Pre-Op to Post-Op:
A Complete Optometrist’s Guide to Advanced Technology IOLs.
Your Role in Guiding Patients Through Cataract Surgery

As an optometrist, you’ve been guiding your patients through their entire visual journey. And now, as many of these patients begin to enter the point in their lives when cataracts start to affect vision, your rapport and experience with them – their trust and loyalty – will be more important than ever.

It’s always been your first priority to give your patients the best vision possible, and now, new options like advanced technology intraocular lenses (IOLs) can mean new opportunities for ODs, surgeons and patients alike.

What follows is a comprehensive walk-through of your critical role in the cataract surgery process: Advice on guiding your patients through the procedure, as well as a complete discussion on advanced technology lenses – what makes these IOLs different, how to talk about them with your patients, and how they can benefit your practice.

These days, recommending advanced IOLs can be just as beneficial to you and your practice as it is to your patients.

Increase Patient Satisfaction, Enhance Your Reputation

From the beginning, your goal has always been to provide your patients with the very best vision and quality of care. Advanced technology lenses can help you do more than ever to accomplish this goal – and increase the loyalty of your patients along the way.

By walking your patients through the cataract surgery process, from pre-op examination through post-op recovery, providing advice and recommendations along the way, you’ll gain a reputation as an important source of knowledge at a time when your patients need it most.

Advanced Technology IOLs – WHY THEY MATTER

Advanced technology IOLs offer new innovations and the potential for better results than ever:

• New technologies are designed to offer sharper eyesight and vision closer to a healthy, youthful lens.²

• Advanced technology lenses can correct conditions in addition to cataracts, like astigmatism, spherical aberration and presbyopia.

• Multifocal lenses provide good vision at all distances, so that patients no longer need to rely as much on glasses after surgery.⁴

Please refer to the Important Safety Information on page 20 for additional information about ALCON® globally AcrySof® IOLs.

REMEmBER: Even with advanced technology lenses, there may still be some need for further vision correction after cataract surgery (e.g., reading glasses).
The AcrySof® Advantage

Alcon’s line of AcrySof® IQ IOLs combines trusted lens technology with advanced optics that push the limits of what artificial lenses can do. Since 1995, over 60 million AcrySof® IOLs have been implanted worldwide.¹

AcrySof® IQ IOLs have built upon a proven lens platform with unique enhancements like asphericity and blue light filtering, for IOLs that are one step closer to matching the vision of the natural lens.²

Asphericity

As the lens ages, it often leads to an increase in spherical aberration, which can result in defocused vision and loss of contrast sensitivity.²

The AcrySof® IQ IOL utilizes a unique aspheric optic to correct for spherical aberration, allowing patients to experience:

- **Improved image quality and enhanced clarity**, with increased contrast sensitivity.²

- **Clinically and statistically significant improvements in functional vision** in low-light conditions – when patients need it most (such as when driving at night).²

Positive spherical aberration occurs when light rays are overrefracted at the periphery of an optical structure, like a spherical IOL, resulting in a region of defocused light and decreased image quality.

The aspheric optic of the AcrySof® IQ IOL correctly aligns light rays to compensate for positive corneal spherical aberration, providing improved vision quality.

Please refer to the Important Safety Information on page 20 for additional information about ALCON® globally AcrySof® IOLs.
Talking with Your Patients about the AcrySof® IQ Toric IOL

If your keratometry readings indicate that the patient has more than 0.75 D of pre-existing corneal astigmatism, have a discussion with them about their options for correcting the problem:

- **Remind patients that cataract surgery alone cannot correct astigmatism.**
  
  Recommending toric IOLs can be less of a challenge than other advanced technology lenses since it is a monofocal lens. Your patients already know they have astigmatism, and that special measures are required to correct the condition.

- **Explain the options to your patients.**
  
  Until recently, the only viable options for astigmatism correction after cataract surgery were glasses or contact lenses. Limbal relaxing incisions can help to a point, but not with very high levels of astigmatism.

- **Present the AcrySof® IQ Toric IOL as an advanced new option.**
  
  Explain that the innovative technology behind AcrySof® IQ Toric lenses allows for a combined vision solution, correcting cataracts and astigmatism in one, for the best opportunity to minimize the need for glasses for distance vision.

- **Be honest about the pros and cons.**
  
  Explain to the patient that, although the AcrySof® IQ Toric IOL presents the opportunity for a significantly reduced need for glasses after surgery, it’s more than likely they will still need reading glasses for close-up vision.

