Three Reasons to Love This Lens

It's my go-to lens for cataract surgery patients with active lifestyles

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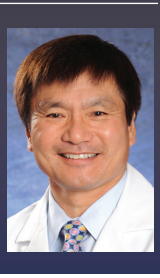

Since I began using the AcrySof® IQ ReSTOR® +2.5D IOL with ACTIVEFOCUS™ design (Alcon), it has become my first choice for patients who are looking to lead active lifestyles after cataract surgery. Here are the three reasons why this is the case.

Reason #1: Designed to Reduce Dysphotopsia

With the advancements made with the ACTIVEFOCUS™ design, very few of my patients who have this lens have complained of glare or halos. The central portion of the lens optic is 100% dedicated to distance vision, which creates a quality of distance vision similar to that of a monofocal IOL. Outside the central optic, seven apodized diffractive steps (fewer than the AcrySof® IQ ReSTOR® +3.0D IOL and spaced farther apart) manage light efficiently, and are designed to minimize the potential for visual disturbances while still providing an extended range of vision compared to a monofocal lens.

Reason #2: Uncompromised Distance

The ACTIVEFOCUS™ design is also responsible for providing the most clear and crisp distance image compared to other multifocals on the market.[1] Its modulation transfer function (MTF) is nearly identical to the MTF of the wavefront-optimized AcrySof® IQ Monofocal IOL; therefore, contrast sensitivity is not lost to any significant degree.[1] In the clinical trial that led to its FDA approval, ReSTOR® +2.5 with the ACTIVEFOCUS™ design delivered comparable quality contrast sensitivity as the AcrySof® IQ Monofocal IOL.[2] In addition, patients binocularly implanted with the lens achieved uncorrected and best-corrected distance visual acuity similar to monofocal control subjects.[2]

In my experience, the ACTIVEFOCUS™ design has resulted in patients being much more satisfied with their postoperative vision even if the surgery doesn't result in a perfect plano refraction. I have found that any degradation of vision resulting from a missed target is much less significant as it is a much more forgiving lens. In my experience with other diffractive IOLs, missing the plano target by 0.5D sphere or 0.75D cylinder could reduce visual acuity from 20/20 to 20/60 or 20/70. With the ACTIVEFOCUS™ optical design, the same patient is more likely to have 20/40, rather than 20/20, visual acuity and have few or no complaints about his or her vision. Now surgeons have access to the ACTIVEFOCUS™ optical design in the ReSTOR® +2.5D toric multifocal IOL, which will allow us to address sphere, toricity, and presbyopia at the same time and will be my first choice for premium lens patients who have significant levels of astigmatism.

Reason #3: Flexibility for Meeting Patients' Vision Goals

A common strategy among surgeons using IOLs with the ACTIVEFOCUS™ design is to implant the lens in the patient's first operated eye (See "Dominant or Non-dominant Eye?" on page 2) and evaluate the result before choosing a lens for the second eye. I, too, prefer to know the result in the first eye before performing surgery on the second eye. Most of my patients with active lifestyles — those who play sports, want to continue to drive at night, use their laptops and have a social life — know that they want to be as close as possible to emmetropic at distance. If I happen to miss the target with the first eye, I can remedy it by targeting the second eye differently. Patients experience the full visual benefit of surgery once both eyes are done. In addition, the potential to either use the ReSTOR® +2.5D IOL in both eyes or the +2.5D IOL in the first eye and the ReSTOR® +3.0D IOL in the second eye affords maximum flexibility for meeting patients' vision goals.

After I implant the ReSTOR® +2.5D IOL with the ACTIVEFOCUS™ design in the first eye:

• If the patient is happy with the distance vision, I use the ReSTOR® +3.0D IOL in the second eye to enhance the range of vision by providing "casual near ability." (See "Setting Expectations," on page 3.) For the majority of my patients, I use this combination approach. They achieve crisp distance vision, most of them report little or no significant visual disturbances, and a good range of vision.

See Important Product Information about the AcrySof® ReSTOR® Multifocal IOLs on page 4

Quality-of-vision enhancements by design[1,2]

Simulated headlight images[1*]

AcrySof® IQ ReSTOR® +2.5 D IOL

AcrySof® IQ Monofocal IOL

***Pinhole images of AcrySof® using the 02 μm SA Modified ISO model eye and a 5-mm pupil at the IOL plane.**

Data and images provided by Alcon Laboratories, Inc.; Alcon Data on File

Figure 1. This is a representation of the appearance of headlights through the AcrySof® IQ ReSTOR® +2.5D IOL and the AcrySof® IQ Monofocal IOL.

