HUMANOPTICS

ASPIRA-aXA

XL-OPTIC – VISION WITHOUT LIMITS

ASPIRA-aXA

THE EXTENDED 7.0 mm XL-OPTIC

Available with blue-light protection

INNOVATIVE IOL DESIGN

For standard cataract surgery and especially for patients with large pupils, traumatic mydriasis or iris defects

- Aspira-aXA as the promising approach to avoid dysphotopsia[1] and deliver a fast adaption to the patient's visual habits
- An investment in the future

For patients at increased risk of retinal diseases or need for combined vitreoretinal surgery

- Enlarged panoramic view into the outermost fundus periphery during diagnosis, progression control and therapy[5, 8]
- Offers stability even in highly myopic eyes or extreme situations such as intravitreal injections or combined vitrectomies[5, 7]

XL OPTIC Ø 7.0 mm

XS INCISION 2.0

SAFELOADER® READY

EASY TO INTEGRATE INTO THE ROUTINE

- Astigmatism-neutral implantation conveniently through small incisions
- Precise and reliable IOL supply by preloaded SAFELOADER® autoloading system
- Intuitive, easy handling for a quick and efficient surgical routine

PREVENT PHOTIC PHENOMENA –
FOR AN UNTROUBLED VISUAL OUTCOME

Pseudophakic dysphotopsia is the most important dissatisfier for patients after successful cataract surgery.[2]

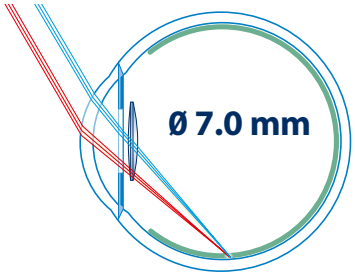
BENEFIT FROM A SMOOTH ADAPTION PHASE

- Reduced dysphotopsia from the early postoperative course leads to a fast adaption to the patient's visual habits and results in high patient satisfaction[1]
- Overlap of pupil and IOL optic prevents light passing by the IOL. Incident light is safely directed through the XL-optic
- Interfering edge effects get diminished, frequency and extent of dysphotopsia are reduced in comparison to conventional 6.0 mm IOL designs

PREVENT PERSISTENT DYSPHOTOPSIA

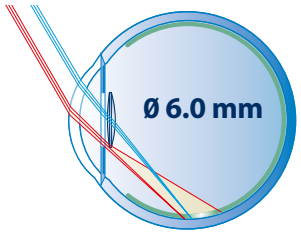
Bag-to-bag IOL exchange with the 7.0 mm Aspira-aXA showed complete resolution of dysphotopsia in almost all patients. An IOL exchange with a wide optic diameter IOL seems a promising surgical treatment for dysphotopsia.[3]

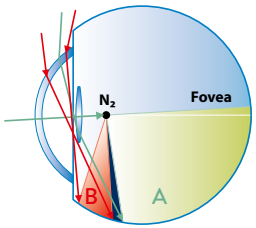
SIMULATED BEAM GUIDANCE WITH ASPIRA-aXA



Reduces positive and negative dysphotopsia effectively[1]

SIMULATED BEAM GUIDANCE WITH CONVENTIONAL IOL





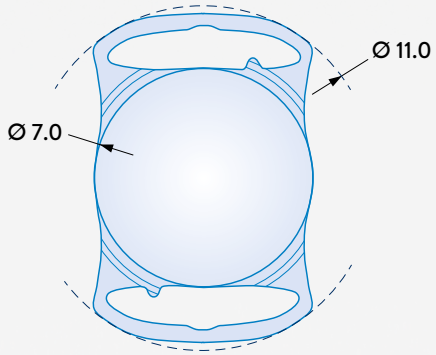
Schematic illustration according to Holladay[10]

AREA A:
Retinal image is generated by light rays refracted by the IOL optic

AREA B:
Retinal image is generated by light rays projected next to the IOL optic or refracted at the IOL edge

The dark gap between the two areas A & B can lead to the perception of negative dysphotopsia

THE PANORAMIC IOL –
THINKING ONE STEP AHEAD



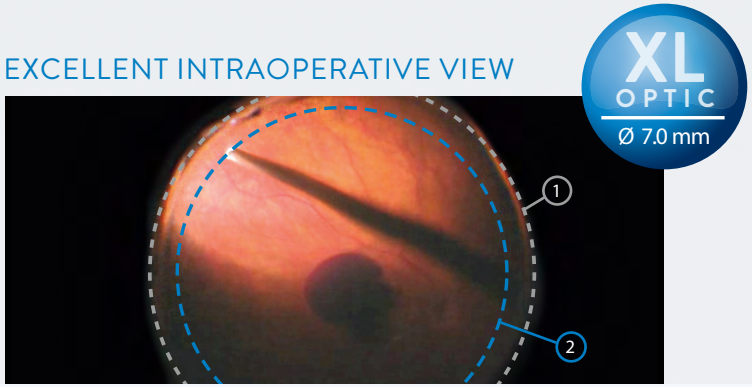
THE SOLUTION FOR VITREORETINAL SURGERY

- 7.0 mm XL-optic ideal for vitreoretinal visualization, facilitation of preventive examinations and follow-up surgeries[4]
- Possibility to perform wide capsulorhexis contributes to undisturbed wide view[5]
- XL diopter range from **-10.0 D** appointed to highly myopic patients

AN INVESTMENT IN THE FUTURE

- Early detection and management of high-risk groups is key to preventing visual impairment
- Patients suffering from central visual loss that adapt to using unaffected retinal areas for peripheral vision might benefit from the XL panoramic optic.[5,6]

EXCELLENT INTRAOPERATIVE VIEW



Opening of the anterior capsule membrane with a rhexis diameter of up to 6.5 mm

1. **Edge of the XL optic**
2. **Theoretical optic edge of a 6.0 mm IOL**

Extended fundus view for convenient assessment of the tissue structures of the posterior segment of the eye

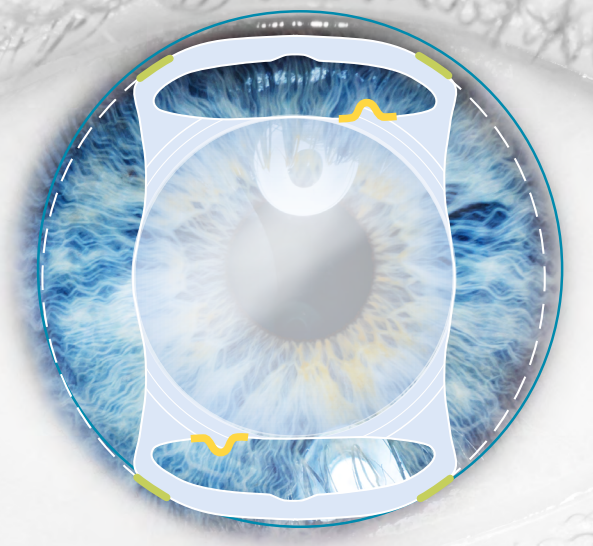
Facilitates therapeutic measures in the presence of peripheral retinal diseases

Images: Courtesy of Professor M. Bolz, Linz, Austria

"We have been using Aspira-aXA for several years - especially in combination with vitreous surgery. The particular advantage for me is the excellent stability of the IOL position and the vision, especially when using gas and oil tamponades. Even after almost two hundred implantations, no abnormalities, such as calcification or deposits of the hydrophilic material, occurred."

Dr. J. Schrecker, Glauchau, Germany

SAFE POSITIONING –
STABLE REFRACTION

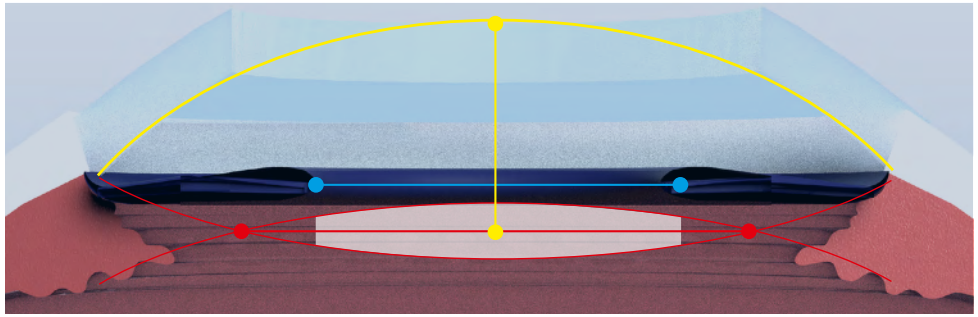


QUATTRO POINT CONTACT ZONE
Large contact area provides stability
in the capsular bag

DOUBLE POSITION MARKING
For correct and safe placement

CUT-OUT HAPTICS
As absorption elements for embedding the IOL
in the capsular bag

- Excellent overall capsular stability[7]
- Even in myopic eyes[5]
- Withstands increased pressure conditions providing stability also under extreme situations such as intravitreal injections or combined vitrectomies[5]



"Aspira-aXA combines tilt-free fit, excellent A-constant fidelity with optical precision, and its size makes it the number one monofocal IOL for eyes with a WTW greater than 12.0 mm and/or large pupils."

Dr. E. Becker, Oranienburg, Germany

CLINICALLY CONVINCING

STABLE RESULTS[8]

Refraction	Postoperative CDVA stable over time: After 1 month, median 0.00 logMAR; **-0.10** to **0.22** After 1.5 years, median 0.00 logMAR; **-0.10** to **0.10**
Mean Tilt	**<5.5º**, stable in the follow-up period
Mean Decentration	**<0.2 mm**, stable in the follow-up period
Median Rotation	**1.8º** one week postoperatively No significant changes between surgery and 1.5-year follow-up

AN IOL TO WIN YOU OVER

Effective Reduction of Dysphotopsia

Incidence, frequency and extent of dysphotopsia are lower for patients treated with Aspira-aXA compared to patients treated with a 6.0 mm optic[1]

Excellent Stability

Confirmed long-term stability with no significant IOL displacement or shift, hence no change in refraction[5, 7, 8, 9]

Highest Level of Patient Satisfaction

97 % of patients were highly satisfied or satisfied with their vision 1.5 years after surgery[8]

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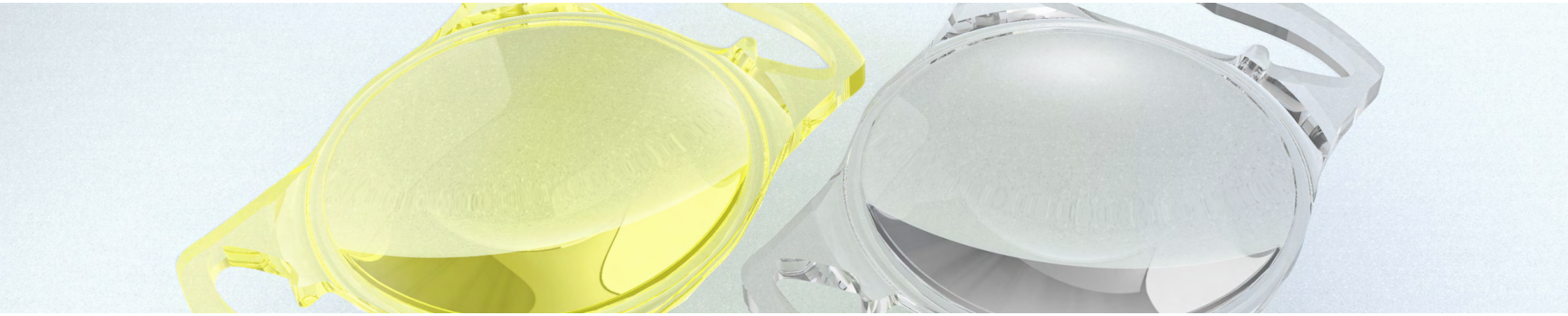

XL DIOPTER RANGE

ASPIRA-aXA/-aXAY PRELOADED IN SAFELOADER®	ASPIRA-aXA IN COMPACT LINE
10.0 to **30.0** in 0.5 D steps	**-10.0** to **9.0** in 1.0 D steps **10.0** to **30.0** in 0.5 D steps

RECOMMENDED IOL CONSTANTS

For laser interferometry and immersion ultrasound biometry

Haigis	Hoffer Q (pACD)	Holladay (surgeon factor)	Holladay 2	SRK/T	Barett LF/DF
a_0 = -0.521 a_1 = 0.269 a_2 = 0.215	5.924	sf = 2.17	5.724	119.568	2.18/–

PLEASE NOTE

IOL implantation in combination with vitrectomy may influence the predicted lens position.
Contact our customer service for details and adjusted power calculation.
For the latest constant optimizations, please refer to www.humanoptics.com and IOLcon.org.

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