- **Discuss the risks of cataract surgery with your patients.**
  
  Although cataract surgery has been shown to be both safe and effective, it’s important to educate the patient on the potential risks, complications and side effects associated with the procedure, so they can make an informed decision.

- **Remind patients of the activities they can enjoy with corrected distance vision after surgery.**
  
  Include any sports, hobbies and outdoor activities you know your patient enjoys. Don’t forget night driving – it’s often a major concern with patients.

Please refer to the Important Safety Information on page 20 for additional information about ALCON® globally AcrySof® IOLs.
Talking with Your Patients about the AcrySof® IQ ReSTOR® IOL

- **Explain presbyopia to your patients.**
  Let them know that cataract surgery alone can’t correct the condition, and that most artificial lenses only correct vision at one distance, meaning they’d still need glasses to read and see up-close.

- **Determine if your patients are interested in increased spectacle independence.**
  At this point, many of your patients have likely been wearing glasses for so long that they may have no preference either way. If, however, they have an active lifestyle or only recently made the switch to glasses, they may be more intrigued by the chance to live with less reliance on glasses. Either way, it’s worth raising the question.

- **Explain that the AcrySof® IQ ReSTOR® IOL is an advanced technology lens that offers new opportunities for increased spectacle independence.**
  Describe the differences between standard monofocal lenses and multifocal technology, and how a full range of vision – near, far, and in-between – can help increase freedom from glasses.

- **Be honest about the pros and cons.**
  Even though the AcrySof® IQ ReSTOR® lens offers a full range of vision and increased spectacle independence, patients don’t always walk away from surgery completely glasses-free. Explain that, even with advanced technology lenses, they may still sometimes need glasses after surgery – although they will likely be less reliant on them.
  Also note that IOLs aren’t exactly like the natural human lens, so there may be a learning curve that comes with the new technology.

- **Describe the potential side effects.**
  There is the potential for mild visual disturbances with multifocal lenses – over time, many people grow accustomed to these disturbances and stop noticing them, but that isn’t always the case.
  Also, apodized diffractive technology allows for quality distance vision in low light, but it can make reading in poorly lit conditions more challenging.

- **Remind patients of the activities they can enjoy with their reduced reliance on glasses.**
  Include any sports, hobbies and outdoor activities you know your patient enjoys. In particular, reading, night driving and water sports can be important points of discussion.
Before Cataract Surgery

**Education**

One of your most important roles in the cataract surgery process will be that of an educator. As the one most likely to diagnose the problem, you’ll be the first line of defense, providing crucial information and reassurance. Your patients will have lots of questions, and you should be ready with answers:

- What are cataracts?
- How do cataracts affect vision?
- What symptoms are associated with cataracts?
- What causes cataracts?
- How are cataracts treated?
- Could you describe the surgical procedure?
- What are the risks and benefits of surgery?

**Start Preparing Patients Early**

As patients start approaching their late 40s and early 50s, begin mentioning cataracts during routine checkups:

- **Reassure patients** that they shouldn’t be concerned yet, but remind them to keep vigilant for signs and symptoms.
- **Reinforce regular checkups** to keep an eye on the progression of cataracts.
- **Help patients understand** that, as cataracts develop, glasses and contacts will no longer help (neither will LASIK), and that surgery may be the only solution.
- **Outline how treatment works** early on, so that patients understand the right steps to take when surgery is required.

**Advantages of Cataract Surgery**

Too often, patients see cataracts as an entirely negative development — by explaining that new advances have made it a great time to have cataract surgery, you can change the story and help patients see surgery as an opportunity:

- **Ask patients about the hobbies and activities they enjoy**, things they may be losing due to cataracts. Let them know they may be able to regain these important activities, and the quality of life they may have been missing out on.
- **Help your patients understand that cataract surgery is in most cases an outpatient procedure** that can lead to major improvements — not only giving them back what they’ve lost, but allowing them to do more than before.
- **Emphasize that advanced technology IOLs can make a significant difference** when it comes to gaining the best vision, a more youthful lifestyle and improved quality of life.

**Provide Patient Resources**

The surgeon you refer your patients to will offer more detailed, step-by-step information as necessary, but in the meantime, you can direct patients to a number of educational websites, where they can get the full story on cataract surgery and their options:

ReclaimYourVision.com

TIP: Visual aids — handouts, diagrams, videos — can help your patients understand the how and why of cataracts quickly and easily.

