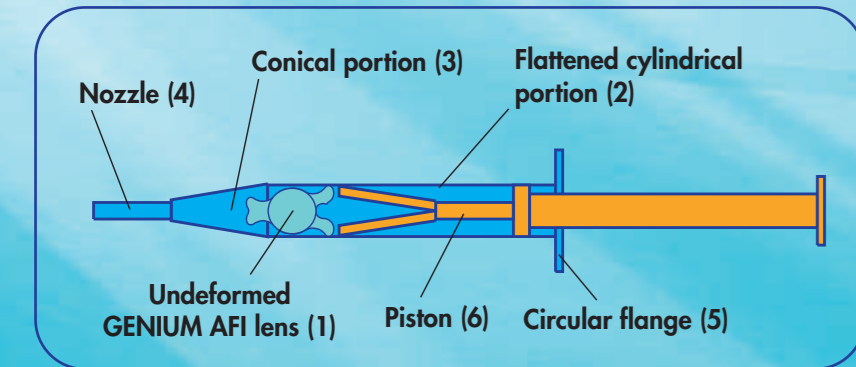




**GENIUM AFI PREPAK** is the world's first and truly innovative process for cataract surgery, involving an injectable intraocular lens that is completely preloaded in its own sterile, single-use injector.



The **GENIUM AFI<sup>®</sup>** injector is shaped like a syringe.

The single-piece barrel of the syringe is made of transparent polypropylene and comprises :

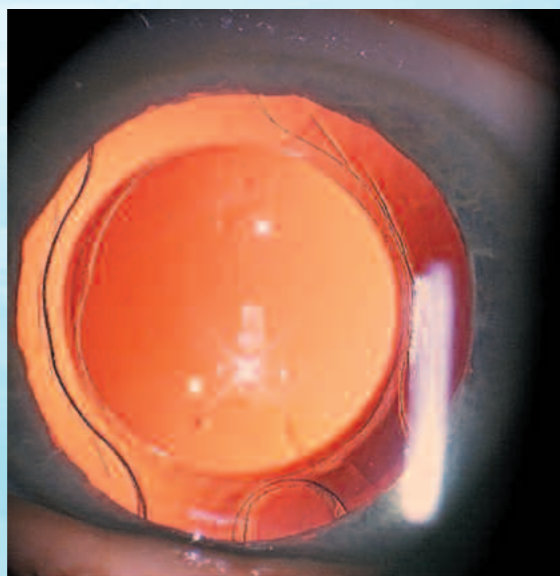
- A flattened cylindrical portion (2) with a flat surface and a curved surface: the curved surface necessarily coincides with the most convex surface of the lens.
- The cylindrical portion of the barrel of the syringe is both long and wide enough to receive **GENIUM AFI 5,5<sup>®</sup>** and **AFI 6,0<sup>®</sup>** undeformed lenses (1), ready to be folded then injected.
- A conical portion (3), tapered in cross-section, for folding the lens.
- A slightly conical nozzle (4), for insertion of the lens through the incision : as with the cartridge of a conventional injector, the tip of the nozzle is bevelled, and the opening should be directed downwards.
- A circular flange (5), cut away on one side: the flat side coincides with the flat surface of the body of the syringe

and stops the injector rolling when it is placed on a slightly sloping surface. The piston (6) is made of natural polyetherimide (amber-coloured) and comprises:

- A plunger rod that is as rigid as possible (solid in cross-section).
- A central section fitted with one seal to avoid air penetrating during injection.
- Two plunger threads, joined to the plunger rod by a flexible connection.

When the piston is depressed, the conical portion causes the threads to move gradually closer together, until they are brought together entirely and can pass into the nozzle.

There is a small depression at the tip of the threads, designed to contain the upper haptics, enabling the threads to push directly on the edge of the optic near the end of the lens folding process.



