Zepto Visual Axis Centration For Consistent 360-degree Capsular Overlap & Best Optical Performance

Starting Points:

- Universal agreement that 360-degree capsular overlap is ideal in cataract surgery.

  Minimizes IOL tilt due to even mechanical forces on the IOL optic.

  Minimizes PCO development due to even downward forces to maximize the IOL’s barrier effect.

- Universal agreement that Centration of MF IOL on the patient’s visual axis is important for best optical performance in multifocality. In addition, MF IOL de-centration can contribute to dysphotopsias.

- Consensus that IOL haptic design will cause the IOL to self-align within the confines of the capsular bag. However, a small amount of lateral adjustment may be possible by the surgeon.

Current Problems:

- Capsular bag fornices are not visible. Therefore the surgeon can only guess the location of the capsular bag (Moving target 1).

- The surgeon has to select where to place the manual capsulotomy to end up with 360-degree capsular overlap (Moving target 2).

- Pupillary center for capsulotomy centration is a strong attraction, but misleading due to inconsistent dilation effect. Center of dilated pupil is often asymmetric and not related to center of the capsular bag (Moving target 3).

- Creation of a round capsulotomy by manual CCC perfectly fixed around an intended center point is difficult to impossible for most surgeons (Moving target 4).

These four ‘moving targets’ are at play in every cataract surgery with IOL implantation. Together, they combine end result in inherent imprecision in
targeting and inability to accomplish targeted goals that can have undesirable impacts for patients.

**Zepto Solves These Problems: Consistent 360-degree capsular overlap With Visual Axis Centration.**

- Zepto allows the surgeon to determine the patient’s own unique visual axis intraoperatively.

- This visual axis information is then directly translated into a surgical reference landmark (the capsulotomy) whose center aligned with the visual axis and closely aligned with the center of the capsular bag.

- The Zepto capsulotomy will therefore very likely improve alignment of the IOL on the visual axis and a likely consistent 360-degree overlap with the IOL optic in every case.

**Zepto’s visual axis identification function helps to eliminate uncertainty and enhances consistency in cataract surgery**