**“It’s nothing to worry about now, but over the next few years, you may begin to notice your vision getting blurrier from cataracts. This is perfectly natural, but we’ll need to monitor your vision, so you don’t have to put up with blurry vision any longer than you have to.”**

Please refer to the Important Safety Information on page 20 for additional information about ALCON® AcrySof® IOLs.
Evaluate the Eyes
Based on the patient’s past visual history, as well as the tests you perform once you’ve diagnosed them with cataracts, there are a number of criteria you can look for to determine if a patient is a candidate for advanced technology lenses, and which type of lens makes the most sense for them:

Assessing Overall Potential for Advanced Technology Lenses

- **Evaluate pre-existing ocular pathology.**
  - Glaucoma
  - Extremely small pupils
  - Any corneal, retinal or endothelial pathology that may limit visual acuity
  - Ocular surface disease (dry eye)
    - Patients with ocular surface disease may be candidates for advanced technology lenses, but they should be aggressively treated for the condition prior to referral.

- **Assess potential for good bilateral visual acuity.**
  - Conditions like strabismus or amblyopia can limit optimal visual performance.
  - Patients who have had prior refractive surgery are not ideal candidates for advanced technology lenses.
    - Generally, multifocal lenses like the AcrySof® IQ ReSTOR® IOL are not recommended for patients with previous procedures.
    - These patients may still be candidates for astigmatism correction with the AcrySof® IQ Toric IOL, however.

- **Determine if the patient exhibits poor fixation.**
  - This can be due to ocular pathology, such as macular degeneration.

- **Calculate keratometry readings.**
  - Keratometry plays a critical role in the accuracy of IOL power calculation by detecting and measuring astigmatism.
    - K readings may be obtained with a computerized or manual instrument.
  - Measure K readings on an untouched clear cornea.
    - No drops, applanation or corneal manipulation.
  - For contact lens wearers, soft lenses must be removed at least 2 weeks prior to measurements being taken, and 4 weeks for GP lenses.
  - Ensure K readings are stable.
    - Take 2 readings one week apart before using for IOL calculations.

- **Evaluate level of astigmatism.**
  - If the patient’s regular astigmatism < 1.00 D, they may be ideal for the AcrySof® IQ ReSTOR® IOL.
  - If the patient’s regular astigmatism > 0.75 D, they may be ideal for the AcrySof® IQ Toric IOL.
  - If the patient exhibits irregular astigmatism, achieving an ideal correction with any lens may be a challenge.

Specific Criteria for the AcrySof® IQ Toric IOL

- Cataracts with pre-operative regular astigmatism
- Within the available IOL diopter range:
  - Sphere: +6.0 to +30.0 D in 0.5 D increments
  - Cylinder: 1.50 D, 2.25 D, 3.00 D, 3.75 D, 4.50 D, 5.25 D, and 6.00 D

Specific Criteria for the AcrySof® IQ ReSTOR® IOL

- Cataract patients with or without presbyopia
- Within the available IOL diopter range:
  - +6.0 to +34.0 D
- Have 1.0 D or less of astigmatism
- Implantation may require further consideration of the benefit/risk ratio in the case of certain complications during surgery, such as:
  - Significant vitreous loss
  - Pupil trauma
- Factors that may impact long-term IOL performance:
  - Zonular damage
  - Capsulorhexis tear/rupture
  - Capsular rupture
You’re not there to sell patients a lens – you’re on their side. Providing education on these lenses will help them accomplish their visual goals. Here’s how you might describe two different advanced technology IOLs to your patients:

Cataract surgery usually includes a basic artificial lens, which allows you to see clearly at a distance. To read, or do other close-up tasks, you’d still need reading glasses after surgery. However, based on your lifestyle, and all the different things you like to do, I’d recommend the AcrySof® IQ ReSTOR® lens. This multifocal lens allows you to have functional vision at all distances – near, far and everywhere in-between – with the potential for freedom from glasses. There’s a chance you may still need glasses for some tasks after surgery, but overall, you’ll be less reliant on glasses, for things like driving at night.”

When it comes time to recommend an IOL to one of your patients, it’s not enough to just tell them which lens you’re recommending – product names often sound alike to patients, and it can be easy to forget your recommendation by the time they see their referred surgeon. To really make an impact, you need to convey the specific benefits of the lens you’ve recommended, so they’ll remember why this lens is right for them.

