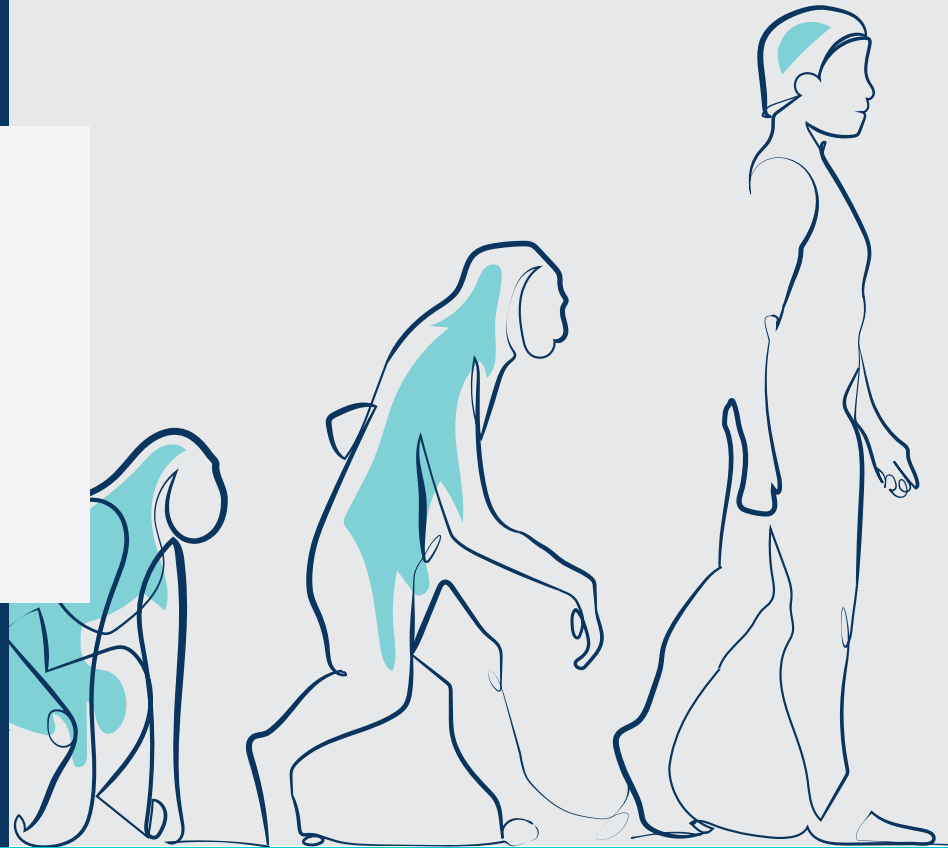


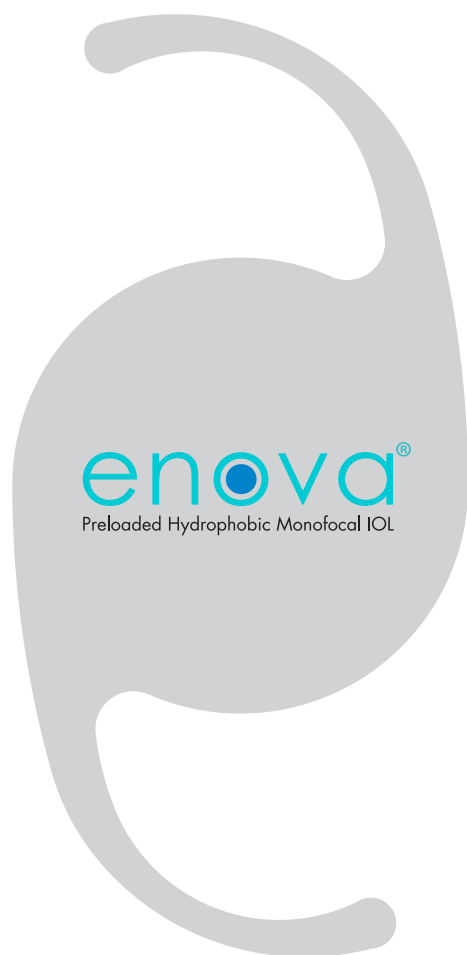
Enovation of Hydrophobic IOLs



enova[®]
Preloaded Hydrophobic Monofocal IOL



Enovation of Hydrophobic IOLs



100%
glistening-free material



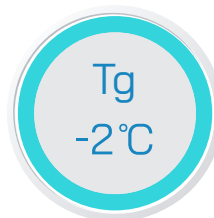
Outstanding
Biomechanical Properties



Clinically Proven
Low PCO Rate



Pre-conditioning Free

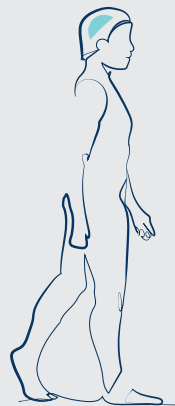


Preloaded



Enovation of Hydrophobic IOLs

Hydrophobic IOLs have evolved significantly over time, and Enova® represents the pinnacle of this evolution. That's why we call it "Enovation".



enova® Generation

Enova® is the only 100% glistening-free¹ hydrophobic acrylic IOL that requires neither pre-hydration nor storage in saline. Enova®, which has 7% water content, is dry-packed and has excellent optical and mechanical properties with a preloaded system.