Dominant or Non-dominant Eye?

Many surgeons prefer to implant the AcrySof® IQ ReSTOR® +2.5D IOL with the ACTIVEFOCUS™ design in the patient's dominant eye. I take a different approach. I perform the patient's first cataract surgery on the worse eye, whether or not it's the dominant one. This makes more sense to me for two reasons. 1) Patients want to begin seeing better as soon as possible, and 2) cataract patients tend to be older and no longer accommodating; therefore, eye dominance is fluid. With an artificial IOL in place, a non-accommodating patient will use whichever eye is better suited for the task at hand. We see with our brain, and the brain figures out which eye is best for a given task and moves back and forth between eyes as necessary.

The practice of correcting the dominant eye for distance started when we learned that eye dominance did matter for LASIK patients, who tend to be younger than cataract patients and still accommodating. They do better using the dominant eye for distance vision. However, again, this isn't a factor for non-accommodating patients who are receiving fixed lenses. They'll switch between eyes as needed, just as we see them do when they have, for example, monofocal IOLs set for monovision.

• If the refraction is -0.50D, and the patient desires an improvement in distance vision, I use the ReSTOR® +2.5D IOL for the second eye, but I don't use the IOL Master choice for plano. Instead, because I can expect healing and effective lens position to be the same in the second eye as it was in the first, I use a lower-power implant to achieve plano. If the patient desires improvement at near, I use a ReSTOR® +3.0D IOL in the second eye.

• If the refraction is +0.50D and the patient isn't completely satisfied, but has no dysphotopsias, I consider the +3.0 IOL targeted for plano for the second eye. The +2.5D IOL may provide a near focal point too far out for the patient's liking, and the +3.0D IOL enhances the near ability.

• If the refraction is +0.50D, or astigmatism remains, and the patient complains of glare, I use a +2.5D IOL targeted for plano in the second eye and expect binocular summation to alleviate the symptoms.

• If the refraction is plano, but the patient complains of glare or halos, I use the +2.5D IOL targeted for plano in the second eye and expect binocular summation to work its magic.

More Patients Can Benefit

Given the excellent distance vision and quality range of vision the ACTIVEFOCUS™ design provides, it's a great choice for:

• younger, active cataract patients who perform many activities that require good distance vision

• patients who do a great deal of work on computers. Many prefer to view the screen at a distance of about 20 to 22 inches, and the lens has a near focal point of 21 inches.

• patients, such as those with mild dry eye or early AMD, in whom loss of contrast with other presbyopia-correcting IOLs would be worrisome

See Important Product Information about the AcrySof® ReSTOR® Multifocal IOLs on page 4

Setting Expectations

As with any presbyopia-correcting lens, success with the AcrySof® IQ ReSTOR® +2.5D IOL with the ACTIVEFOCUS™ design depends quite a bit on properly setting expectations. I start by making sure patients understand that our primary priority is safely removing the cataract to create a clear optical pathway. Our goal is to remove the clouded lens and replace it with a clear one. This sets up a low hurdle for me to clear with regard to refractive outcome.

Next, most of my patients seeking some level of spectacle independence after cataract surgery want to keep their good distance vision, and I can tell them with confidence that it's possible. However, I ensure that they know they may not achieve their best distance vision until after we operate on the second eye. Not every eye heals the same, which means effective lens position may deviate from the average. We may have to utilize the second-eye surgery to compensate for that.

Finally, while the goal is to provide a broader range of vision than a monofocal lens can provide, I temper enthusiasm in this area. I don't tell patients they'll have great close-up reading ability. Instead, I explain that they'll have what I call "casual near ability." They won't have to hassle with reading glasses for every near and intermediate visual task, for example, when they need to sign a credit card receipt or use the computer. But they'll likely need to use the readers to see small print, such as on a medicine label or in a magazine. All of my patients have been very happy with this scenario. In general, they achieve the best near vision when I place an AcrySof® IQ ReSTOR® +2.5D IOL with ACTIVEFOCUS™ in one eye and an AcrySof® IQ ReSTOR® +3.0 IOL in the other. They're thrilled they don't have to fumble for reading glasses when they're on the move, and they don't mind using them in predictable locations, such as for reading a book on the couch.