Advanced technology IOLs can provide a dramatic change in your cataract patients’ vision. However, artificial lenses can’t yet match the vision of a healthy natural lens. With even the most advanced IOLs, there may be a few limitations and compromises:

- Slight visual disturbances (like halos or glare)
- Challenges adapting to the new technology
- Limited vision at certain ranges
- Continued need for some form of vision correction (e.g., reading glasses)

In general, most patients will be satisfied with their results, but of course there are always exceptions. To help keep dissatisfied patients to a minimum, it’s important to provide patients with a realistic set of standards of what they can and cannot expect from advanced technology lenses, so they can make an informed decision.

Try and keep your discussions balanced. For instance: Mild visual disturbances like halos and glare can be common with multifocal lenses; however, in a clinical study, the majority of patients indicated they would have multifocal lenses implanted again.
Refer Patients to the Right Surgeon

You’ve evaluated the patient’s need for surgery. You’ve recommended the IOL that’s right for them. But, don’t forget to consider which surgeon is the best fit for them, too.

Ensure Patients Follow Through

It’s usually not a good idea to leave the task of contacting your referral to the patient – surgery can be scary, and left to their own devices, patients are likely to put off the procedure, or forget about it entirely.

Always try to schedule the patient’s consultation for them, and forward a written referral to the surgeon. Follow-up with the surgeon to make sure the patient actually made it to their appointment, and took steps to arrange a procedure. After all, your patients can’t benefit from surgery if they keep avoiding it!

Keep Lines of Communication Open with the Surgeon

It’s up to you to provide your referred surgeon with information about the patient – their history and test results, potential contraindications to surgery, your lens recommendation, and anything else the surgeon might need to know in order to properly treat the patient.

In return, the surgeon should be providing you with regular updates about the patient’s progress – which lens they chose, how the procedure turned out, whether there were any complications, anything you’ll need to make sure the patient gets the best results when they come back to you for post-op treatment.

Keep this working relationship proactive and helpful, and the surgeon will do the same for you.

Typical Post-Op Checkups

Generally, most patients heal quickly from cataract surgery, and rapidly recover vision that’s an improvement from what they experienced before the procedure.

Day 1 to 2 Week Post-Op
(First lens implanted)

- Measure visual acuity.
- Test at all distances if the patient has a presbyopia-correcting IOL.
- Assess ocular health concerns:
  - Infection
  - Excessive inflammation
  - Anterior chamber reaction
  - Intraocular pressure
  - Corneal integrity (including tear film and lids)
- Monitor IOL position, centration and alignment.
- Continue pharmaceutical therapy:
  - Antibiotics for infection
  - Steroids
  - NSAIDs
- Treat dry eye aggressively.
- Address patient concerns related to visual function.
  - Explain that visual acuity typically increases when the second eye has been implanted.

1 Month Post-Op
(Second lens implanted)

- Assess both eyes for ocular health concerns, as well as refractive status.
- Patient should demonstrate greatly improved visual acuity.
- Conduct a dilated fundus examination to check for cystoid macular edema.
- If edema persists, consider referring the patient back to the surgeon, or consulting with a retina specialist.
- Taper off post-op pharmaceutical regimen.
- Maintain aggressive dry eye management.
- Prescribe glasses, if necessary.

3 Months Post-Op

- Perform detailed assessment of refractive status.
- Check visual acuity at appropriate distances, in both photopic and mesopic conditions.
- Provide encouragement or advice on how to maximize lens performance.
- Explain ideal lighting conditions and focal distances.
- Help enhance the ocular surface with lubricant eye drops.
- Survey patient satisfaction.

Please refer to the Important Safety Information on page 20 for additional information about ALCON® globally AcrySof® IOLs.
Complications and Side Effects

While serious complications are rare with cataract surgery, minor side effects are perfectly natural, and are to be expected after any procedure. Treating these conditions quickly and effectively can make all the difference between a happy patient and a dissatisfied one.

What You Can Do to Help

Many side effects and complications are minor and will pass on their own, but complications like dry eye should be aggressively treated to optimize the patient’s outcome.

• Ocular Surface Disease (Dry Eye)
  Managing dry eye is incredibly important – particularly for patients who may not be satisfied with their vision – as advanced technology IOLs are often extremely dependent on the presence of healthy tear film. Treatment can help significantly reduce the frequency and severity of vision fluctuations.

