

Safety, Quality, and Personalized Care: Tenets of a Complete Premium Package

BY JOAQUIN FERNÁNDEZ, MD



In today's cataract surgery market, surgeons are accustomed to the word *premium* in regard to the services that they offer patients. For many surgeons, they place the most emphasis on premium IOLs, such as multifocal, trifocal, accommodating, and extended depth of focus lenses. But there are other aspects, too, that must be premium in order to provide such an outstanding level of care. For instance, offering laser-assisted cataract surgery (LACS) with a reliable femtosecond laser platform and eliminating the need for phacoemulsification are, in my mind, both crucial components of a premium refractive cataract surgery procedure.

THE NICE PROCEDURE

Bausch + Lomb Spain coined the term *new innovative crystalline lens experience* (NICE). We have recently begun using this term to help describe to patients the complete premium package that is available to them.

The NICE procedure starts with an exhaustive preoperative examination in order to select the most appropriate IOL for the patient. In this exam, we evaluate the patient's visual performance, refractive state, and expected visual performance depending on his or her ocular health and visual needs, taking his or her job, hobbies, and other activities in which significant time is spent into account. Although we have many IOLs available to choose from, some of our more popular premium lens options include the bifocal Versario Multifocal MICS and trifocal Versario Multifocal 3F* IOLs (Bausch + Lomb; see sidebar for more information). We implant the former in patients who require good quality of vision at far and near, and we implant the latter in those who require good vision at not only those distances, but also at intermediate. We also use other trifocal lenses depending on the distance at which the patient is used to working at near or intermediate and on his or her work and hobbies.

After the preoperative exam, LACS with the Victus femtosecond laser (Technolas Perfect Vision GmbH, a Bausch + Lomb Company; Figure 1) is performed. In my experience, this laser platform helps in obtaining a safer, more precise surgery that, in combination with the proper IOL, results in a complete premium procedure.

THE IMPORTANCE OF THE FEMTOSECOND LASER

Safety, quality of vision, and personalized attention to patients are the cornerstones of a premium procedure. Yet safety is often



Figure 1. The Victus femtosecond laser system.

overlooked when selling refractive cataract surgery—a premium procedure—to patients. If we go above and beyond to market a premium procedure to patients and then do not individualize patient care and do not emphasize safety, we are not succeeding.

That is why the femtosecond laser is so important, as it not only can help us to customize surgery according to the patient's ocular anatomy but it also can address many issues of safety that are related to manual cataract surgery procedures. For instance, after performing more than 1,000 cases, I have perceived a decrease in the rate of major capsule-related complications such as capsular tears, and I have had no cases of dropped nuclei. After NICE surgeries, corneas are clearer, with lower induction of corneal edema.

As we all know, today, offering a premium procedure is imperative in the health care industry. The fact that all of our patients who elect a premium IOL and a majority of those who elect a monofocal also elect LACS as part of the NICE procedure is testament to this.

What sets the Victus apart from other femtosecond lasers on the market is its live swept source OCT technology. Before this new update, we had to program the procedure and wait for it to finish; now, we have the opportunity to control what is happening with the ocular structures as the procedure is progressing. Seeing how well defined the corneal incisions are according to the programmed planes and what is happening in the anterior chamber during lens

fragmentation gives us complete confidence in the procedure and in the outcomes that we can provide for our patients.

I believe that docking is one of the most important steps in LACS. Centering the ring around the limbus and avoiding excessive pressure on the cornea guarantees that the lens will not tilt and prevents the formation of endothelial folds, which could otherwise disturb the laser focus in the eye and lower the cutting quality. Furthermore, I usually perform corneal incisions at a higher anterior position than where I perform manual incisions, which are nearer to the limbus.

ZERO PHACO

Another component of our premium NICE procedure is eliminating the need for ultrasound during cataract removal. Ultrasound energy is a known cause of endothelial cell loss.¹ Now that we have great background experience with Zero Phaco technology (Bausch + Lomb Storz Ophthalmic Instruments; Figure 2), about 90% of the procedures we perform in Pentacam Nucleus Staging grade 2 cataract or lower (equivalent to LOCS grade 3 or lower) can be completed without ultrasound. With more than 1,000 procedures performed to date, we now have great confidence in explaining to patients that their surgeries are performed completely by the laser.

I have been using Zero Phaco for 2 years, and, in this time, I have used three different single-use handpieces (2.75, 2.2, and 1.8 mm).



Figure 2. The Zero Phaco handpiece.

I feel the most comfortable using the 2.2-mm handpiece, which I have now used for the past 2 years in conjunction with the 2.5-mm, three-plane incision I program with the Victus. With this incision size, I feel more comfortable inserting the IOL. Analyzing an initial series of data, I have found that my level of surgically induced astigmatism has a lower standard deviation than my typical manual incision. A larger data set is required to confirm these findings.

The fact that the Zero Phaco handpiece is single-use is important in the prevention of toxic anterior segment syndrome, and its silicone irrigation sleeve increases the seal of the wound. ■

1. Walkow T, Anders N, Klebe S. Endothelial cell loss after phacoemulsification: relation to preoperative and intraoperative parameters. *J Cataract Refract Surg.* 2000;26:727-732.

Indications and approvals may vary by country.

**Versario Multifocal 3F CE Mark Pending – expected by September 2016*

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Versario Multifocal 3F

The trifocal Versario Multifocal 3F (Figure 1) places the near and intermediate additions at the spectacle plane, at around 45 cm (2.20 D). Because the effective lens position for intermediate focus is around 89 cm (1.12 D), the distance between the foci is closer than what it is with other trifocal lenses (Figure 2). This gives the patient more progressive vision from far to near, with good intermediate vision.

Considering the increased use of mobile devices, tablets, and computers, patients' intermediate vision has become increasingly important in their selection of an IOL. We believe, considering our early experience with the lens, that the trifocal Versario Multifocal 3F is the best option for patients who are heavy users of these technologies.



Figure 1. The Versario Multifocal 3F IOL.

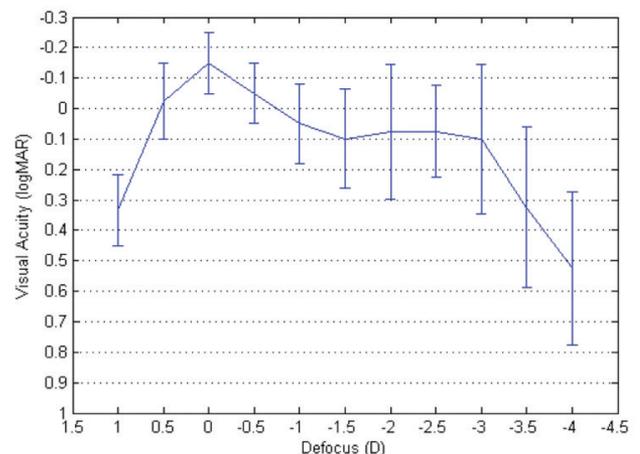


Figure 2. Mean defocus curve at 1 month postoperative in eyes implanted with the trifocal Versario Multifocal 3F at Qvision. The curve was measured with the Multifocal Lens Analyzer for iPad.