

# Cataract & Refractive Surgery TODAY



## *Performance-Driven Practices Adopting Premium IOLs*

Early adopters share their strategies  
for succeeding with new-technology IOLs.

**Participants: Kerry D. Solomon, MD, Moderator • Robert J. Cionni, MD • Kay Coulson  
Edward J. Holland, MD • Professor Thomas Kohlen • Stephen S. Lane, MD**

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# *Performance-Driven Practices Adopting Premium IOLs*

Early adopters share their strategies for succeeding with new-technology IOLs.

*The goal of this discussion is to provide pearls for refractive cataract surgeons who are considering adopting premium IOLs, as well as pointers for those who are comfortable with these lenses but wish to continue increasing their success. This distinguished panel includes both European and American leaders in ophthalmic surgery as well as a well-respected consultant to ophthalmic practices.*

—Kerry D. Solomon, MD, Moderator

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**Dr. Solomon:** Let's start by introducing ourselves and describing our experience with premium refractive IOLs.

**Dr. Cionni:** I have been implanting premium refractive IOLs since I participated in the FDA clinical trial of the AcrySof ReSTOR IOL (Alcon Laboratories, Inc., Fort Worth, TX) 5 or 6 years ago. Since then, I have been implanting more of these lenses each year, thanks to patients' growing awareness of the option and my own increasing comfort with the technology.

**Prof. Kohnen:** I have been implanting the AcrySof ReSTOR IOL since 2001, when the European FDA trial commenced. I have also had some experience with other models of premium IOLs, including the Array IOL (Advanced Medical Optics, Inc., Santa Ana, CA) and the Akkommodative 1CU (not available in the US; Humanoptics AG, Erlangen, Germany), although they were not marketed as such. I continue to implant greater numbers of these IOLs.

**Dr. Lane:** I have a lot of experience with implanting the AcrySof ReSTOR IOL and am quite familiar with its data. I was also a medical monitor in the lens' FDA clinical study and have been implanting it since it became available on the market. My staff and I have noticed that our implantations of this and other premium refractive IOLs have been increasing yearly. I attribute this success to our becoming more comfortable talking to patients about these lens options as well as the fact that our results continue to improve.

**Dr. Holland:** I have been implanting the AcrySof ReSTOR IOL since its FDA approval, and I was involved in the AcrySof Toric IOL's FDA trial (I also consider this lens a premium refractive IOL). I increased the use of premium IOLs in my practice gradually. I think ophthalmologists are still learning which patients benefit from these lenses and which patients are not optimal candidates.

**Dr. Solomon:** I was also involved with the AcrySof ReSTOR IOL early on as one of the original investigators in the FDA trials. Since the lens' approvals, we have learned more about presbyopia-correcting lens technology and what it can and cannot deliver. I also agree that more patients are learning about this modality and helping to build awareness and acceptance of it.

**Ms. Coulson:** I have been helping comprehensive ophthalmology practices develop their elective IOL service

lines since the Centers for Medicare and Medicaid Services approved incremental charges for noncovered presbyopia and astigmatism correction. This shift from insurance to private pay requires most practices to adjust staffing, scheduling, counseling, and patient education.

### 1 TIPS FOR GETTING STARTED

**Dr. Solomon:** From the standpoint of getting started with premium lenses, either toric or presbyopia-correcting, can you each tell me what was most helpful to your practice and give me your number one recommendation for first-time adopters?

**Ms. Coulson:** I recommend that surgeons and their staff adjust appointment calendars to conduct all lens evaluation/surgical screening appointments on a single clinic day or two half days. This scheduling allows both the surgeon and staff to achieve a rhythm in patient flow and in talking about cataract surgery and lens upgrade options. They can spend more time with these patients without being distracted by a diverse, overbooked schedule.

**Dr. Solomon:** That is a great suggestion. Have any of you done that?

**Dr. Cionni:** My practice consists of mostly cataract evaluations, so it is easy for us to discuss premium IOLs with patients and keep our message consistent.

**Dr. Holland:** My practice is largely cornea based. To illustrate Ms. Coulson's point, when my staff and I first adopted premium refractive IOLs, we had complicated corneal consultations mixed with cataract surgical cases on the same days. Sometimes, our cataract patients would have to wait for us to finish treating the corneal patients, so we changed our scheduling. We now see corneal patients on half days and cataract patients on separate half days. This approach streamlines our patient flow and allows the technicians who are doing the patient workups to discuss the premium IOLs. Separating these patients made a big difference in my practice.

**Dr. Solomon:** My staff and I also made changes similar to what Ms. Coulson described. Let's continue with our suggested pearls.

**Dr. Cionni:** My advice for new adopters of these IOLs is (1) for the entire staff to be well versed and consistent in



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how they explain these technologies to patients and (2) to get educational material to patients preoperatively. The conversation in the examination lane is much shorter and conversion to a premium refractive IOL is much more likely when the patient has a basic understanding of the technology and his options before he comes into your practice.

**Dr. Solomon:** What specifically do you send patients in advance, and how do you identify to whom to send it?

**Dr. Cionni:** Our telephone counselors ask new callers key questions that help identify those who are likely to be cataract patients and therefore possible candidates for premium refractive lenses. Then, we mail brochures that explain what a cataract is, how we treat it, what astigmatism and presbyopia are, and what options are available for lens replacement.

"I think the biggest hurdle to surgeons' adopting premium IOLs is their fear of how to manage postoperative refractive errors."  
—Edward J. Holland, MD

**Dr. Solomon:** Did you develop your own patient education brochure?

**Dr. Cionni:** My staff and I developed our educational material to be completely generic. The materials simply inform them that there are options in IOLs and that my staff and I will guide patients to their best choice.

**Dr. Solomon:** Ms. Coulson, do you have an opinion about physicians' educational material?

**Ms. Coulson:** Educational materials should be personalized to the practice and communicate to prospective patients that the practice offers a complete range of treatment options. These materials should instill confidence in the surgeon's capabilities and reassure patients that he and his staff will address whatever their needs are with the best possible solution. They should also engage patients in thinking about the vision they want after cataract surgery. Because practitioners never before had such extensive

options to discuss with cataract patients, education needs to remove the fear of cataract surgery and create an opportunity in the patient's mind to restore vision that has been lost over the years.

**Prof. Kohnen:** I have a different view, because we European practitioners do not have the same payment strategy for premium IOLs. If we want to give patients these lenses, we have to convince them to pay for the entire procedure out of pocket, otherwise they receive a standard IOL. Thus, converting patients to these lenses is much more difficult than for US physicians. I am careful to select refractive IOL patients prudently, not promise them too much, and make sure that their outcome is very good. I am especially diligent in treating their astigmatism to ensure a good outcome. When the patient is paying for the entire procedure himself (ie, €2,000/eye), we have to deliver.

**Dr. Solomon:** Let's discuss patient selection.

**Prof. Kohnen:** Surgeons who cannot perform refractive surgery in their practices should begin offering premium IOLs to patients with low astigmatism first. The same is true for surgeons who do not perform limbal relaxing incisions (LRIs); they should focus on high and low hyperopes and patients with less than 0.75 D of astigmatism. These are the happier patients, and they will help to increase a surgeon's volume. Incidentally, however, all cataract surgeons should begin to train for refractive cataract surgery, because this is the future of the profession.