2ND Generation Hydrophobic IOLs

Hybrid polymers, which include less than 5% water content, demonstrate a so-called control over water uptake and improved resistance to glistening formation, albeit at reduced levels. However, IOLs made from such materials either have poor mechanical properties or require both pre-hydration and storage in saline².



1ST Generation Hydrophobic IOLs

Acrylic IOLs, with less than 1% water content³, develop various levels of glistening post-implantation due to uncontrolled water intake into the IOL polymers.

1- Glistening Analysis in Enova® Hydrophobic Acrylic Intraocular Lenses / In-vitro Study Evaluating the Tendency of Different Intraocular Lenses to Form Intraoptical Glistenings by the University of Utah

2- Bausch & Lomb. enVista Directions for Use

3- Comparative analysis of in vitro accelerated glistening formation in foldable hydrophobic intraocular lenses. International Ophthalmology Tandogan, T., Aufarth, G. U., Choi, C. Y., Son, H.-S., & Khoramnia, R. (2021).



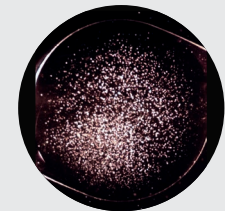
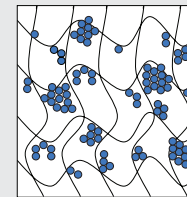
Enovation of 100% Glistening Free IOL Material

The Enova® IOL Material is the first 100% glistening-free hydrophobic acrylic IOL that does not require pre-hydration and storage in saline solution!

The Enova® PGF3 IOL is dry-packed and boasts exceptional optical and mechanical properties.

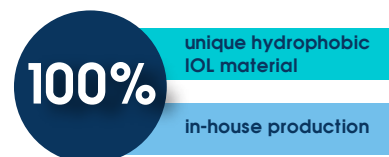
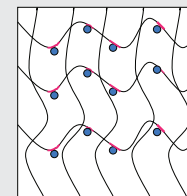
Glistening Formation in IOL

Water molecules bind to certain chemical groups through weak hydrogen bonds. Over time, more water molecules diffuse into the polymer network and bind preferably to other water molecules, which forms clusters referred to as "glistening."



ENOVA® 100% Glistening-Free IOL

The unique composition of Enova® material allows uniform hydration of specific sites to have controlled water uptake and resistance to glistening formation.





Enovation of 100% Glistening Free IOL Material

Conclusion by the University of Utah



In vitro glistenings study; University of Utah

Study: In vitro study evaluating the tendency of different intraocular lenses

to form intraoptical glistenings:

STUDY REPORT

Intermountain Ocular Research Center
John A. Moran Eye Center
University of Utah

Sponsor: VSY Biotechnology



In vitro glistenings study; University of Utah

Conclusions: Enova® hydrophobic acrylic intraocular lenses exhibited no glistening formation after hydration and variation of the temperature. Tecnis intraocular lenses exhibited trace glistening formation, and AcrySof intraocular lenses exhibited mild glistening formation in these in vitro test conditions. The new Enova® intraocular lenses showed no surface haze and glistenings when compared with other commercially available hydrophobic acrylic IOLs as AcrySof and Tecnis intraocular lenses.

Liliana Werner, MD, PhD

Nick Mamalis, MD

Week 1: The findings at this time point were generally similar to those on Day 1. Overall, whenever glistening formation was observed in this study at week 1, it was mostly within the central 4.0 mm of the IOL optic.

- Enova® IOLs: No glistening, no haze.
- AcrySof IQ IOLs: Mild optic haze (giving the lens a slight yellowish/brownish discoloration under light microscopy) and mild glistening formation. Diameter of the glistenings: 10 to 20 microns.
- Tecnis IOLs: Moderate central optic haze (giving the central part of the optic a yellowish/brownish discoloration under light microscopy) and trace glistening formation. Diameter of glistenings: 25 microns.

In an attempt to quantify glistening formation within the lenses, the number of glistenings or microvacuoles (MV) that were well focused in the X200 light photomicrographs (area of 0.35 mm²) were counted, and the results were converted to MV/mm².