• patients in whom dysphotopsias would be a significant concern, such as pilots, truck drivers, or engineers. While I may be cautious about recommending this lens for a commercial airline pilot, I've used it for several pilots for whom flying is more of a hobby.

• patients who want a range of vision but want to avoid a multifocal IOL because they have read about halos and rings on the Internet. I show these patients a representation of the appearance of headlights through the AcrySof® IQ ReSTOR® +2.5D IOL and the AcrySof® IQ Monofocal IOL. I also educate patients about the benefits of the ACTIVEFOCUS™ design. I also explain to this group of patients that some of the ReSTOR® information on the Internet is quite old and predates the advancements with the ACTIVEFOCUS™ design.

• patients who have previously had LASIK, provided their level of higher-order aberrations isn't too high. Unless the goal of the procedure was to correct extreme nearsightedness, or it was a now-outdated procedure resulting in a small optical zone, the ReSTOR® +2.5D IOL with ACTIVEFOCUS™ design has been used in my practice with great success in former LASIK patients. The aberrations on the cornea may even help to provide better-than-expected near vision due to added depth of field.

A Range of Vision With Uncompromised Distance

Prior to the availability of the ACTIVEFOCUS™ design, implanting a diffractive lens to give patients a range of good vision meant sacrificing best potential distance vision. With this more advanced option, with contrast sensitivity comparable to the AcrySof® IQ monofocal, this concern goes away, and my patients and I couldn't be happier about it.

References

1. Vega F, Alba-Bueno F, Millán MS, Varón C, Gil MA, Buil JA. Halo and through-focus performance of four diffractive multifocal intraocular lenses. *Invest Ophthalmol Vis Sci.* 2015;56(6):3967-3975.
2. Alcon Data on File (11 Apr 2016)
3. AcrySof® IQ ReSTOR® +2.5D Multifocal IOL Directions for Use.

See Important Product Information about the AcrySof® ReSTOR® Multifocal IOLs on page 4

ACRYSOF® IQ RESTOR® FAMILY OF MULTIFOCAL IOLS
IMPORTANT PRODUCT INFORMATION

CAUTION: Federal (USA) law restricts this device to the sale by or on the order of a physician.

INDICATIONS: The AcrySof® IQ ReSTOR® Posterior Chamber Intraocular Multifocal IOLs include AcrySof® IQ ReSTOR® and AcrySof® ReSTOR® Toric and are intended for primary implantation for the visual correction of aphakia secondary to removal of a cataractous lens in adult patients with and without presbyopia, who desire near, intermediate and distance vision with increased spectacle independence. In addition, the AcrySof® IQ ReSTOR® Toric IOL is intended to correct pre-existing astigmatism. The lenses are intended to be placed in the capsular bag.

WARNINGS AND PRECAUTIONS: Careful preoperative evaluation and sound clinical judgment should be used by the surgeon to decide the risk/benefit ratio before implanting a lens in a patient with any of the conditions described in the Directions for Use labeling for each IOL. Physicians should target emmetropia, and ensure that IOL centration is achieved. Care should be taken to remove viscoelastic from the eye at the close of surgery. The ReSTOR® Toric IOL should not be implanted if the posterior capsule is ruptured, if the zonules are damaged, or if a primary posterior capsulotomy is planned. Rotation can reduce astigmatic correction; if necessary lens repositioning should occur as early as possible prior to lens encapsulation. Some patients may experience visual disturbances and/or discomfort due to multifocality, especially under dim light conditions. A reduction in contrast sensitivity may occur in low light conditions. Visual symptoms may be significant enough that the patient will request explant of the multifocal IOL. Spectacle independence rates vary; some patients may need glasses when reading small print or looking at small objects. Posterior capsule opacification (PCO), when present, may develop earlier into clinically significant PCO with multifocal IOLs. Prior to surgery, physicians should provide prospective patients with a copy of the Patient Information Brochure available from Alcon informing them of possible risks and benefits associated with the AcrySof® IQ ReSTOR® IOLs. Do not resterilize; do not store over 45° C; use only sterile irrigating solutions such as BSS® or BSS PLUS® Sterile Intraocular Irrigating Solutions.

ATTENTION: Reference the Directions for Use labeling for each IOL for a complete listing of indications, warnings and precautions.

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