THE ADD-ON CONCEPT — FOR PRECISION IN PSEUDOPHAKIC EYES

Add-On IOLs are secondary implants located in the sulcus ciliaris additionally to a capsular bag IOL. The design is optimized for the requirements of pseudophakic sulcus implantation.

- **CAPSULAR BAG IOL**
- **ADD-ON IOL**

Placement of the Add-On IOL in the ciliary sulcus and a posterior concave optic profile safely separate the Add-On IOL from the capsular bag.

*The year 2000 saw the first successful implant of a HumanOptics Add-On IOL.*

THE ADD-ON CONCEPT — FLEXIBLE TREATMENT OPTIONS

- **Postoperative options for refractive fine-tuning**
  - Compensation of residual ametropia (spherical, cylindrical)
  - Treatment of pseudophakic presbyopia

- **Reversible treatment:**
  - Safer and less traumatic than IOL explantation from the capsular bag
  - In cases where a dynamic change of refraction is likely, for instance with juvenile cataracts, after keratoplasty, or after silicone oil extraction
  - For patients who may be unable to adapt to an IOL feature or functionality, such as a multifocal IOL
  - Useful when a precise IOL calculation is not possible, e.g. following LASIK

- **Extension of power range diopter splitting**
  - Easy compensation of extreme refractive errors by splitting the total refractive power between two IOLs, while maintaining a small incision size.

- **Flexible choice and easy logistics**
  - The combination of a standard capsular bag IOL with an Add-On IOL makes it easy to offer flexible and individual patient care. Patients can decide shortly before the surgery to get a multifocal IOL implant, for instance.
DESIGNED BY THE PIONEERS OF THE TWO-LENS CONCEPT

SAFE OPTIC DESIGN

- Safety profile of the posterior concave optic designed to ensure a distance of approximately 0.5 mm between the two optics [1]
- Iris protection through an enlarged optic diameter (7 mm)*, which also reduces photic phenomena
- Negligible spherical aberration due to reduced center thickness

WELL-TOLERATED AND STABLE SULCUS FIXATION

- Filigree C-loop filament haptics made of high molecular PMMA, optimized for implantation in the sensitive sulcus tissue
- Enlarged overall diameter of 14 mm with a 45° sulcus contact area for excellent long-term stability
- Toric models with undulated C-loop haptics designed for outstanding rotational stability

* To avoid iris capture.

NUMEROUS APPLICATIONS

Depending on the application, two implantation strategies are possible. The Add-On IOL can either be implanted together with the capsular bag IOL in a single surgical procedure (1-session) or separately into a pseudophakic eye in a subsequent surgery (2-session).

A 1-session procedure is a sensible option when there is an expectation of dynamic refraction or when the IOL is likely to be replaced at a later date. Aphakia should be corrected with the capsular bag IOL. An Add-On IOL (e.g. multifocal, toric) can then be used to provide additional optical features.

In a 2-session procedure, the Add-On surgery can be performed at any time, even long after the preceding capsular bag IOL implantation. A 2-session procedure may be indicated to optimize postoperative refractive results, for instance, or for patients who want to take advantage of the benefits of a premium IOL (toric, multifocal, etc.) following cataract surgery.
CHOOSE A CUSTOM SOLUTION FROM OUR BROAD RANGE OF PRODUCTS

**The ADD-ON Concept — For Precision in Pseudophakic Eyes**

- **Add-On IOLs** are secondary implants located in the sulcus ciliaris additionally to a capsular bag IOL. The design is optimized for the requirements of pseudophakic sulcus implantation.

**The ADD-ON Concept — Flexible Treatment Options**

- **Postoperative options for refractive fine-tuning**
- **Reversible treatment:** Safe and less traumatic than IOL explantation from the capsular bag
- **Extension of power range:** diopter splitting
- **Flexible choice and easy logistics**

- **Compensation of residual ametropia (spherical, cylindrical)**
- **Treatment of pseudophakic presbyopia**
- **In cases where a dynamic change of refraction is likely, for instance with juvenile cataracts, after keratoplasty, or after silicone oil extraction**
- **For patients who may be unable to adapt to an IOL feature or functionality, such as a multifocal IOL**
- **Useful when a precise IOL calculation is not possible, e.g. following LASIK**

**MONOFOCAL: ASPIRA®3P-sPB**
- Advanced monofocal Add-On IOL
- Diopter range: −6.0 to 6.0 D
- Also available as WS 714 TPB

**MULTIFOCAL: DIFFRACTIVA® DIFF-sPB**
- The diffractive Add-On IOL for presbyopia correction
- Diopter range: −6.0 to 6.0 D
- Near addition: +3.5 D (at IOL plane)
- Also available as WS 714 TPB Diff

**TORIC: TORICA®-sPB**
- The toric Add-On IOL for astigmatism correction
- Diopter range: sph: −30.0 to 6.0 D, cyl: 1.0 to 30.0 D
- Also available as: MS 714 TPB

**TORIC-MULTIFOCAL: TORICADIFF-sPB**
- The toric-diffractive Add-On IOL
- Diopter range: sph: −2.5 to 1.0 D, cyl: 1.0 to 4.0 D
- Near addition: +3.5 D (at IOL plane)

**PROVEN SAFETY AND EFFICACY**

Numerous studies, some conducted over a period of more than 7 years, have demonstrated the design’s optimal suitability for such implantation [1, 2].

**ENHANCED OPTIONS**

Diopter splitting creates numerous benefits for surgeons with no adverse effects on the optical system*

**EFFICIENT AT ALL DISTANCES: NEAR · INTERMEDIATE · FAR**

Excellent visual results were achieved in a comparative study of the multifocal Add-On IOL (Diff-sPB) with the corresponding capsular bag model. The Add-On IOL facilitates a separate presbyopia correction with equally good optical results compared to conventional in-the-bag IOLs [4, 5].

**PRECISE CORRECTION OF EVEN EXTREME ASTIGMATISM**

Astigmatism has been reduced by 70 to 80%, even in complex clinical cases, e.g. after PKP [7, 8].

**OUTSTANDING PERFORMANCE**

Visual performance of the Add-On IOL TORICADIFF-sPB was excellent at near, intermediate and far distances with stable and rotation-free centration 9 months postoperative.

**ENHANCED OPTIONS**

Diopter splitting creates numerous benefits for surgeons with no adverse effects on the optical system*

**EXCELLENT VISION**

A clinical study comparing the postoperative performance of the Diff-sPB to a comparator showed superior efficiency. The Diff-sPB achieved significantly better contrast sensitivity results with distinctly fewer photic effects. The delicate curve performed significantly better at the intermediate distance [5].

**CASE STUDY: TORIC ADD-ON IOL TO TREAT EXTREME ASTIGMATISM**

“...the only way I could care for this patient.”

[Prof. G. Duncker, company symposium, DOC 2013]

**OUTSTANDING PATIENT SATISFACTION**

Freedom from eyeglasses and high patient satisfaction following bilateral implantation of the toric-multifocal Add-On IOL TORICADIFF-sPB performed 6 years after primary cataract surgery [9].

* For more information on the efficient concept of diffractive Add-On IOLs and additional multifocal models please visit the download area of our media center www.humanoptics.com

**THE ADD-ON PLATFORM**

**The Two-Iso-Centric Concept**

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The year 2000 saw the first successful implant of a HumanOptics Add-On IOL.
TOP TIER CUSTOMER SERVICE

Benefit from our expertise as an experienced manufacturer of advanced ophthalmological implant technology.

Please consult our qualified team of experts for individual calculations.

LITERATURE:


