APX-200 surgical pearls:

1. Stretching of the pupil (by any means) is often associated with pain. It is advisable to augment local anesthesia by intra cameral, subtennon or peribulbar injection.

2. The APX 200 is designed to be inserted through two opposite 19G stab incisions located perpendicular to the surgical incisions (for example, for temporal surgical approach the incisions should be done at 6 and 12 o'clock positions).

3. Incisions opposite to each other create a quadrangular opening (Fig 1). Slight skew of the incisions will create a trapezoidal opening with the wider base facing the surgeon to provide more space for surgical instruments (for example, incisions at 12:30 and 05:30 for right eye temporal approach)(Fig 2)

4. Corneal incisions should be done parallel to the iris plane. No need to tilt the incisions backwards.

5. Fill the anterior chamber with a cohesive viscoelastic prior to insertion of the APX. Highly viscous OVD may be advantageous however regular OVD such as hyaluronic acid 1% is usually adequate.

6. It is advisable to inject OVD behind the iris to create a space between the pupillary margin and the lens. This may facilitate positioning of the distal tips behind the pupillary margin

7. Insert the APX into the anterior chamber until the pivot pin is inside the AC or at least within the incisional tract.

8. Open the APX slowly about half way, until the distance between the distal tips is approximately the pupil size.

9. Locate the terminal hook behind the iris so that the pupillary margin is located between the two hooks.

10. When the tips on both sides are properly positioned, slowly release the forceps and allow the device to open up completely.

11. If the tips are not positioned properly – redo the procedure using the designated forceps. No need for any intraocular manipulations.

12. The terminal tips are slightly bent backwards. When properly positioned the shafts of the device lie parallel to the iris.

13. In deep-set eyes ask the patient to look to the direction opposite to the insertion site (for example – "look down", for APX inserted at 12:00)

14. Proceed with routine surgical procedure. Utilize the device-free area, however the APX arms do not interfere with instruments crossing over the device (Fig 1)

15. Removal of the APX should be done prior to removal of the OVD

16. Use the designated forceps to remove the APX.
Additional Guidance

1. The APX can be squeezed through a 20G incision however it is advisable to use a 19G blade.

2. Fibrotic pupillary band and wide posterior synechiae may require surgical manipulations of the pupil prior to insertion of the APX. Postoperative irregular pupillary margin may occur (similar to any pupillary expander).

3. Do not overfill the anterior chamber with OVD. This may push the iris backwards and interfere with placement of the terminal hooks of the APX.

4. Release the forceps slowly to prevent inadvertent damage to adjacent structures.

5. Do not use the APX to fixate an unstable capsule in cases such as severe pseudoexfoliation. It was not designed for this purpose.