**Dr. Holland:** I think the biggest hurdle to surgeons' adopting premium IOLs is their fear of how to manage postoperative refractive errors. I suggest that these surgeons start with a toric IOL; I think that is the easiest first step into premium IOLs. They should also calculate the amount of astigmatism induced by their own incisions. There are plenty of helpful Web sites and other educational information available that allow practitioners to track a number of surgical cases and calculate their induced astigmatism. One example is IOL Power Calculation in Eyes That Have Undergone LASIK/PRK/RK, developed by Warren Hill, MD; Li Wang, MD, PhD; and Douglas Koch, MD; and available at <http://iol.ascrs.org> (also see the sidebar Toric IOL Calculator on page 15). Surgeons may then start managing cataract patients with astigmatism using the toric IOL. Once they get comfortable with that modality, the next step is to move to presbyopia-correcting IOLs. I think many cataract surgeons who have not practiced refractive surgery can make that step to the toric IOL easily.





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**Dr. Lane:** The best pearl I can give is for surgeons to carefully query their patients about their visual demands and preferences. It is critical that physicians understand what is important to patients. Are they looking for great distance vision? Do they want distance and near function? Is intermediate vision important to them?

If I could give a second-best tip, it is for surgeons to clearly understand the strengths and weaknesses of all of the premium IOLs so they can cherry-pick the best lens for each patient based on his visual needs. They should know which lens to choose for the circumstance.

“Expectations are different now, and if surgeons cannot deliver a more precise outcome, their success will be limited in the premium IOL market.”  
—Kay Coulson

**Ms. Coulson:** Cataract surgeons are shifting their efforts toward customizing lens selection to the individual. I call this customization *patient-preferred vision*. With premium IOLs, the focus is now on the preferred vision patients want after surgery and whether they will accept glasses postoperatively. Baby boomers feel that if they are going to have eye surgery, they do not want to wear glasses at all, or only for a minimal period within the day. Surgeons’ attention to a patient’s desired visual outcome is the biggest adjustment from traditional cataract surgery, in which the surgeon simply removed the cataract, implanted a monofocal lens, and patients largely expected to wear glasses. Surgeons were effectively enhancing 100% of their patients, because the likelihood of glasses was so great. Expectations are different now, and if surgeons cannot deliver a more precise outcome, their success will be limited in the premium IOL market.

**Dr. Lane:** That sentiment refers to what Dr. Holland said about toric IOLs, which I fully agree are premium lenses. Certain patients’ visual needs dictate that they will be much happier with a toric IOL than with a multifocal or accommodating lens. If you try to force these patients into a multifocal or accommodating IOL that does not suit their needs, even if their outcome is excellent, you will produce an unhappy patient and an unhappy doctor as a result.

**Prof. Kohnen:** I often find myself with patients whose astigmatism is too great for a multifocal IOL. I know that if I give them a toric lens, they will be really happy.

## 2 CHOOSING THE BEST IOL

**Dr. Solomon:** How should surgeons decide which lens to use?

**Dr. Cionni:** My decision is based largely on the patient’s answer to the vision questionnaire he fills out while his eyes are dilating as well as on my conversation with him in the exam lane. For instance, if a patient wants his vision tailored for reading and driving, most likely his best option is the AcrySof ReSTOR Aspheric IOL (Alcon Laboratories, Inc.). Another patient who hunts and is an occupational driver might be a better candidate for the Crystalens Accommodating IOL (Bausch & Lomb, Rochester, NY). IOL selection depends on the patient’s daily visual demands, which you learn through conversing with him. This interaction also builds rapport between you and the patient.

**Dr. Lane:** One of the reservations surgeons voice about adopting refractive IOLs is the potential for increased chair time. For me, the preoperative conversation with patients is fairly quick. I think it is important to standardize your questioning. For example, if a person has even mild astigmatism, I ask what is important to him visually. At what range does he want excellent vision? How much time does he spend at certain tasks? An individual who spends all day on the golf course needs maximized distance vision, and so I may shy away from a premium IOL. If a patient has cylinder, I would probably give him a toric lens. The trick is to fit patients with the lens that best suits their needs.

**Dr. Solomon:** When does that conversation occur, and with whom? Is it based on patients’ responses to a questionnaire, and does it take place with a technician or the surgeon?

**Dr. Lane:** The conversation can take place at a number of different levels, depending on the sophistication of the physician’s office and what procedures are already in place. I do not think surgeons need multiple staff members conducting patient interviews. Also, a Dell-style questionnaire (for a sample, visit [www.crstoday.com/Pages/Dellindex.doc](http://www.crstoday.com/Pages/Dellindex.doc)) can be valuable in determining a patient’s goals for surgery.



In my practice, the technicians are able to determine which patients need cataract surgery. Then, they give these individuals a Dell-style questionnaire to fill out and direct them to the room where the computerized IOL Counselor (Patient Education Concepts; Houston, TX) displays information about IOL options. The IOL Counselor is another valuable asset in our practice. This tool explains the basics of a cataract and how various IOLs improve vision. Within this context, the IOL Counselor's program discusses lens options that are available for the individual.

By the time cataract patients reach me for their preoperative examination, my technician has done much of the testing for K readings, axial length, and corneal shape, so I know what lens may be most suitable for them. My conversation with patients based on their answers to the questionnaire takes about 5 minutes and helps me further pinpoint the best lens implant for the individual. Then, they return to one of our counselors to choose which lens they want from the options I have given. The counselor presents patients with all the necessary information, including costs.

**Dr. Solomon:** Do you present the lens options in a certain order, or does your staff explain the differences to patients?

**Dr. Lane:** I try to make my patients' choice as simple as possible. I give them three options: (1) a monofocal IOL that should be covered by their insurance but will necessitate glasses for distance and near vision; (2) a toric IOL that will most likely give them spectacle-free distance vision but will require glasses for all reading activities (and the approximate cost of that lens); and (3) a presbyopia-correcting IOL (accommodating or multifocal) that will give them near and distance vision with a minimal use of glasses (and the cost of that lens). I do not bother patients about the details of one lens versus another. I make that choice for them based on our analysis and their stated visual demands.

**Dr. Solomon:** Does anyone else do things differently?

**Dr. Cionni:** My staff and I manage cataract patients similarly, but I think it is important to send patients the previsit educational material so they can begin to learn about their options. I also feel it is very important for patients to undergo preoperative testing before they see the surgeon. Surgeons will save substantial chair time by evaluating the keratometry, axial length, and IOL calculations before they begin speaking with the patient. The surgeon can better

"The trick is to fit patients with the lens that best suits their needs."  
—Stephen S. Lane, MD

understand which IOL may be most likely to help the patient achieve his goal. For example, if a patient strongly desires distance and near vision without glasses, yet has 3.00 D of astigmatism found with keratometry, the surgeon can inform the patient at the time of the consultation that two procedures will likely be required for the patient to reach that level of visual performance.

The cataract evaluation routine in my office is (1) preconsultation education via mailed materials, (2) the technician begins to assess the patient's level of interest in these IOLs during the workup, and (3) the patient undergoes preoperative testing and a discussion with me to explain their lens options. If the patient has significant astigmatism and expresses the desire for distance and near vision, I emphasize the potential need for two procedures for each eye. If he says he would be happy with just distance vision, I state that I am 97% certain I can achieve that with a toric IOL.

**Prof. Kohnen:** It would be worthwhile for physicians outside the US to adopt some of these strategies regarding patient selection and education, as well as the methodology of using the same incisions and injectors for all IOL implantation, which makes outcomes much more predictable. I also agree with Dr. Lane that it is important not to leave the choice of lens up to the patient. Patients cannot understand the intricacies of this technology.

**Dr. Holland:** My patients receive information on cataract surgery and IOL options before they come in. During the initial visit, the technician queries them about their visual issues and demands and then relays this information to me. Then, patients watch a DVD about cataract surgery and IOL options that has been personalized for my practice. My preoperative conversation with cataract patients about their visual needs is one of the most valuable interactions I have with them. Sometimes, people think they know what type of lens they want based on information they have heard or read, but everyone has different visual priorities. I make a point to speak with every cataract patient, and I sometimes change the technician's recommendation following this discussion. If patients do



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not achieve the vision they want, it does not matter how good the surgical result is.

**Dr. Solomon:** There is no question that patients' goals and expectations need to be aligned. We must deliver what the patient wants.

**Ms. Coulson:** The surgeon-patient conversation is vital to success with these lenses. Do not skip it, because what patients want most is quality time with their surgeon. Also, a questionnaire helps patients contemplate what type of vision is most important to them. I modified the Dell patient questionnaire into the form I currently use with clients, called the *Vision Preferences Checklist* (Figure 1). This form, filled out by all lens evaluation patients before the workup begins, asks more in-depth questions about hobbies, computer use, employment activity, and under which conditions the patient would be most accepting of glasses

"If patients do not achieve the vision they want, it does not matter how good the surgical result is."

—Edward J. Holland, MD

after surgery. This screener, a predictor of psychological fit and personality adaptability, is vital for determining who will be most satisfied with upgraded lenses.

**Dr. Lane:** I agree that the physician-patient conversation is invaluable. The problem I see with mailing informational packets to every patient is that most first-time callers to a general ophthalmic practice state their reason for calling as "I don't see very well." The cause of their vision loss could

be anything, and I don't feel that mailing such a packet to every caller is a good use of time and money. My staff and I wait until we see the patient to determine what his problem is. We have also simplified the Dell questionnaire to suit our practice. We made it fit on one side of a page and worded it so that it is easy to fill out. Patient surveys are useful tools for any type of practice.

**Dr. Solomon:** It seems we all find a Dell-type patient questionnaire helpful. When discussing lens options, my staff and I present information on the presbyopia-correcting IOLs first, before the other types of lenses. Then, if a patient is interested in excellent distance vision, we talk about toric versus monofocal technologies. We have found organizing the information in this way helps simplify matters for the patient and their family members. It makes it easier for patients to organize their thoughts. This approach to patient education allows my staff and I to deliver the technology that best fits each patient, and it also helps patients ground their goals and expectations better. In short, education promotes patient satisfaction and reduces confusion.

Dr. Lane mentioned general practices. Ms. Coulson, how best can comprehensive ophthalmologists address patients about premium refractive IOLs?

**Vision Preferences Checklist**  
electivemedical MARKETING

Your Name: \_\_\_\_\_ Date: \_\_\_\_\_

The term "contact" refers to a clearly lens within the eye. When a contact is removed, a lens implant is placed inside the eye to replace the cloudy human lens. Occasionally, clear lenses that have not yet developed cataracts are also removed to reduce or eliminate the need for glasses or contacts. If it is deemed that surgery is appropriate for you, this questionnaire will help us provide the best treatment for your visual needs. Please fill this form out completely and return it to us.

**❑ If surgery is recommended for you, would you be interested in seeing well without glasses in the following situations?**

- ▶ **Distance Vision:** driving, golf, tennis, other sports, watching TV.
  - I prefer no Distance glasses
  - I wouldn't mind wearing Distance glasses
- ▶ **Mid-range Vision:** computer, music, pricing, cooking, board games, items on a shelf.
  - I prefer no Mid-Range glasses
  - I wouldn't mind wearing Mid-Range glasses
- ▶ **Near Vision:** reading books, newspapers, magazines, detailed handwork.
  - I prefer no Near glasses
  - I wouldn't mind wearing Near glasses

**❑ Please check the single statement that best describes you in terms of night vision.**

- Night vision is extremely important to me, and I require the best possible quality night vision.
- I want to be able to drive comfortably at night, but I would tolerate some slight imperfection.
- Night vision is not particularly important to me.

**❑ If you had to wear glasses after surgery for one activity, for which activity would you be most willing to use glasses?**

- Distance Vision
- Mid-range Vision
- Near Vision

**❑ If you could have good Distance Vision during the day without glasses, and good Near Vision for reading without glasses, but the compromise was that you might see some halos or rings around lights at night, would that be OK with you?**

Yes  No

**❑ If you could have good Distance Vision during the day and night without glasses, and good Mid-Range Vision without glasses, but the compromise was that you might need glasses for reading the finest print at near, would you like that option?**

Yes  No

**❑ How many hours per day do you spend \_\_\_\_\_**

On the computer  
Reading books, newspapers,  
typed documents or small print  
driving

**❑ Please list up to three favorite hobbies:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**❑ Please place an "X" on the following scale to describe your personality so best you can:**

Easy going  Perfectionist

Please Sign Here: \_\_\_\_\_

Figure 1. The Elective Medical Marketing Vision Preferences Checklist. It is also available as a PDF at [www.crstoday.com/Pages/EMM\\_LensChecklist.pdf](http://www.crstoday.com/Pages/EMM_LensChecklist.pdf).





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**Ms. Coulson:** Most general-practice appointment schedulers only ask patients whether they are new to the practice or returning. I strongly recommend that telephone schedulers ask callers four questions: (1) May I ask how old you are? (2) Have you been told you have a cataract? (3) Have you ever had cataract surgery? (4) What recent changes are you noticing in your vision? This last question could include two or three prompts about glare, frequent changes in glasses prescription, etc.—things the scheduler is trained to inquire about which likely indicate the presence of a cataract.

“I feel strongly that practices should have one informed consent that includes a brief statement about all three lens options (monofocal, presbyopia-correcting, and astigmatism-correcting).”  
—Kay Coulson

These questions take phone personnel only a few extra seconds, and the answers help place patients into either a cataract evaluation or a standard annual examination. This way, cataract patients can be mailed informational packets about surgery and available IOL options in advance of their appointment so that the educational process has begun before the conversation with the surgeon in the lane.

### 3 INFORMED CONSENT

**Dr. Lane:** Once you make the decision to offer premium IOLs in your practice, I think you are obligated to discuss their availability with every one of your cataract patients, whether or not you think you will use the option. If a patient is clearly a poor candidate for this type of lens, I think it is important for him to know why. In my conversations with patients, I often say, “You’ve probably heard about these new lenses ...” (especially because we have videos about them playing in our waiting room) “... but I do not think they are a good choice for you, because of these specific reasons.” Even surgeons who are not offering premium lenses must at least acknowledge the existence of these IOLs, or else risk

angering their patients once they find out about the technology from another source.

**Dr. Solomon:** That’s a very important point. You suggest that every patient who has a cataract should be informed of the available choices in lens technology, even if their surgeon does not offer all of them.

**Dr. Holland:** This issue is part of informed consent, as I learned the hard way. When I first started implanting these lenses, I would not present the option of premium IOLs to patients whom I felt were not candidates. Some of these patients returned later and complained that I had not informed them of the technology. I agree with Dr. Lane that we should present every patient with every lens option, and then explain why the individual may not be a candidate for certain ones. For example, “Lens X would not be suitable for you because of your retinal problem.”

