ELIMINATING THE GUESSWORK WITH LENSAR

How IntelliAxis Refractive Capsulorhexis ensures precise toric intraocular lens placement



Warren Hill, MD

"IntelliAxis Refractive Capsulorhexis has converted a problematic aspect of the toric IOL surgery into a non-issue."

For Warren Hill, MD, of East Valley Ophthalmology, achieving successful and consistent outcomes for patients is his top priority. In addition to being an experienced surgeon, he is well known for his work in helping physicians obtain accurate IOL power calculations. During a recent interview, Dr. Hill shared how the IntelliAxis Refractive Capsulorhexis feature on the LENSAR Laser System has addressed one of the remaining challenges that most surgeons still face when treating astigmatism—toric IOL alignment.

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

A: When working with the toric IOL, there are a number of different challenges, but one of the remaining aspects that continues to be a problem for most surgeons is placing the toric IOL at the time of surgery. Before using IntelliAxis, we made some marks in the preoperative holding area, but the marks spread and sometimes the marks aren't exactly where they are supposed to be. Inaccuracies in this step can lead to misalignment of the toric IOL resulting in a refractive surprise, which can compromise the quality of the visual outcome for the patient.

In the operating room, the goal after we've taken out the cataract in the astigmatic patient is to properly align the toric intraocular lens along the intended meridian. One of the great features of the IntelliAxis is that there's no question as to where it needs to be. There are two tabs that are 180 degrees apart; they're part of the anterior capsule and they lie directly above the anterior surface of the toric IOL. They easily allow you to use the toric IOL alignment marks because the IntelliAxis marks sits right on top of them. There are no parallax issues involved and we know exactly where to place the lens.

Q: What makes the IntelliAxis feature of the **LENSAR Laser so precise?**

A: Well, there are three parts to this. First is that fact that we can do iris registration in our clinic using two different devices—the Pentacam or the Cassini. After that's done, the information is wirelessly transmitted to the femtosecond laser. That gets rid of any question about right eye versus left eye, patient identification or transcription errors. Lastly, when we create the capsulorhexis, there are two tabs that are made on the steep axis and they are exactly where they need to be because the laser uses the iris registration to compensate for any cyclotorsion. So when it comes time to align the toric IOL, there is no question about placement.

"When it comes time to align the toric IOL, there is no question as to where it needs to be with the IntelliAxis feature of the LENSAR Laser System."

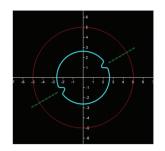
Q: How does the IntelliAxis feature give you an edge in terms of managing astigmatism?

A: One of the things I like the most about the IntelliAxis feature of the LENSAR femtosecond laser is that it gives confidence in the operating room. You have a plan, you follow the plan by placing the toric lens exactly where it needs to be, and then you're done.

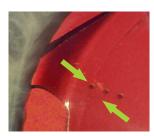
Another has to do with after surgery. One question that comes up if you have a residual refractive surprise is if the lens rotated. With the IntelliAxis feature, you can tell the lens is where you put it at the time of surgery without any question because the capsular marks are permanent and can be easily visualized postoperatively.







IntelliAxis Refractive Capsulorhexis automatically aligns to the steep axis based on iris registration and preoperative data.



The implanted toric IOL aligns to the axis mark of the IntelliAxis **Refractive Capsulorhexis for** improved predictability and outcomes.