**GENIUM AFI 5,5 Prepak** implant at 6 months, on a female patient. Photograph kindly provided by Dr Thierry Amzallag.

The injected **GENIUM AFI Prepak** implant is highly innovative. First of all, it is specifically designed with and for the **GENIUM** injector. The injector and the injected implant therefore complement each other ideally. Secondly, its lateral surfaces have been designed to improve the guidance and stability of the implant during injection. This device helps give a flat injection in every case. The **GENIUM AFI Prepak** implant is inserted into the capsular bag without rotation, facilitating direct positioning of the lens. It does not require the use of a second instrument for control. Finally, the **GENIUM AFI Prepak** implant is designed to facilitate folding and injection of the lens.

The injector-implant unit is sterilised by steam autoclave and its mechanical qualities and precision do not deteriorate over time. Sliding capacity is retained. The design means that the piston and implant are correctly positioned at the time of injection. All these innovations make the injection simple, quick and safe.

After checking the position of the implant, a viscoelastic substance is injected through the tip of the **GENIUM AFI Prepak** using a specific cannula, after having purged the syringe to avoid the presence of air bubbles. This injection is performed on either side of the implant, then against the wall in the conical portion, while withdrawing the cannula. A small volume is sufficient.

Pushing on the piston moves the implant towards the folding zone. The upper haptics are then folded over onto the optic by the folding piston. The optic

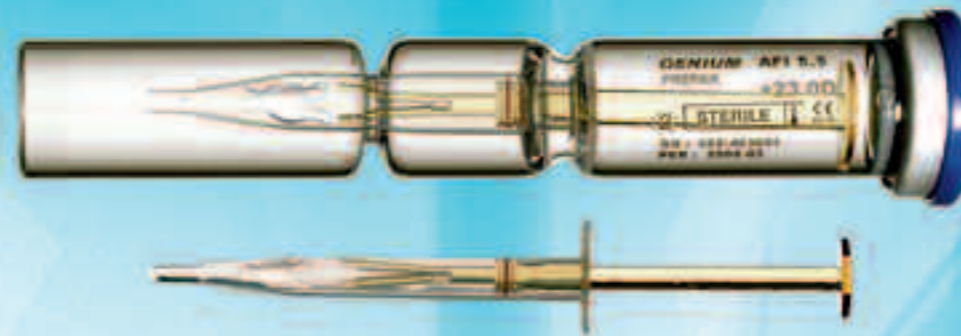
then starts to fold and advance towards the injection zone. Folding requires only very gentle pressure on the piston and then becomes slightly harder once it is positioned in the injection zone. The **GENIUM AFI Prepak** is then ready to be introduced into the anterior chamber.

After filling the anterior chamber with a viscoelastic substance (Viscum TWO ONE) the bevelled tip of the **GENIUM AFI Prepak** is introduced through an incision measuring 3.2 mm. The injector is angled towards the back for direct positioning in the capsular bag.

The plunger should be depressed gradually and not suddenly in order to maintain control over the injection process. It should be depressed until the end of the piston reaches the bevelled tip. At this point, the optic is released into the anterior chamber and the piston is drawn back in order to inject the upper haptics by depressing the plunger once more. The **GENIUM AFI Prepak** implant is placed directly in the capsular bag, making use of the bevelled tip if necessary.

The implant is easy to centre. Its position in the capsular bag is checked, then the viscoelastic substance is removed.

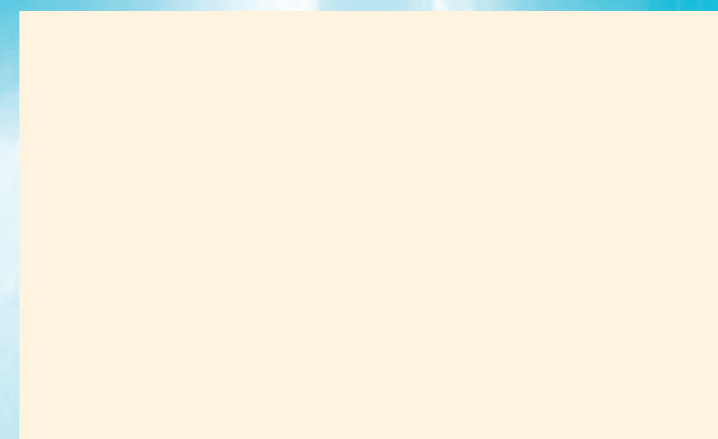
- Preloaded injection is the latest stage of injection and its future. The innovative features of LCA's preloaded **GENIUM AFI Prepak** injector make implantation procedures simple and safe, which is a great advantage for surgeons and patients.



