

AHEAD OF THE CURVE

Managing Astigmatism With the Highly Evolved LENSAR Laser System



Elizabeth Yeu, MD

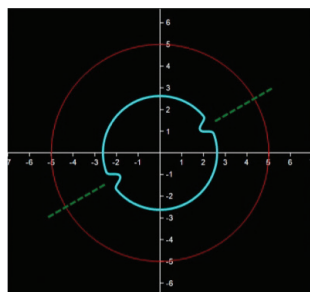
"It's important that whatever technology we utilize can take us to another level as cataract surgeons, and I truly believe the LENSAR Laser System does just that."

For Elizabeth Yeu, MD, of Virginia Eye Consultants, mitigating astigmatism is the cornerstone of exceeding her cataract patients' expectations. In a recent interview, Dr. Yeu shared how the LENSAR Laser System, now with IntelliAxis-L refractive capsulorhexis, has been a game changer in her practice to help her achieve this end.

Q: Why are you a believer in the LENSAR Laser System?

A: I think FLACS (femtosecond laser-assisted cataract surgery) can make a good surgeon great technically, but the LENSAR internal technology makes me a more accurate surgeon. LENSAR is the only system that I can confidently say has continued to innovate within the femtosecond laser space. It's not just a tool to help us provide for fragmentation and astigmatic keratotomies—which it does so effectively—but it also makes me a better and more predictable surgeon because of how it collectively manages astigmatism.

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IntelliAxis-L refractive capsulorhexis, unique to the LENSAR Laser System, incorporates steep axis markings on the capsule that facilitate precise toric IOL alignment for improved predictability and outcomes.

We, as refractive cataract surgeons, are aiming to meet and maybe even exceed patient expectations. The first step toward getting there is to become that refractively minded surgeon who effectively reduces astigmatism as much as possible. But it's also important that whatever technology we utilize can actually take us to another level as cataract surgeons, and I truly believe the LENSAR Laser System does just that.

When I started using the LENSAR Laser 3 years ago, it was already streamlining information from various preoperative diagnostic technologies and helping me identify and correct astigmatism more accurately. But each year, there have been advancements upon advancements. First, there was IntelliAxis-C—which provides small, 7-degree intrastromal marks to identify the steep meridian—and now IntelliAxis-L, which creates a capsulorhexis with incorporated refractive markings that I can overlie with the hash marks on my toric IOLs. This has been a huge advantage and has made me a true believer and firm user of the LENSAR Laser.

Q: How does LENSAR give you an edge in terms of managing astigmatism?

A: For me, the LENSAR Laser has several unique advantages. What I enjoy most are the refractive outcomes and the predictability that the LENSAR Laser System now affords me as it relates to astigmatism correction.

The LENSAR Laser can streamline data from different corneal topographers and then seamlessly use internal nomograms to customize the locations and lengths of astigmatic keratotomies for lower levels of corneal astigmatism. I am enamored with the IntelliAxis-L feature, which allows for the very precise alignment of toric IOLs, as its capsular marks directly overlie the intended steep meridian. Because these marks are on the capsule, I can also use them postoperatively to confirm that the lens stays on axis.

Ultimately, the IntelliAxis-L markings are based on the preoperative data streamlined from different diagnostic technologies—in my case, Nidek OPD and Cassini. The data is automatically transferred right into the LENSAR system to account for iris registration as well as to identify the proper magnitude of astigmatism and the proper steep meridian. This allows me to be a very accurate surgeon because I no longer need to worry about cyclotorsion. Eliminating this variable is a big deal because for every degree that I am off the true steep meridian, 3% of the effective reduction is lost. So, even with just 10 degrees of error, 30% of the desired effect is lost. That is no longer a concern for me with LENSAR, which gives me the highest level of confidence when implanting toric IOLs.

Q: What does the future of FLACS look like to you?

A: We are only scratching the surface right now with what femtosecond cataract lasers can do. LENSAR as a company is committed to making the best femto system there is as well as continuing to innovate as our needs grow or change. Based on the results I've seen in my practice with streamlining essential topographic information and IntelliAxis-C and IntelliAxis-L software, they are succeeding. Their attention to astigmatism management, a factor so critical in terms of patient satisfaction and really success on a greater scale, will continue to set their system apart from any other.

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