IOL	MV/mm ² Week 1
Enova®	0
AcrySof IQ	8.7
Tecnis	2.9

Table 1: Number of Microvacuoles Converted to MV/mm²



In vitro glistenings study; University of Utah

Conclusions: Enova® hydrophobic acrylic intraocular lenses exhibited no glistening formation after hydration and variation of the temperature. Tecnis intraocular lenses exhibited trace glistening formation, and AcrySof intraocular lenses exhibited mild glistening formation in these in vitro test conditions. The new Enova® intraocular lenses showed no surface haze and glistenings when compared with other commercially available hydrophobic acrylic IOLs as AcrySof and Tecnis intraocular lenses.

Liliana Werner, MD, PhD

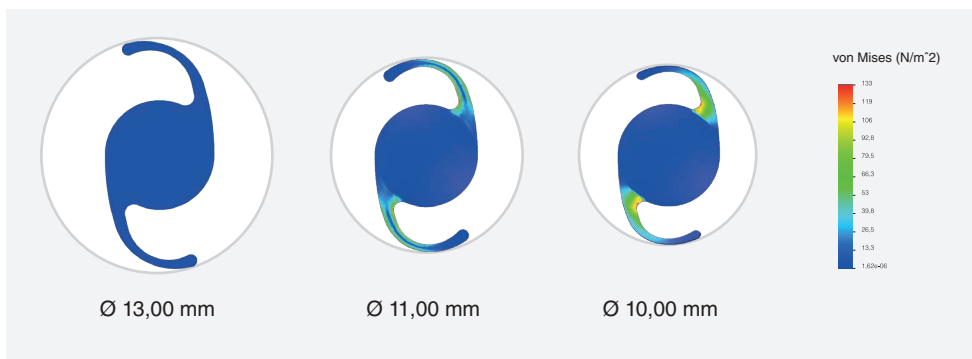
Nick Mamalis, MD



Outstanding Biomechanical Properties

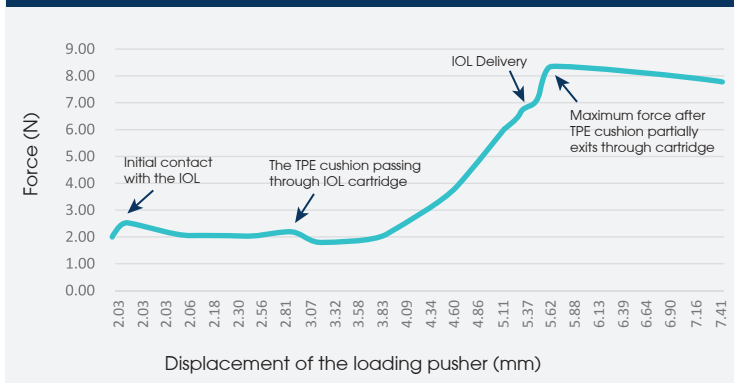
Gentle and controlled unfolding process in the anterior chamber and no pre-warming or special pre-conditioning is required.

Biomechanical stability of IOL inside the postcataract capsular bag



Outstanding rotational stability thanks to unique haptic design.

Description of the IOL delivery process

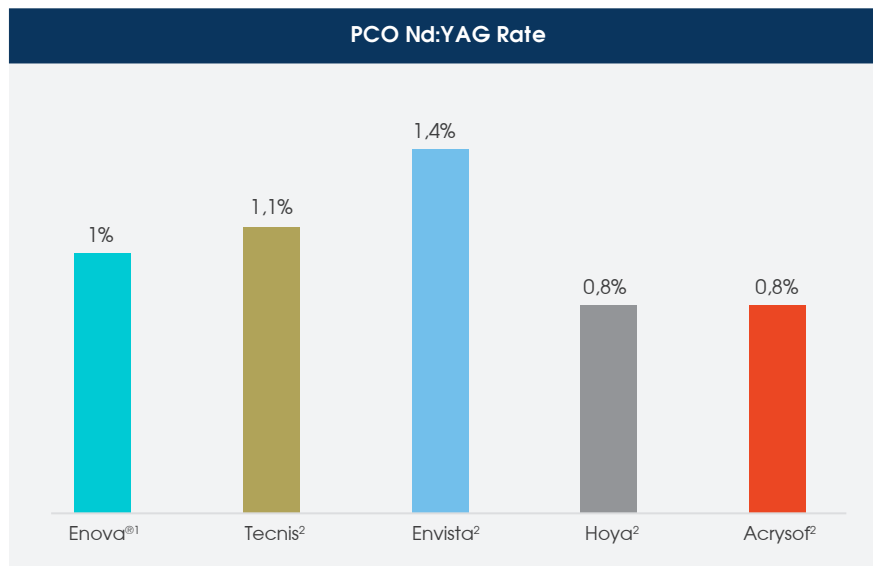




Clinically Proven Low PCO Rate

Posterior capsule opacification (PCO) after cataract surgery is influenced by intraocular lens (IOL) design and material. Thanks to Enova®'s 100% Glistening-Free novel material and 360° precise square edge design; they form a dual barrier against the risk of PCO and minimize Nd:YAG procedures after the implantation.