**Ms. Coulson:** This is a key point. The order in which staff members present material has a dramatic impact on how patients process and accept the information. I have seen practices that keep two informed consents, the one they have always had for monofocal lenses, and a separate one for the premium or *lifestyle* lenses, as I call them. I feel strongly that practices should have one informed consent that includes a brief statement about all three lens options (monofocal, presbyopia-correcting, and astigmatism-correcting), which allows patients to check the one they want and ensures all options have been disclosed to everyone (Figure 2).

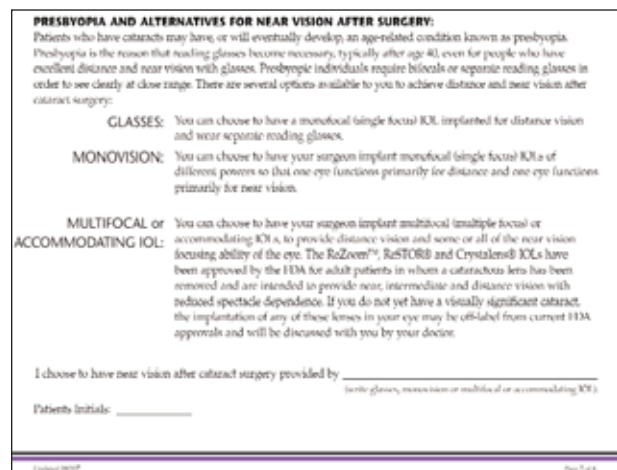


Figure 2. This excerpt is from the Procedure Overview section of Elective Medical Marketing's informed consent.



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**Prof. Kohnen:** My patients receive a single-page document stating that cataract surgery is typically performed with a monofocal lens, but that there are other choices like multifocal, aspheric, and toric IOLs. Often, patients do not understand the options, but at least we have informed them.

**Dr. Solomon:** I have heard of practices that have patients sign an informed consent stating that they are declining a premium IOL. Do any of you do this?

**Prof. Kohnen:** My staff and I are starting to do this, because a patient who developed age-related macular degeneration raised an issue because we did not give him the option of a blue-light-filtering IOL.

**Dr. Cionni:** One of my most disgruntled patients was a 16-year-old boy who was in no way a candidate for a premium IOL. He had a traumatic cataract in one eye, in which I implanted a sutured, modified capsular tension ring. His other eye was healthy but had a refraction of about -7.00 D. My staff and I discussed multifocal IOLs with this boy and his parents and explained why this was not a good option for him, and we agreed upon a standard lens, which gave him fine vision postoperatively. Nevertheless, his mother was almost litigious because she thought he was going to receive a multifocal IOL, and at the time, we did not have language in our informed consent about which lens the patient accepts.

### 4 TALKING PRICE

**Dr. Solomon:** Who talks with patients about cost?

**Dr. Cionni:** I like to raise the issue of cost with patients myself, after our conversation about the possibility of becoming spectacle-free has made them excited for a premium lens. I like for patients to hear the price from me, because there is no one in my practice more enthusiastic about these lenses than I am.

**Dr. Holland:** My technicians, who spend a lot of time with the patients, first present the pricing for toric and multifocal IOLs and then tell patients that I will discuss the matter with them further. So, when I raise the issue, patients have not heard the price for the first time.

**Dr. Lane:** I also discuss cost with my patients; the conversation fits in nicely with my dialogue about the three

different lens options. I feel it makes sense to mention price in this discussion so that patients understand why these lenses cost more. I give them a rough estimate of the procedure's cost and then say that my counselor will talk with them about it more specifically. Although I mention the availability of financing, I try to avoid any discussion about the specifics. Once I hand the patient back to the counselor, he or she becomes the patient's contact person for any questions.

I find it extremely helpful to include family members in the patient's learning process as much as possible.

—Kerry D. Solomon, MD

**Ms. Coulson:** I feel it is important for the surgeon to state the premium-IOL procedure's fee while in the exam lane with the patient, because no one else can as effectively convey the value. You should not feel you need to justify or apologize for your fee. There are several ways you can present the upgrade tactfully; the practices I work with include it in their brochures and on their Web sites so it is transparent within the educational process. Of course, payment and financing details are still best left to the surgery scheduler.

**Prof. Kohnen:** I like to step out of the discussion of cost with my patients. I inform the patient of the differences between monofocal and the other lenses. I mention that the refractive IOLs are more expensive, but I say that my staff will discuss cost with them. I believe the issue is too time-consuming for us surgeons.

**Dr. Lane:** I have also found it effective to make the value of the premium IOLs tangible for patients. Naturally, they experience some sticker shock when they first hear the price, but I think that is partly because the technology is so new. If patients comment that the cost is high, my standard response is to ask if they have a plasma screen TV or some other item that costs about the same, and then I will ask them how soon they think they will have to replace or upgrade the item. Then I make the point that refractive lenses offer high-technology vision for years. I find that phrasing the issue in these terms helps patients become comfortable with the cost.



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**Dr. Holland:** Again, patients' initial sticker shock is why I prefer to have my staff inform them of the cost of the procedure before they talk to me. If they learn the approximate price at the initial visit, they can go home and discuss it with their families, who often help them justify the expenditure. By the time they have their appointment with me, they are much more open to the discussion.

**Dr. Cionni:** These are good points, but I see a problem with patients learning the price of the surgery before they understand its benefits. They may completely dismiss the idea and not return for a consultation. I think if patients see the surgeon's and staff's enthusiasm, then they are more open to learning about the benefits of the technology.

**Dr. Solomon:** I find it extremely helpful to include family members in the patient's learning process as much as possible. Most patients bring a relative or friend with them when they come in for an evaluation. My staff and I invite this person to join in the preoperative discussion for two primary reasons. First, they tend to calm the patient and help him think of questions to ask. Second, and most importantly, they usually encourage the patient to spend the extra money for the premium lens. Most patients are reluctant to spend money on themselves for an elective technology, and it is easier for them when it is a joint decision.

**Prof. Kohnen:** Europeans are not used to paying out of pocket for any health-related treatments, so converting them to elective IOL technology is even more challenging. That is why I tell my patients that there is a standard lens and a new-technology lens, which costs extra, but I do not let them make the choice. I decide which lens is best for the patient after I examine him, and if I choose to use a refractive lens, I say, "I am giving you the more expensive lens, but it is better." Then, my technician tells him what the cost is.

**Ms. Coulson:** When a surgeon tells me that his patients are not interested in premium IOLs and that price is the barrier, I find the surgeon has not effectively conveyed the *vision value* to both his staff and patients. Encourage patients to think about what kind of vision they want in their daily lives. In my experience, people are not so different across local markets, and price is not a problem if the patient is motivated by the promise of increased freedom from glasses.

**Dr. Solomon:** To me, it seems that price is often more of a barrier for the physician than the patient. Practices that have traditionally offered insurance-based treatments have a harder time shifting their mindset and their approach to patients. Physicians need to become comfortable talking about price, and they must be confident in the services they offer. I recommend that surgeons remove those barriers and let patients bring a family member into their consultation, and they will see price become much less of an issue.

## 5 RESTOR ASPHERIC IOL

**Dr. Solomon:** We now have another IOL option: the AcrySof ReSTOR Aspheric IOL (Alcon Laboratories, Inc.). Has anyone noticed a difference with this lens compared to its predecessor?