LCA PHARMACEUTICAL HAS DESIGNED THE PRELOADED **GENIUM AFI PREPAK** INJECTOR, AN ORIGINAL AND INNOVATIVE CONCEPT. IT MAKES IMPLANTATION ACCURATE AND SAFE, ALLOWING THE SURGEON TO CONCENTRATE ON THE ESSENTIALS :

**THE QUALITY OF THE RESULT AND PATIENT SAFETY.**

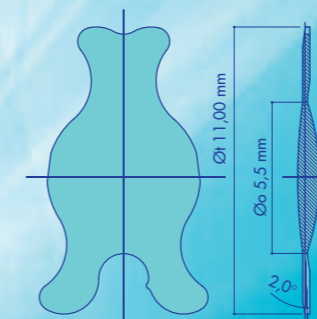
Your local distributor :



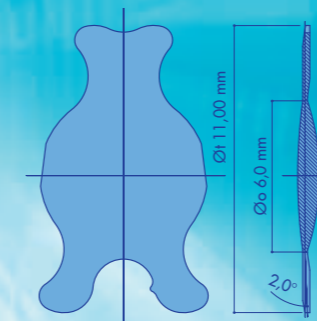
Designed and manufactured by:  
**LCA PHARMACEUTICAL**  
9, Allée Prométhée, F-28000 Chartres, France  
Phone : (33) 02.37.33.39.30  
Fax : (33) 02.37.33.39.39  
E-mail : lca@lca-pharma.com



International Patents Pending

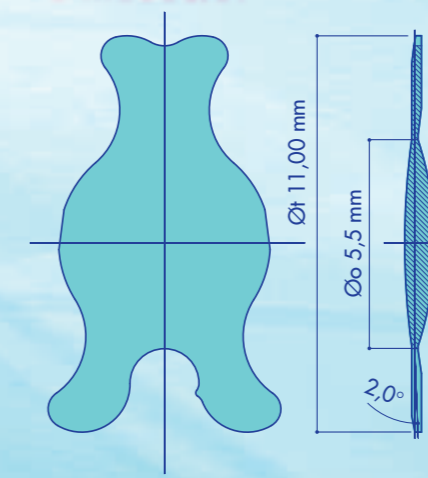


**GENIUM AFI 5,5 PREPAK**

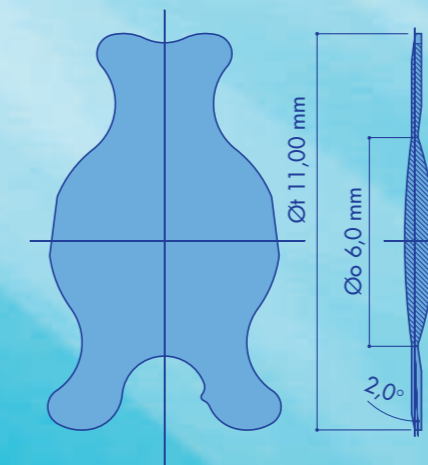


**GENIUM AFI 6,0 PREPAK**

**NEW Ø6,0 mm**



**GENIUM AFI 5,5 PREPAK**



**GENIUM AFI 6,0 PREPAK**

**NEW**  
**Ø6,0 mm**

THE **GENIUM AFI** LENS HAS THE FOLLOWING FEATURES :

