Patients should be instructed to report, without delay, any symptoms suggestive of endophthalmitis.



Fluocinolone acetonide is a white or almost white, microcrystalline powder, practically insoluble in water, soluble in methanol, ethanol, chloroform and acetone, and sparingly soluble in ether.

Each **ILUVIEN** consists of a light brown 3.5mm x 0.37mm implant containing 0.19 mg of the active ingredient fluocinolone acetonide and the following inactive ingredients: polyimide tube, polyvinyl alcohol, silicone adhesive and water for injection.

12 CLINICAL PHARMACOLOGY

12.1 Mechanism of Action

Corticosteroids inhibit inflammatory responses to a variety of inciting agents including multiple inflammatory cytokines. They inhibit edema, fibrin deposition, capillary dilation, leukocyte migration, capillary proliferation, fibroblast proliferation, deposition of collagen, and scar formation associated with inflammation.

Corticosteroids are thought to act by inhibition of phospholipase A₂ via induction of inhibitory proteins collectively called lipocortins. It is postulated that these proteins control biosynthesis of potent mediators of inflammation such as prostaglandins and leukotrienes by inhibiting release of the common precursor, arachidonic acid. Arachidonic acid is released from membrane phospholipids by phospholipase A₂.

12.3 Pharmacokinetics

In a human pharmacokinetic study of **ILUVIEN**, fluocinolone acetonide concentrations in plasma were below the lower limit of quantitation of the assay (100 pg/mL) at all post-administration time points from Day 7 through Month 36 following intravitreal administration of a 0.2 mcg/day or 0.5 mcg/day fluocinolone acetonide insert.

13 NONCLINICAL TOXICOLOGY

13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

Long-term animal studies have not been conducted to determine the carcinogenic potential or the effect on fertility of **ILUVIEN**.

Fluocinolone acetonide was not genotoxic *in vitro* in the Ames test (*S. typhimurium* and *E. coli*) and the mouse lymphoma TK assay, or *in vivo* in the mouse bone marrow micronucleus assay.

14 CLINICAL STUDIES

The efficacy of **ILUVIEN** was assessed in two three year, randomized (2:1, active: sham), multicenter, double-masked, parallel-groups studies that enrolled patients with diabetic macular edema (DME) that had previously been treated with laser photocoagulation.

The primary efficacy endpoint in both trials was the proportion of subjects in whom vision had improved by 15 letters or more from baseline after 24 months of follow-up.

Table 3: Baseline BCVA (Letters)

	Study 1		Study 2	
	ILUVIEN (N=190)	Sham (N=95)	ILUVIEN (N=186)	Sham (N=90)
Mean (SD)	53 (13)	55 (11)	53 (12)	55 (11)
Median (Range)	57 (19-75)	58 (25-69)	56 (20-70)	58 (21-68)

Table 4: Visual Acuity outcomes at Month 24 (All randomized subjects with LOCF)

Study	Outcomes	ILUVIEN	Sham	Estimated Difference (95% CI)
1 ^a	Gain of ≥15 letters in BCVA (n (%))	51 (27%)	14 (15%)	12.1% (2.6%, 21.6%)
	Loss of ≥15 letters in BCVA (n (%))	26 (14%)	5 (5%)	8.4% (1.8%, 15.1%)
	Mean change from baseline in BCVA (SD)	3.7 (18.7)	3.2 (13.1)	1.8 (-2.8, 6.3)
2 ^b	Gain of ≥15 letters in BCVA (n (%))	57 (31%)	16 (18%)	13.0% (2.7%, 23.4%)
	Loss of ≥15 letters in BCVA (n (%))	22 (12%)	9 (10%)	1.8% (-5.9%, 9.6%)
	Mean change from baseline in BCVA (SD)	5.2 (18.0)	0.0 (15.6)	6.1 (1.4, 10.8)

^aStudy 1: **ILUVIEN**, N=190; Sham, N=95

^bStudy 2: **ILUVIEN**, N=186; Sham, N=90

Visual acuity outcomes by lens status (Phakic or Pseudophakic) at different visits are presented in Figure 2 and Figure 3. The occurrence of cataracts impacted visual acuity during the study. Patients who were pseudophakic at baseline achieved greater mean BCVA change from baseline at the Month 24 study visit.