**Dr. Cionni:** Definitely, the ReSTOR Aspheric IOL is a vast improvement over the original ReSTOR. My patients have much fewer complaints about the Aspheric lens. Whereas many recipients of the original ReSTOR are wary about receiving the second implant, my aspheric patients cannot wait to have their second eye treated, because their vision in the first eye is so much improved.

"I feel that the quality of vision with a ReSTOR Aspheric lens is on par with an aspheric monofocal IOL."  
—Stephen S. Lane, MD

**Dr. Holland:** I had a clinical experience that really hammered this difference home. I work with a very talented optometrist who sees my patients for follow-up, and my staff and I did not mention when we began using the ReSTOR Aspheric IOL. After we had used the lens for about 6 weeks, she asked me what I was doing differently. She told me that the patients were much happier and had had fewer complaints of waxy vision. It was all due to the ReSTOR Aspheric IOL.

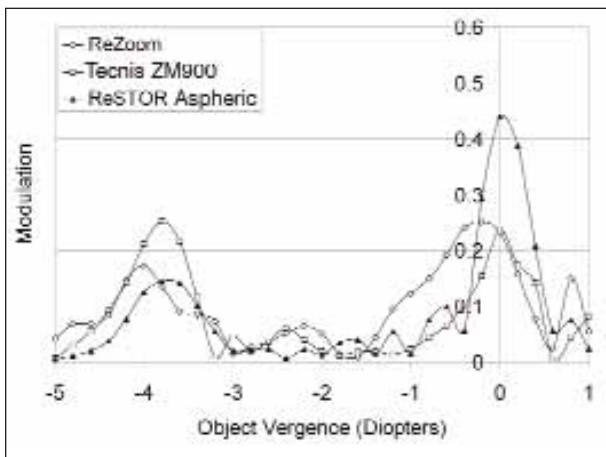
**Dr. Solomon:** Is distance vision better with the ReSTOR Aspheric IOL than the original lens?



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(Courtesy of Jim Schwiegerling, PhD, University of Arizona.)



**Figure 3.** This graphic plots the various through-focus MTFs for a 6-mm pupil.

**Dr. Lane:** Jim Schwiegerling, PhD, in Tucson, Arizona, has good data from a study he conducted of all the multifocal lenses' modulation transfer functions (MTF),<sup>1</sup> which is one metric for visual quality (Figures 3-6). Using specific targets, he was able to show that the quality of the image seen through an aspheric ReSTOR is much better than that seen with a nonaspheric ReSTOR lens. In fact, the ReSTOR Aspheric's MTF was higher than the Crystalens', which is not a multifocal IOL, and it surpassed that of the ReZoom multifocal IOL (Advanced Medical Optics, Inc., Santa Ana, CA). Clinically, I have seen the improvement in my patients' visual acuity at distance, and they have fewer complaints.

**Dr. Solomon:** Is it reasonable to select a lens based on its quality of a particular range of vision?

**Dr. Lane:** I believe the answer is yes. I feel that the quality of vision with a ReSTOR Aspheric lens is on par with an aspheric monofocal IOL.

**Dr. Solomon:** So, if a physician wonders which lens to give a patient who requires quality distance vision, the ReSTOR Aspheric IOL's MTF data should answer that question?

**Dr. Cionni:** It will take it off the table. Also, my standard deviation from the target refraction is much greater with the Crystalens than with the ReSTOR Aspheric IOL, and therefore the likelihood of attaining excellent uncorrected distance vision without having to perform an enhancement is better with the ReSTOR Aspheric than with the

Crystalens. In addition, my patients implanted with the ReSTOR Aspheric IOL have better near vision than those receiving a Crystalens.

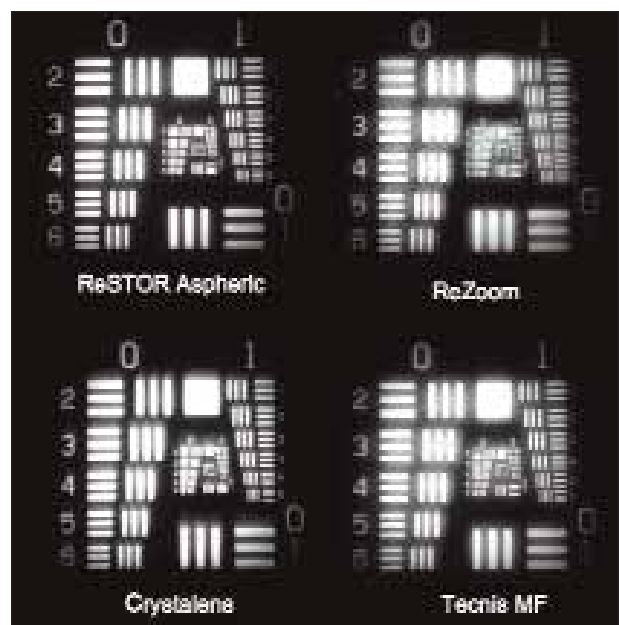
**Dr. Lane:** That is exactly my experience as well.

**Dr. Solomon:** We have heard terms like *waxy vision* to describe the quality of vision with an AcrySof ReSTOR IOL. Have you seen or heard of any similar issues with the aspheric version?

**Dr. Cionni:** In my experience, the only patients who do not tolerate the ReSTOR Aspheric lens are those with residual cylinder or some similar type of refractive error. Otherwise, this lens eliminates most of the visual complaints previously associated with IOLs.

**Prof. Kohnen:** The only symptoms I hear about occasionally with the ReSTOR Aspheric IOL are halos and starbursts.

**Dr. Lane:** I think the aspheric version of the ReSTOR negates most symptoms. I am not aware of this lens being explanted and replaced with a monofocal IOL to improve patients' quality of vision. Having implanted more than 300 original AcrySof ReSTOR IOLs, I have never explanted

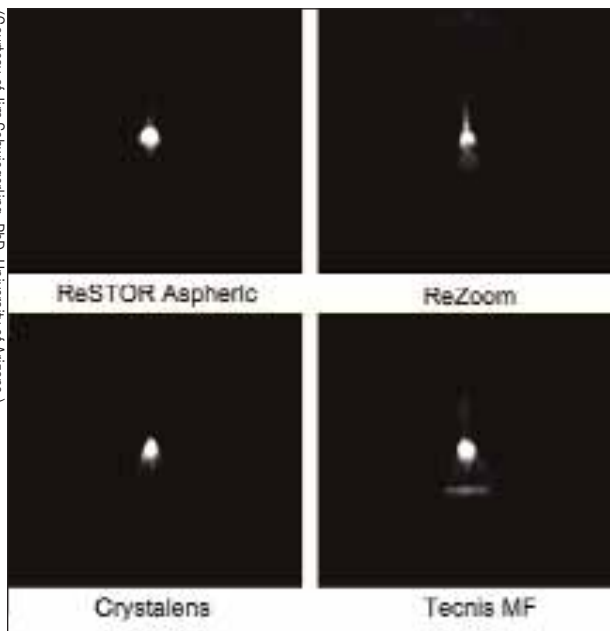


(Courtesy of Jim Schwiegerling, PhD, University of Arizona.)

**Figure 4.** These images were taken in a wet cell with a model eye cornea (Distance Air Force Bar Target with a 6-mm aperture). Compare the sharpness of the bars and numbers. Notice that all products except the ReSTOR Aspheric have more ghosting.