In the multicenter studies performed on Enova® IOLs, PCO was evaluated on 320 eyes. By the 1-year postoperative results, only 5% of the total eyes. 1% of total implantations had PCO which necessitated Nd-YAG laser treatment.



1- VSY Biotechnology Data on File, 2023.

2- RCOPhth National Ophthalmology Database Audit Feasibility Study of Post-cataract Posterior Capsule Opacification 2021

Pre-conditioning Free

A polymer's Glass transition temperature is reached when the polymer changes from a rigid material to a soft material. Having a Tg of -2.0°C , all IOLs with the unique Enova[®] material undergo a gentle and controlled unfolding process that occurs below standard operating room temperatures.

Thus, no warming or special pre-conditioning is required.

IOL	Tg (°C)	Glistening	Packaging State
	-2.0	No	Dry
Acrysof Vivity [®]	15	Yes	Dry
Tecnis [®]	14	Yes	Dry

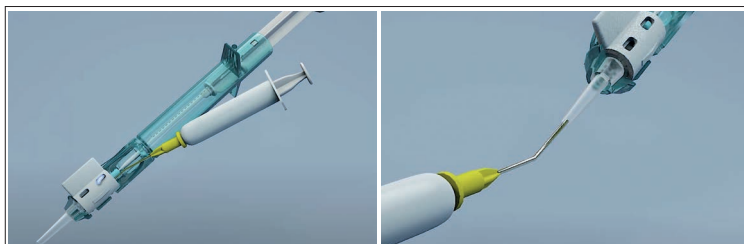


Ready to go Preloaded System

Enova® Hydrophobic IOL with Rotaryjet Preloaded IOL system provides a safe and efficient delivery procedure due to its patented* Rotaryjet technology. Its smart design allows a reliable surgery with smooth IOL transition and reduced post-op risks regarding IOL implantation.

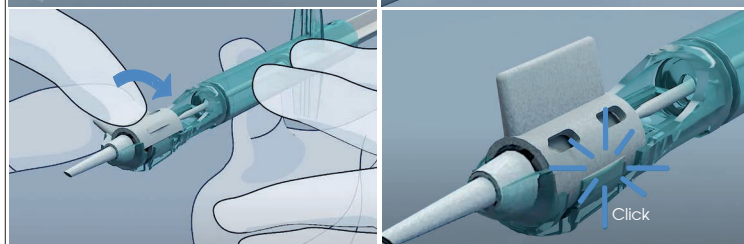
Step 1

Apply the OVD



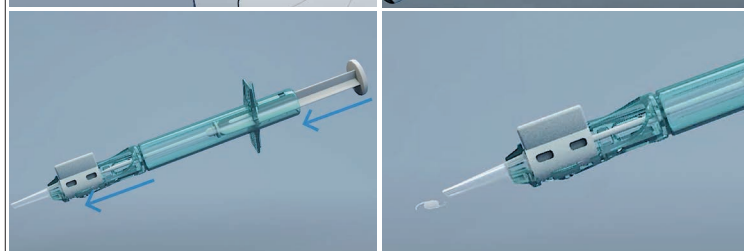
Step 2

Turn of 90° until you hear the "click" sound

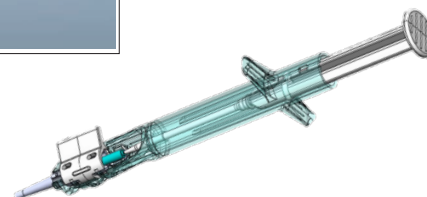


Step 3

Ready to inject



*Patented in



Technical Features

IOL Model	Enova [®] PGF3	Dioptr Power Range	Preloaded	From +10.00 D to +30.00 D (0.50 D increments)
Material	100% glistening-free / hydrophobic acrylic		Standalone*	From +06.00 D to +32.00 D (0.50 D increments)
Optic Design	Biconvex Aspheric	Tg (Glass transition temperature)	-2.0 °C	
Refractive Index	1.53	Photoprotection	UV Filtration	
Abbe Number	42	Recommended Constants	Ac A constant: 118.0	
Water Content	7%		SRK-II : 119.03	
Square Edge	360° square edge		SRK-T: 118.7	
Optic Size	6.00 mm		Haigis a0, a1, a2: 1.11, 0.4, 0.1	
Haptic Size	13.00 mm		HofferQ pACD: 5.33	
Haptic Design	C Haptic		Holladay sf:1.55	
Haptic Angle	0°		Barrett Universalll LF:1.73	

*Recommended injector system: Acrijetfly

enova[®]

Preloaded Hydrophobic Monofocal IOL

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