Figure 2: Proportion of subjects with ≥15 Letters Improvement from Baseline BCVA in the Study Eye

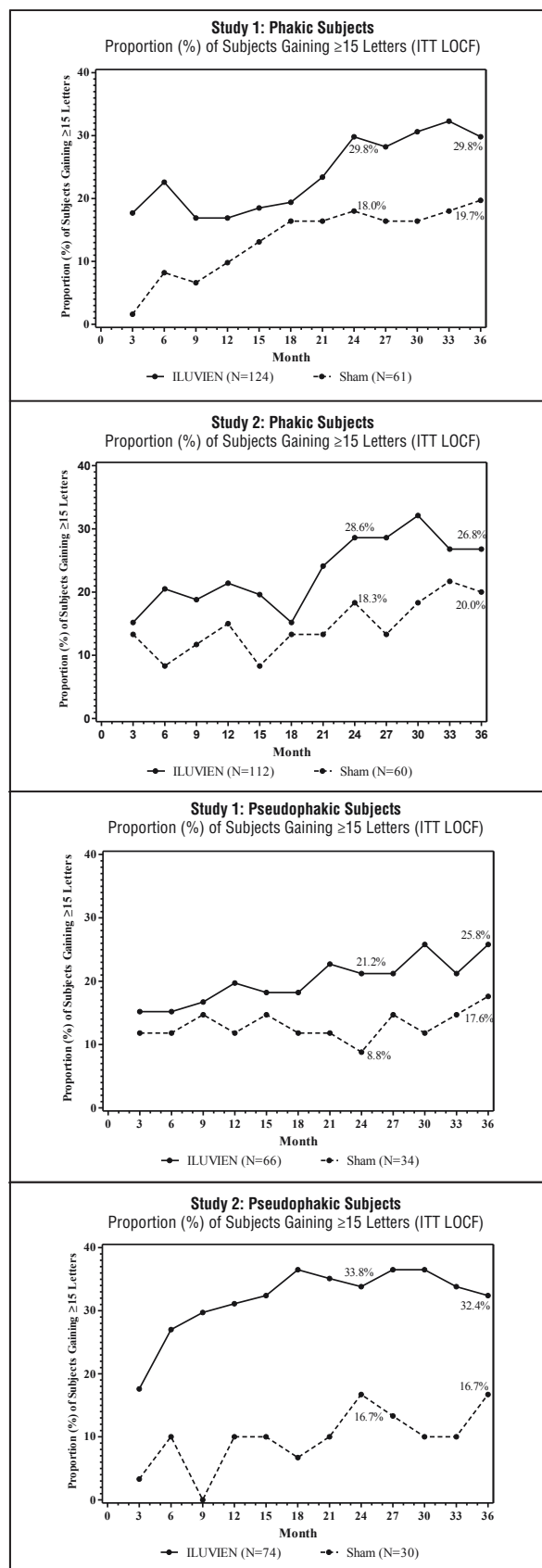
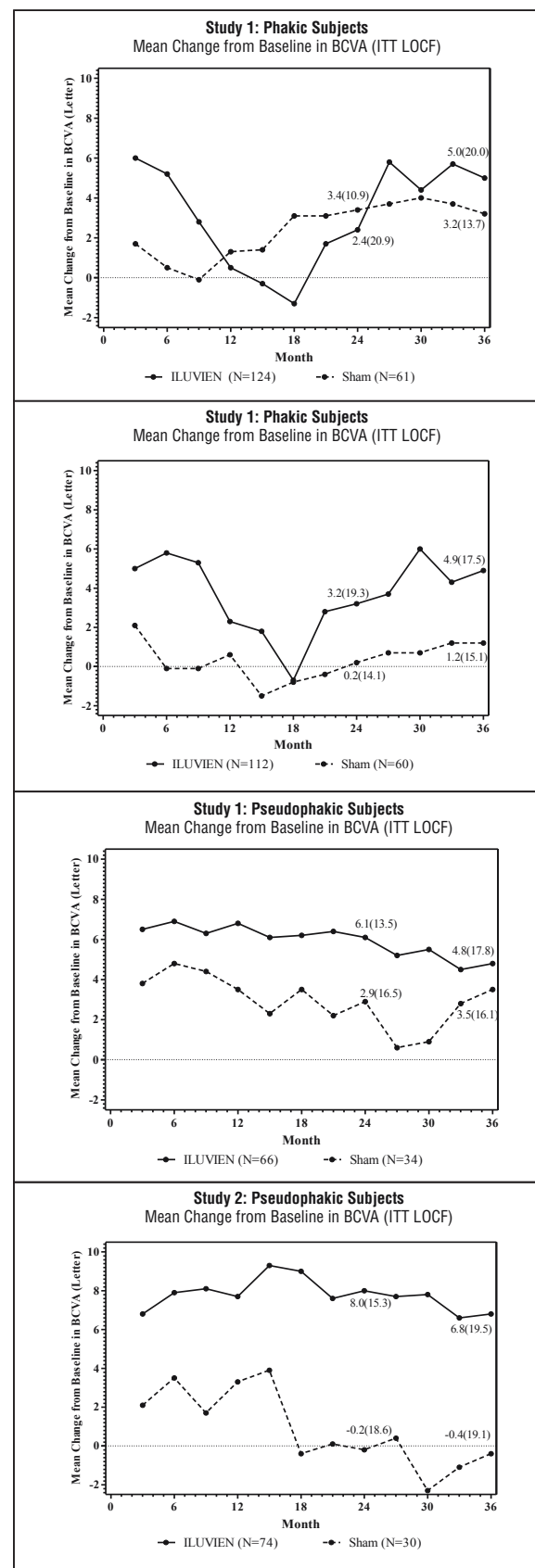


Figure 3: Mean BCVA Change from Baseline



The BCVA outcomes for the Pseudophakic and Phakic subgroups from Studies 1 and 2 at Month 24 are presented in Table 5.

Table 5: Visual Acuity outcomes at Month 24 (Subgroup for pooled data with LOCF)

Lens Status	Outcomes	ILUVIEN	Sham	Estimated Difference (95% CI)
^a Pseudophakic	Gain of ≥15 letters in BCVA (n (%))	39 (28%)	8 (13%)	15.4% (4.4%, 26.3%)
	Loss of ≥15 letters in BCVA (n (%))	7 (5%)	7 (11%)	-5.9% (-14.4%, 2.5%)
	Mean change from baseline in BCVA (SD)	7.1 (14.5)	1.5 (17.4)	5.6 (0.7, 10.6)
^b Phakic	Gain of ≥15 letters in BCVA (n (%))	69 (29%)	22 (18%)	11.1% (2.1%, 20.1%)
	Loss of ≥15 letters in BCVA (n (%))	41 (17%)	7 (6%)	11.6% (5.2%, 18%)
	Mean change from baseline in BCVA (SD)	2.8 (20.1)	1.8 (12.6)	1 (-2.5, 4.4)

^aPseudophakic: **ILUVIEN**, N=140; Sham, N=64

^bPhakic: **ILUVIEN**, N=236; Sham, N=121

16 HOW SUPPLIED/STORAGE AND HANDLING

ILUVIEN® (fluocinolone acetonide intravitreal implant) 0.19 mg is supplied in a sterile single use preloaded applicator with a 25-gauge needle, packaged in a tray sealed with a lid inside a carton.

NDC 68611-190-02

Storage: Store at 15° - 30° C (59° - 86° F).

17 PATIENT COUNSELING INFORMATION

Steroid-related Effects

Advise patients that a cataract may occur after treatment with **ILUVIEN**. If this occurs, advise patients that their vision will decrease, and they will need an operation to remove the cataract and restore their vision.

Advise patients that they may develop increased intraocular pressure with **ILUVIEN** treatment, and the increased IOP may need to be managed with eye drops, or surgery.

Intravitreal Injection-related Effects

Advise patients that in the days following intravitreal injection of **ILUVIEN**, patients are at risk for potential complications including in particular, but not limited to, the development of endophthalmitis or elevated intraocular pressure.

When to Seek Physician Advice

Advise patients that if the eye becomes red, sensitive to light, painful, or develops a change in vision, they should seek immediate care from an ophthalmologist.

Driving and Using Machines

Inform patients that they may experience temporary visual blurring after receiving an intravitreal injection. Advise patients not to drive or use machines until this has been resolved.

Manufactured for:

Alimera Sciences, Inc.
6120 Windward Parkway
Alpharetta, GA 30005

Patented. See: www.alimerasciences.com

ALIMERA
SCIENCES



ILUVIEN[®]
(fluocinolone acetonide
intravitreal implant) 0.19mg



INDICATION

ILUVIEN[®] (fluocinolone acetonide intravitreal implant) 0.19 mg 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.

TO LEARN MORE, PLEASE VISIT ILUVIEN.COM

For additional information about ILUVIEN, please refer to the full Prescribing Information on pages 12 through 15.