(Courtesy of Jim Schwiegerling, PhD, University of Arizona.)



**Figure 5.** These pinhole images through a 6-mm aperture simulate an oncoming headlight in the distance. The ReSTOR Aspheric and the Crystalens demonstrate similar performance.

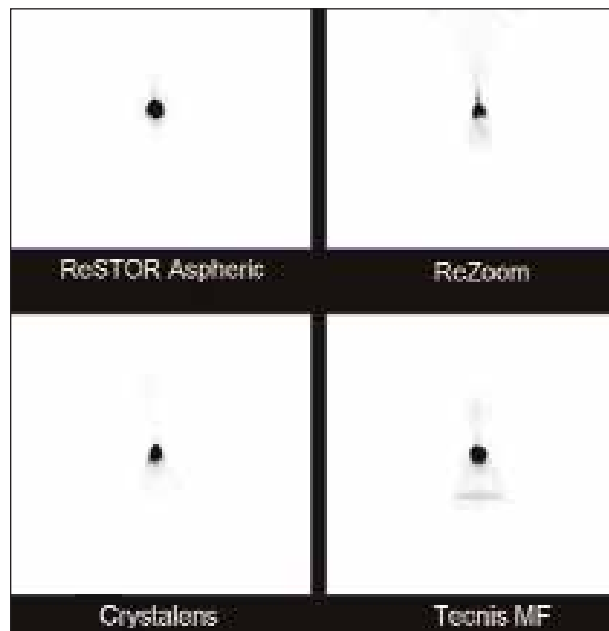
one due to issues of visual quality, so I will not say that the difference between the original lens and the aspheric version is dramatic. After implanting about 100 ReSTOR Aspheric IOLs, however, I do consider it an improvement over its predecessor, and my patients seem to like it better.

**Dr. Holland:** A handful of my AcrySof ReSTOR patients were inexplicably dissatisfied with their postoperative vision despite healthy eyes, preoperative ocular surface optimization, and a great outcome. I have not experienced this problem yet with the ReSTOR Aspheric IOL, and I believe it is because the aspheric lens offers a better quality of vision.

**Dr. Solomon:** I agree; I continue to ask our colleagues, but I am not aware of any quality-of-vision issues with the aspheric ReSTOR like those of the previous model. I think this new version is putting that issue to rest.

**Prof. Kohnen:** It is very important to emphasize again that with any premium lens, we must do all we can preoperatively, such as addressing dry eye and refractive error, to ensure a good outcome and minimize postoperative complaints.

**Dr. Holland:** If a patient has a preexisting surface disease



(Courtesy of Jim Schwiegerling, PhD, University of Arizona.)

**Figure 6.** This negative image highlights the visual disturbances a patient may experience with various IOLs.

(ie, meibomian gland disease, corneal staining, and an unstable tear film), I may delay surgery. I routinely manage my cataract patients' ocular surface prior to surgery because doing so improves their results.

## 6 MANAGING ASTIGMATISM

**Dr. Solomon:** At what point should we start managing astigmatism preoperatively if we are planning to implant a ReSTOR Aspheric lens?

**Dr. Cionni:** Before proceeding with surgery, we must be certain that the patient will end up with less than 0.75 D of astigmatism. Thus, we have to consider LRIs or secondary refractive surgery in our surgical planning.

**Dr. Solomon:** How comfortable are surgeons with tackling astigmatism with LRIs?

**Dr. Holland:** Any surgeon thinking of adopting premium refractive lenses has to become comfortable with performing LRIs, because it is the best form of correction for errors of up to 2.00 D, depending on the axis. Larger amounts of astigmatism require laser vision correction. I believe the AcrySof Toric IOL (Alcon Laboratories, Inc.) is

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the best choice for managing cataract-induced astigmatism, and I hope someday to have a toric version of the ReSTOR lens.

**Dr. Lane:** The bar continues to rise, and I want my patients to come away from surgery with no more than 0.50 D of astigmatism. I will treat less than 0.75 D.

**Prof. Kohnen:** If a patient has more than 1.50 D of preoperative astigmatism, we must carefully consider whether to proceed with a multifocal implant. With less than 1.50 D, I try to do an LRI, but I always explain to the patient that there is the possibility he will need laser vision correction after the initial surgery. It is important to set this expectation preoperatively, otherwise he will be unhappy.

**Dr. Holland:** If the patient is motivated to receive a multifocal IOL and is educated up front to expect two procedures, then laser vision correction is a great tool for managing 1.50 to 2.00 D of astigmatism.

**Dr. Solomon:** I also suggest LRIs for up to 1.50 D of astigmatism. For treating more than that, bioptics with laser vision correction is the best option. Surgeons who do not have access to a laser have the option of a toric IOL.

**Dr. Lane:** Or, they can partner with a surgeon who performs laser vision correction.

**Prof. Kohnen:** Would you offer a ReSTOR Aspheric IOL to a patient with 3.00 D of astigmatism?

**Dr. Holland:** No. I offer the AcrySof Toric lens to patients with high amounts of astigmatism. However, patients' motivation makes a big difference in their success with any lens choice. For example, a patient who has been wearing monovision contact lenses his entire life and has never worn reading glasses is incredibly motivated for spectacle-free vision. Thus, he will be very satisfied with a multifocal lens and will not mind two procedures to achieve his goal.

**Dr. Cionni:** A patient like that may also be satisfied with monovision toric lenses.

### **7** TORIC IOLs

**Dr. Solomon:** Technically speaking, how does a surgeon succeed with toric lenses? What amounts of astigmatism

does a lens like that treat? What should the topography look like? How should he align the lens?

**Dr. Holland:** I suggest that surgeons start with cases at which they know they can succeed. Pick the cases in which the astigmatism with spectacles is stable. Also, surgeons need to know the amount of astigmatism they induce with their standard incision. In the AcrySof Toric IOL's FDA clinical trial, the investigators were restricted to making the incision at the horizontal meridian, and still, 97% of the subjects achieved 20/20 or better UCVA at distance. It is a tremendously successful technology if the surgeon picks the correct patients.

**Solomon:** Dr. Lane, what do you do if there is incongruity between your IOLMaster (Carl Zeiss Meditec, Inc., Dublin, CA) and your topography?

*"With any premium lens, we must do all we can preoperatively to ensure a good outcome and minimize postoperative complaints."  
—Prof. Thomas Kohnen*

**Dr. Lane:** If there is a true difference between your topographical and manual K readings, which does occur, then you are forced to make a choice. In the FDA clinical trial for the AcrySof Toric IOL, we used only manual Ks, which I tend to rely on more heavily than topography. I think there are tear film issues that can throw off topographic images. Often, a drop of artificial tears can get the cylinder right on target.

**Dr. Holland:** Also, if someone has worn hard contact lenses for 20 or 30 years, I delay preoperative testing until their ocular surface has stabilized. Stability may take several weeks or several months.

**Dr. Solomon:** What about rigid gas-permeable lenses?

**Dr. Holland:** Those eyes also cannot undergo surgery until they have stabilized and their measurements become repeatable. This can take as long as 4 months.

