

Table 25-1

Preoperative Clinical Considerations for Toric ICL Implantation: Personal Experience

Parameter	Pearls
Age	21 to 45 years of age as recommended by manufacturer <ul style="list-style-type: none"> • Off-label: <21 or >45 in specific medical situations
Pupil size	In general, mesopic pupils between 6 and 7 mm are recommended <ul style="list-style-type: none"> • Special attention to high diopter lenses where ≤ 6 mm may be advisable
Refraction	Accurate manifest and cycloplegic refractions <ul style="list-style-type: none"> • If the 2 of them differ in >1.5 D, consider postponing the indication until acceptance of refractive error. Special attention to the back vertex distance for moderate to high degrees of ametropias Accurate keratometry and anterior chamber depth <ul style="list-style-type: none"> • If refractive axis is significantly different from corneal axis, recheck values
Anterior chamber depth	≥ 2.8 mm recommended for Toric ICL, ≥ 3 mm for Visian Toric ICL <ul style="list-style-type: none"> • Possible off-label in shallower anterior chamber depths for lower diopter cases in special situations. Further assessment of peripheral anterior chamber depth and irido-corneal angles is needed before indication
Iridocorneal angles	Wide and open recommended <ul style="list-style-type: none"> • Special attention to high diopter lenses and preoperative shallow iridocorneal angles
WtW	Recommended method for ICL sizing <ul style="list-style-type: none"> • Accurate value with current available equipment (ie, Orbscan Eyemetrics [Bausch & Lomb, Rochester, NY], IOL Master [Carl Zeiss Meditec, Dublin, CA], manual or digital caliper, etc)
Sulcus-to-sulcus (StS)	Optimization of ICL sizing in combination with WtW. Needs accurate measurement, repeatable and reproducible <ul style="list-style-type: none"> • Very examiner-dependent tool
Automated StS and customized ICL simulation software	Further step toward customizing ICL size selection. A recently CE mark unit currently available (VHF-UBM Compact Touch StS)

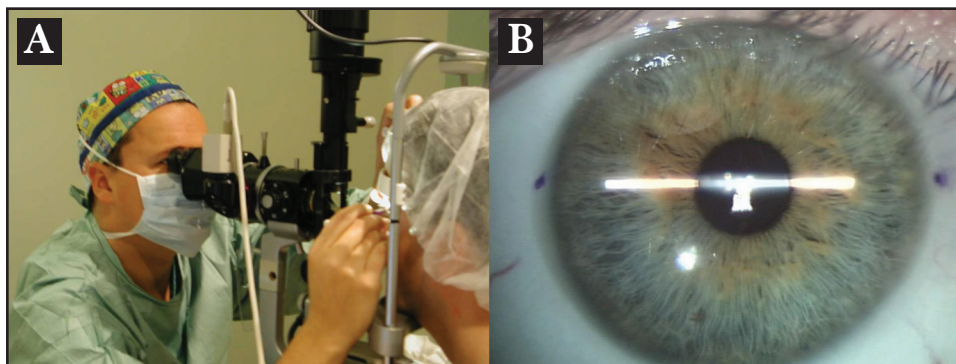


Figure 25-2. (A) Patient is sitting at the slit-lamp and surgeon is using a surgical marker to pre-mark the eye's horizontal axis prior to Toric ICL implantation. (B) The slit is made narrow, short, and horizontally aligned on the eye and 2 dots are placed on the corneolimbic area indicating the 0-180 meridian as reference for later Toric ICL alignment.

- **Lens injection:** Firmly grasp the eye with your forceps, put the tip of the cartridge at the edge of the incision, and slowly inject the lens. Pay attention to the distal footplate to unfold in the anterior chamber before the trailing footplate is injected out of the cartridge. This will prevent

the lens from unfolding upside down in the anterior chamber. Once the lens unfolds in the anterior chamber, the marks on the distal and proximal footplates are checked for proper orientation (Figures 25-4 D and E).