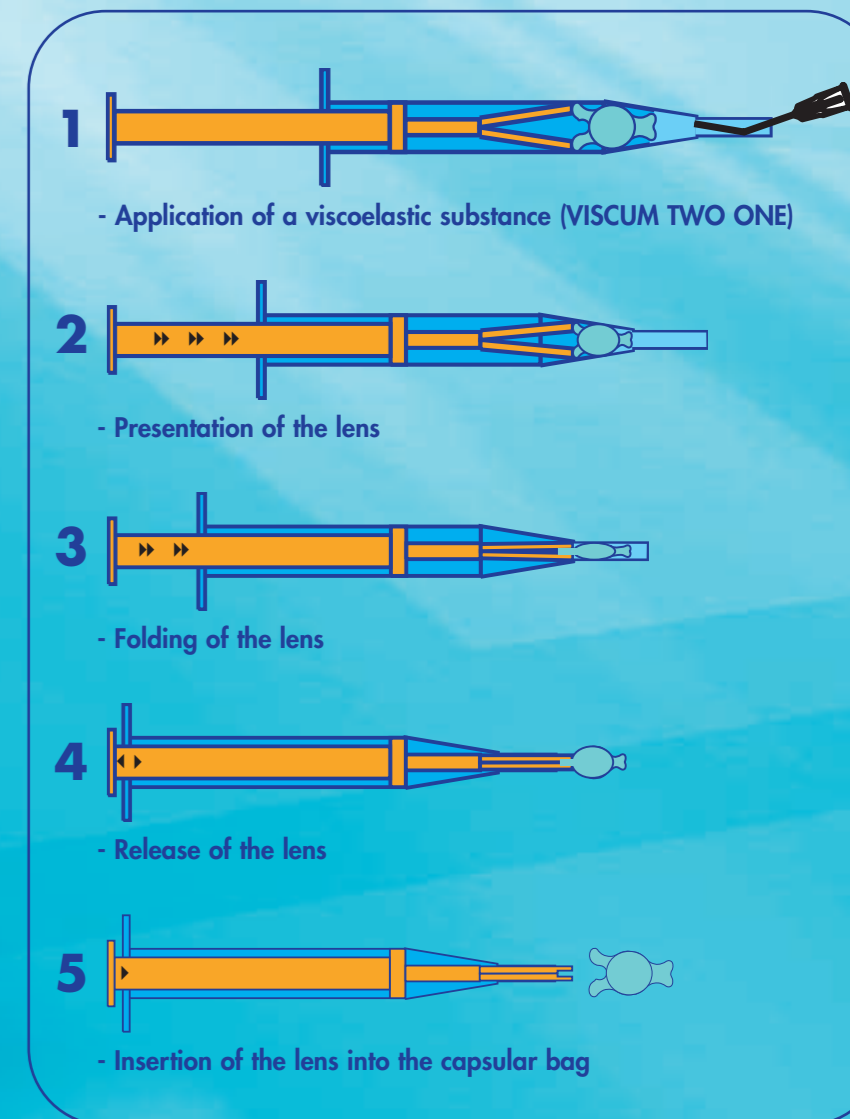
- ▶ Hydrophilic material (26 % hydrophilicity) including a 400 nm UV filter
- ▶ Optimised optic design to reduce spherical aberration
- ▶ Total diameter 11.00 mm
- ▶ Optic diameter 5.5 mm and 6.00 mm
- ▶ Tripod shape, single-piece, square edges
- ▶ Balanced haptic design, to provide perfect centering in the capsular bag

THE NOVEL TRIPOD SHAPE OF THE AFI LENS WHICH IS ADAPTED TO THE **GENIUM** INJECTOR HAS THE FOLLOWING ADVANTAGES :

- ▶ The lens is stored in an undeformed state
- ▶ Automatic alignment of the longitudinal axis of the lens with that of the injector
- ▶ The lens is injected flat, the lower haptic being presented first



**INJECTION INVOLVES 5 STEPS**



Injection of the 5.5 and 6.0 GENIUM AFI lens



# GENIUM AFI<sup>®</sup> PREPAK

THE FIRST IOL PRELOADED IN A STERILE SINGLE-USE INJECTOR\*

\*International Patents Pending



LCA PHARMACEUTICAL HAS DESIGNED THE PRELOADED GENIUM AFI PREPAK INJECTOR, AN ORIGINAL AND INNOVATIVE CONCEPT.  
IT MAKES IMPLANTATION ACCURATE AND SAFE, ALLOWING THE SURGEON TO CONCENTRATE ON THE ESSENTIALS :

THE QUALITY OF THE RESULT AND PATIENT SAFETY.