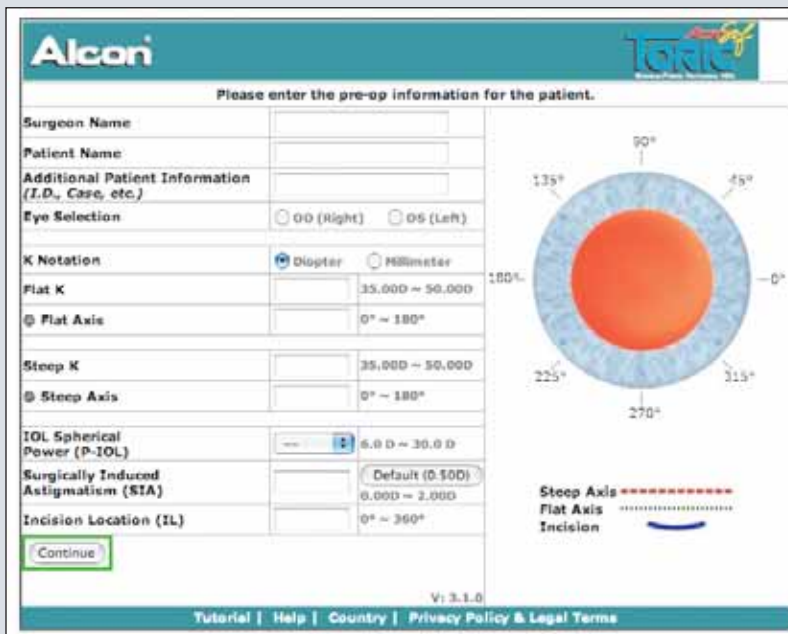
**Dr. Solomon:** Do we all agree that soft lenses should be left out for a week?



### TORIC IOL CALCULATOR

The AcrySof Toric IOL Calculator is a valuable online tool for all toric and multifocal premium IOLs, provided by Alcon Laboratories, Inc., free of charge ([www.acrysoftoriccalculator.com](http://www.acrysoftoriccalculator.com)). A physician or technician can enter the patient's data in terms of Ks or axial length, and the calculator will predict the power required. If you also enter your surgically induced astigmatism, it will compute what the residual refractive error will be. In addition, the calculator allows you to move the incision around and change the amount of predicted induced cylinder. If you need to perform an LRI enhancement, the Toric Calculator will help predict whether a future enhancement will be needed. I have found this to be a very valuable tool.

—Stephen S. Lane, MD



**Dr. Holland:** If the preoperative measurements do not add up, treat any surface issue that exists and bring the patient back another day for testing. If the numbers still do not add up, then perhaps reconsider implanting a toric lens.

**Dr. Lane:** In my practice, all patients who desire a premium refractive IOL receives two sets of preoperative measurements. Once they decide they want this type of lens, they make a separate appointment for testing during which two different technicians will take two different sets of biometry and keratometry readings. The two sets of readings must agree before the patient leaves the office. If there is disagreement, then that patient must return on another day for repeat measurements. I think this strategy of having individual testing appointments is key. Refractive cataract surgery is truly refractive surgery, and there is no reason to treat these patients any differently than LASIK patients in terms of how long they are out of contact lenses and treating ocular surface issues.

**Dr. Solomon:** That is a great point. My staff and I also prefer to optimize the ocular surface before taking any refractive measurements. In our experience, a healthy surface promotes consistent refractions.

**Ms. Coulson:** I would like to add a comment about toric IOLs. All of you panelists are aggressive about treating astigmatism with LRIs and other means. In many training courses, however, a large number of cataract surgeons admit to either not treating astigmatism, not charging for the treatment, or managing astigmatism with glasses. Surgeons who want to grow their refractive cataract business need to recognize the value in correcting astigmatism. Astigmatic management could account for 20% or more of surgical volume.

**Prof. Kohnen:** It is my impression that many surgeons are afraid of adopting toric IOLs because they do not know how to manage astigmatism. They do not know how to calculate the axis. Astigmatic treatment is a component of the refractive procedure, and learning it is a good foray into refractive cataract surgery with multifocal IOLs.

**Dr. Cionni:** I want to make one additional comment about performing patients' refractive testing on a separate day. If your facility is set up to allow you to conduct the testing on the same day as the examination, it is a wonderful convenience for the patient and his family. It is not easy for patients to come back for another visit. If you do the testing before the pressure check or dilation, you



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can get good readings. I prefer this approach for the patient's convenience.

**Dr. Solomon:** It is a good point, but it may be difficult to accomplish in a comprehensive practice.

**Prof. Kohnen:** Refractive IOLs represent a significant paradigm shift for cataract surgeons. They are used to a much simpler process: evaluating the patient and then suggesting an appropriate IOL. Refractive lenses require several steps of patient selection before the surgery can take place.

### 8 RESIDUAL REFRACTIVE ERRORS

**Dr. Solomon:** What is the best course for managing postoperative residual refractive errors? Let's assume a refractive IOL patient is left with residual cylinder. One treatment option is performing an LRI at the slit lamp, but how would you control induced hyperopia and myopia?

**Dr. Holland:** If the cylinder is 0.75 D and degrades the patient's vision only slightly, then a small LRI at the slit lamp is a powerful tool. That is the first step for treating low residual astigmatism.

**Dr. Solomon:** For the best outcomes, however, we have to reduce both the spherical equivalent and residual cylinder to  $< 0.50$  D. If the patient has more cylinder than this, how do we address it?

**Dr. Cionni:** If the error is strictly sphere, there are several choices. One is a piggyback IOL, which is extremely easy to implant and only takes a couple of minutes. For this procedure, I recommend using the AQ 5010 (STAAR Surgical Company, Monrovia, CA). It is a little bit larger than a lens made for the capsular bag, and it will go over a multifocal lens nicely.

**Dr. Lane:** The correction depends on the amount of error. As a corneal refractive surgeon, I prefer treatment with PRK with low-to-moderate degrees of residual near- or farsightedness. Any intraocular procedure carries some risk of endophthalmitis. There is a risk with PRK as well, but this treatment has been extremely successful, and patients' recovery time is quick.

**Dr. Holland:** I agree. It is rare to get pure sphere; there is almost always a bit of astigmatism, and there is no better

way to manage residual refractive error with cylinder and astigmatism than with PRK.

**Dr. Cionni:** PRK can worsen dry eye, causing the patient to be uncomfortable for a week or so, and the results are not immediate. With a piggyback IOL, he will see better that afternoon.

"For the best outcomes, we  
have to reduce both  
the spherical equivalent  
and residual cylinder to  
 $< 0.50$  D."  
—Kerry D. Solomon, MD

**Dr. Solomon:** I presented data at the 2008 ASCRS meeting on achieving excellent results with laser refractive surgery following multifocal lens implantation.<sup>2</sup> Every patient was within 0.25 D of his spherical equivalent and 0.50 D of residual cylinder. We saw improvements in distance, reading, and night vision without complications. Thus, I agree with Dr. Lane that PRK (and LASIK, if the surgeon prefers) is well tolerated after refractive cataract surgery, and the residual refractive error via corneal refractive surgery is treated very successfully.

**Dr. Lane:** It is important to have all these tools available. Even surgeons who do not have a laser know a physician in their community with whom they can partner. Likewise, I perform piggyback IOL procedures for several partners in my own practice who prefer not to take these cases. In short, I think it is reasonable for surgeons who do not perform all these procedures to adopt premium IOLs as long as they have arrangements with physicians who can perform them so that they are able to discuss these options with their patients.

**Prof. Kohnen:** In order to keep multifocal lens patients happy with slight myopia, you must treat their refractive error. When physicians plan an LRI treatment, they often forget that the spherical equivalent is already myopic, and the LRI is not enough to correct it. Therefore, I only use LRIs if the spherical equivalent is emmetropic. If the patient is myopic, I perform LASIK with a femtosecond laser.