  • Over the Counter Treatment
    - SYSTANE® Lubricant Eye Drops
  • Prescription Treatment
    - Cyclosporine Eye Drops
    - Punctal Plugs

When to Refer Back to the Surgeon

Some complications and side effects may require a more extensive course of treatment, possibly even surgical re-intervention, meaning it may be best to refer the patient back to the surgeon. These conditions include:

• Posterior Capsular Opacification
• Persistent Tear Film Abnormalities
• Residual Refractive Error
  • With advanced technology IOLs, even minimal refractive errors can cause a significant variation in lens performance.

Counseling Patients

It’s important to continue managing patients after surgery, keeping them both optimistic and realistic about their outcomes.

Putting Dissatisfaction in Perspective

Even if you set realistic expectations beforehand, some patients will expect 20/20 vision after surgery, or vision that’s just like their eyes were in their youth. If they opted for an advanced technology lens, these expectations can be even higher – anticipating perfect vision at all distances, or complete freedom from glasses.

Naturally, any result that falls short of these benchmarks will be a disappointment; that’s why it’s important to help patients look beyond what the lenses can’t do, and help them realize just how much their vision has improved since surgery.

• Perform a few simple vision tests for them, reminding them how they tested before surgery, and showing how they’ve improved since.
• Ask them what activities they’ve been able to start doing again – if it’s easier to drive or read or spot things at a distance.
• Ask how they’ve been feeling lately – if they’re more active or confident or independent.
• Remind them that, even if they aren’t totally satisfied with their vision at the moment, the results tend to keep getting better in the weeks and months after surgery (particularly visual disturbances like glare and halos).

Help your patients appreciate the amazing gift they’ve been given, and they’ll appreciate your role in the process all the more.
IMPORTANT SAFETY INFORMATION

AcrySof® IQ ReSTOR® IOL

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 Lens (IOL) is intended for primary implantation for the visual correction of aphakia secondary to removal of a cataractous lens in adults with and without presbyopia, who desire near, intermediate and distance vision with increased spectacle independence. The lens is intended to be placed in the capsular bag. WARNINGS/ PRECAUTION: Careful preoperative evaluation and sound clinical judgment should be used by the surgeon to decide the risk/benefit ratio before implantiing a lens in a patient with any of the conditions described in the Directions for Use labeling. 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. Some patients may experience visual disturbances and/or discomfort due to multifocality, especially under dim light conditions. Clinical studies with the AcrySof® ReSTOR® lens indicated that posterior capsule opacification (PCO), when present, developed earlier into clinically significant PCO. Prior to surgery, physicians should provide prospective patients with a copy of the Patient Information Brochure available from Alcon for this product informing them of possible risks and benefits associated with the AcrySof® IQ ReSTOR® IOLs. Studies have shown that color vision discrimination is not adversely affected in individuals with the AcrySof® Natural IOL and normal color vision. The effect on vision of the AcrySof® Natural IOL in subjects with hereditary color vision defects and acquired color vision defects secondary to ocular disease (e.g., glaucoma, diabetic retinopathy, chronic uveitis, and other retinal or optic nerve diseases) has not been studied. 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 a complete listing of indications, warnings and precautions.

AcrySof® IQ Toric IOL

CAUTION: Federal (USA) law restricts this device to the sale by or on the order of a physician. INDICATIONS: The AcrySof® IQ posterior chamber intraocular lens is intended for the replacement of the human lens to achieve visual correction of aphakia in adult patients following cataract surgery. This lens is intended for placement in the capsular bag. WARNINGS/ PRECAUTION: Careful preoperative evaluation and sound clinical judgment should be used by the surgeon to decide the risk/benefit ratio before implantiing a lens in a patient with any of the conditions described in the Directions for Use labeling. Caution should be used prior to lens encapsulation to avoid lens decentrations or dislocations. Studies have shown that color vision discrimination is not adversely affected in individuals with the AcrySof® Natural IOL and normal color vision. The effect on vision of the AcrySof® Natural IOL in subjects with hereditary color vision defects and acquired color vision defects secondary to ocular disease (e.g., glaucoma, diabetic retinopathy, chronic uveitis, and other retinal or optic nerve diseases) has not been studied. 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 a complete listing of indications, warnings and precautions.

REFERENCES:
2. AcrySof® IQ IOL Directions for Use.
3. AcrySof® IQ Toric IOL Directions for Use.
4. AcrySof® IQ ReSTOR® IOL Directions for Use.

© 2013 Novartis      04/13        IOL12604PA-B

a Novartis company