CE  
0120



micro incision 1.8

*New IOL* **HD**



*istacryl* **HD**  
 ACRYLIC BI-ASPHERIC  
 INTRAOCULAR LENSES



HIGH QUALITY PATIENT VISION



LCA PHARMACEUTICAL INNOVATION AND PERFORMANCE...

LCA PHARMACEUTICAL INTRAOCULAR LENSES

NAME	OPTIC DIAMETER	OVERALL DIAMETER	HAPTIC ANGLULATION	A-CONSTANT ESTIMATION
<i>istacryl AFP 5,7</i>	5,7	11,7	5°	118,3
<i>istacryl AFP 5,8</i>	5,8	10,5	0°	118,3
<i>istacryl AFP 6,2</i>	ELLIPTIC 6,2 x 5,8	11,0	5°	118,3
<b>GENIUM AFI 5,5 PREPAK</b>	5,5	11,0	2°	118,0
<b>GENIUM AFI 6,0 PREPAK</b>	6,0	11,0	2°	118,0
<i>istacryl</i> <b>HD</b>	6,0	11,5	5°	118,0
<i>istacryl</i> <b>HD</b>	6,0	10,5	5°	118,0

*IOL Acrylic AFP*  
 MICRO INCISION 2.2

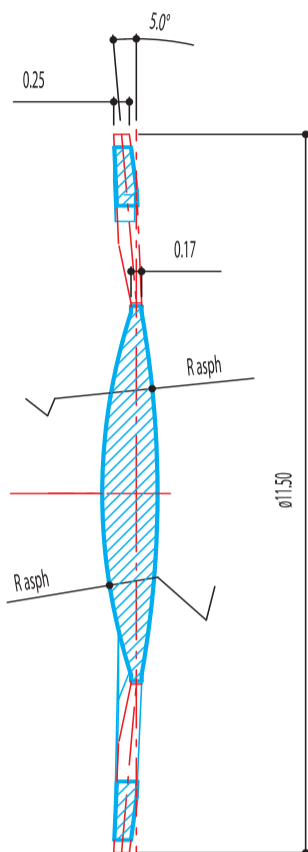
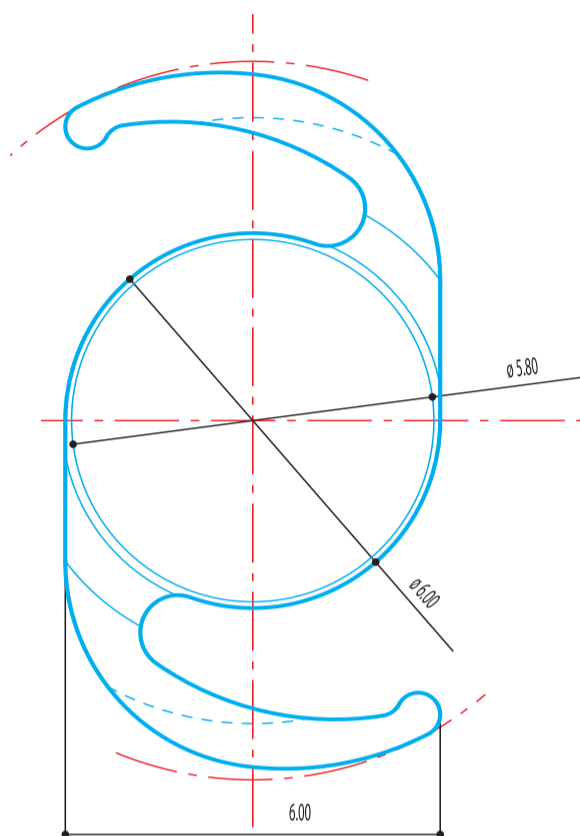
*IOL Prepak*  
 IN ITS READY-TO-USE INJECTOR