**Dr. Solomon:** Would we all agree that unless your spherical equivalent is plano or close to it, you either need to be



comfortable performing astigmatic correction yourself, or be able to refer the patient to a colleague?

**Prof. Kohnen:** Referring patients is not very easy, to tell the truth. Not many surgeons want to refer a patient who has a multifocal implant to a doctor outside their practice.

**Dr. Cionni:** Even within a group, your refractive surgeon does not want to deal with your unhappy patients, and your patients may feel somewhat abandoned by you.

## 9 MARKETING

**Dr. Solomon:** What marketing strategies have you panelists found most effective with premium refractive IOLs?

**Ms. Coulson:** Physicians adopting premium IOLs should first focus on internal marketing. For now, surgeons have enough patients in their existing practice, either presenting with cataracts or in the recheck cycle for early cataracts, who can be offered premium IOLs. Second, materials mailed out to patients must be comprehensive and professional. They should explain what a cataract is and identify the newest lens solutions. Third, practices should use their Web site to promote this technology. Finally, the existing practice database can be mined for 50- to 85-year-old patients in order to mail targeted newsletters and informative postcards about new IOLs. For the practice just beginning with upgraded IOLs, a substantial target audience already exists within the practice.

**Dr. Lane:** My staff and I have done a fair amount of external marketing for refractive IOLs. Our growth in LASIK volume has been flat, so we redirected money we had earmarked for LASIK marketing into promoting premium IOLs, which I believe is a tremendous growth area. I think it is helpful to do some high-quality marketing with ads that appeal to people in this population. For example, an ad of a young child sitting on the lap of a vital-looking grandfather who is reading the child a book conveys a powerful suggestion about the potential of these lenses. Our marketing efforts have been successful, and I think advertising for premium IOLs is going to continue to grow. I feel that once you achieve a market penetration of 5%, external marketing can grow your business further.

**Dr. Solomon:** Are you marketing cataracts or premium lenses?

“For the practice just beginning with upgraded IOLs, a substantial target audience already exists within the practice.”  
—Kay Coulson

**Dr. Lane:** We are marketing quality of life via cataract surgery and the use of special IOLs.

**Dr. Solomon:** What type of marketing do you use?

**Dr. Lane:** Mostly print, because we can show very nice pictures, but we have also used radio advertising.

**Dr. Solomon:** Ms. Coulson, any words of caution?

**Ms. Coulson:** Yes. Before surgeons begin marketing this technology, they should make sure that all patient management systems are in place and functioning well. Their reception staff must be able to handle incoming calls, answer questions, and schedule inquiries appropriately. Their counselors and technicians should know how to discuss these lenses in simple terms that address the reduced need for glasses and the improved range of daily vision. In my experience, comprehensive ophthalmology practices have the hardest time integrating upgraded IOLs into their practices, because an elective patient requires a different in-office experience. Adjusting patient flow and improving educational efforts changes the normal course of operations in an insurance-oriented practice. So, my caution is, invest first in the patient experience, and then extend your efforts into marketing.

**Dr. Solomon:** So, the first step is to get your house in order, and then begin internal marketing before external efforts?

**Ms. Coulson:** Yes.

**Dr. Solomon:** Professor Kohnen, can you market in Europe?

**Prof. Kohnen:** We are not allowed to advertise in Germany. Practitioners may have a comprehensive Web site that explains what they do, and they can use marketing materials inside the office to inform patients about the premium IOLs. My staff and I do not conduct





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seminars for cataract surgery, but we have for refractive surgery.

**Dr. Solomon:** Do you think seminars for premium cataract surgery and premium IOLs would be successful in Europe?

**Prof. Kohnen:** It is quite challenging for European physicians to convince the average cataract patient, who relies on social security, to pay out of pocket for a toric IOL to treat 1.00 to 2.00 D of astigmatism rather than wear glasses. Our culture is our major hurdle, because wearing glasses postoperatively is not a big deal to older Europeans.

**Dr. Solomon:** So, what strategies would you suggest for European practitioners who want to adopt these lenses?

**Prof. Kohnen:** Things are going to change in Europe in the next few years, and we do not know what direction elective surgery may take. For now, seminars might be an option, and I think a practice's Web site is one of its most important marketing tools. The site should inform potential cataract patients about what treatment options they have. Also, only 10% to 20% of European ophthalmologists perform surgery, so the other 85% who are referring physicians need to be educated about this technology.

### 10 TAKE-HOME PEARLS

**Dr. Solomon:** In closing, what words of advice can we give our colleagues?

**Dr. Holland:** Cataract surgeons owe it to their patients to get involved with premium refractive lenses. They all have patients who would benefit from toric and multifocal IOLs, and they should start using this technology.

**Dr. Lane:** My final words of wisdom are to embrace the refractive IOL technology. These lenses perform very well now, and they will continue to improve at all visual ranges. Now is the time to get into the game.

**Prof. Kohnen:** The bottom line is that cataract surgery is going to continue moving into the refractive arena. In order to succeed in this new paradigm, surgeons need to learn how to use refractive IOLs and manage astigmatism. Through this education, they will become better surgeons for their patients.

**Dr. Cionni:** This technology has improved to the point where we surgeons really have to educate our patients about these expanded options. As the baby boomers come of age, their ranks and their expectations will grow. Surgeons who are not offering this technology will miss out on the next big market. We must focus on education and making these IOLs available to our patients.

"In order to succeed in this new paradigm, surgeons need to learn how to use refractive IOLs and manage astigmatism."  
—Prof. Thomas Kohnen

**Ms. Coulson:** Combining US census age projections with incidence projections for cataracts, ophthalmologists should anticipate 60% more cataracts in their practices over the next 20 years. At the same time, according to SF Match,<sup>3</sup> the number of new ophthalmologists entering practice is offset by the number of ophthalmologists retiring, so there will not be additional surgeons to handle the increased patient load. Further specialization within ophthalmology will be required. What type of surgeon do you want to be? A lens specialist? A glaucoma specialist? An elective vision specialist? Once you have decided, be proactive about which appointments you will allow onto your calendar. The sheer number of patients coming through your door will be overwhelming if you rely on the traditional method of scheduling whomever calls and trying to squeeze more patients into each hour. Increasingly, surgeons will be required to proactively shape their practices if they want to improve their personal, professional, and financial satisfaction.

**Dr. Solomon:** This is an exciting time in cataract and refractive surgery. Practitioners wonder whether the technology can deliver what our patients want. The answer, from those of us using this technology on a day-to-day basis, is yes. I believe that ophthalmologists around the world will get involved in refractive IOL technology and help the profession meet patients' expectations. ■

1. Schwiegerling J. Optical performance testing of the Alcon SN6AD3 apodized diffractive multifocal IOL. Paper presented at: The Annual Meeting of the ESCRS; September 2007; Stockholm, Sweden.

2. Solomon KD. Visual outcomes and patient satisfaction after implantation of a multifocal aspheric IOL. Paper presented at: The 2008 ASCRS Symposium on Cataract, IOL and Refractive Surgery; April 6, 2008; Chicago, IL.

3. SF Match. Ophthalmology Residency Match. Statistics. Available at: <http://www.sfmatch.org/residency/ophthalmology/index.htm>. Accessed May 21, 2008.