*New IOL* **HD**  
 MICRO INCISION 1.8

LCA PHARMACEUTICAL - 9, Allée Prométhée, F-28000 CHARTRES, FRANCE



TECHNICAL FEATURES

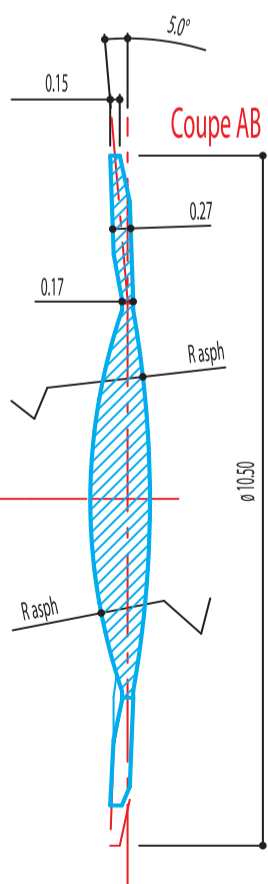
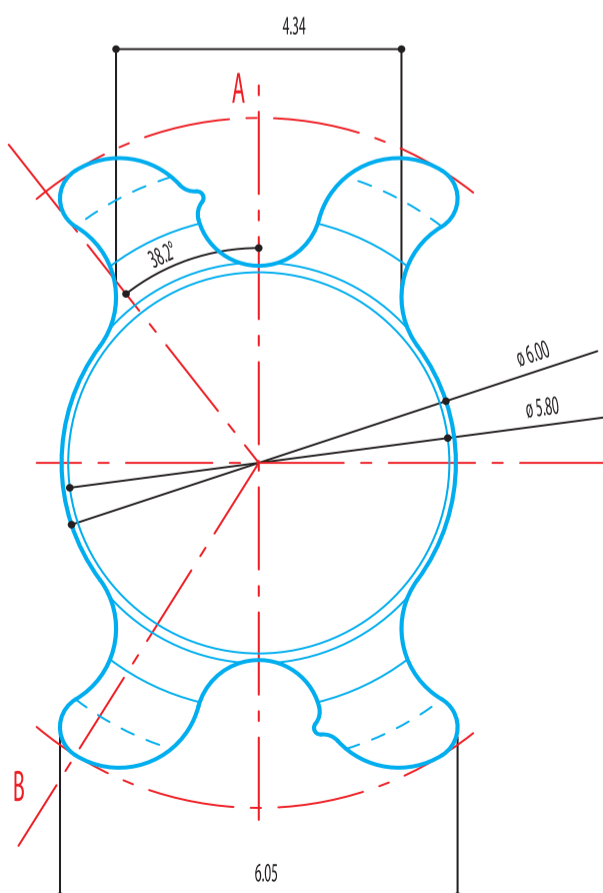


**Lens design**  
**Implantation site**  
**Lens shape**  
**Material (optic and haptic)**  
**Overall diameter**  
**Optic diameter**  
 • +13.0 to +21.0 dioptries  
 • +21.5 to +26.0 dioptries  
 • +27.0 to +28.0 dioptries  
**Optic features**

**Square edge**  
**Haptic angulation**  
**Injectable**  
**Injector name**  
**Injector : Single-use**  
                   : Preloaded  
**A-Constant (estimated)**  
**Theoretical ACD**  
**Power range**

Single-piece  
 Capsular bag  
 C loop  
 Acrylic hydrophilic polymer (26%) with UV filter  
 11.5 mm  
  
 6.0 mm  
 5.8 mm  
 5.6 mm  
 Monofocal – Bi-aspheric  
 Anterior and posterior aspheric surfaces  
 Aberration free  
 Yes  
 5°  
 Yes  
 Medical Visco-Ject 1.8  
 Yes  
 No  
 118 diopters  
 4.9 mm  
 +13.0 to +28.0 diopters  
 (by 0.5 from +16.0 to +26.0)

TECHNICAL FEATURES



**Lens design**  
**Implantation site**  
**Lens shape**  
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