

CAUTION: Federal (USA) law restricts this medical device to the sale by or on the order of a physician.

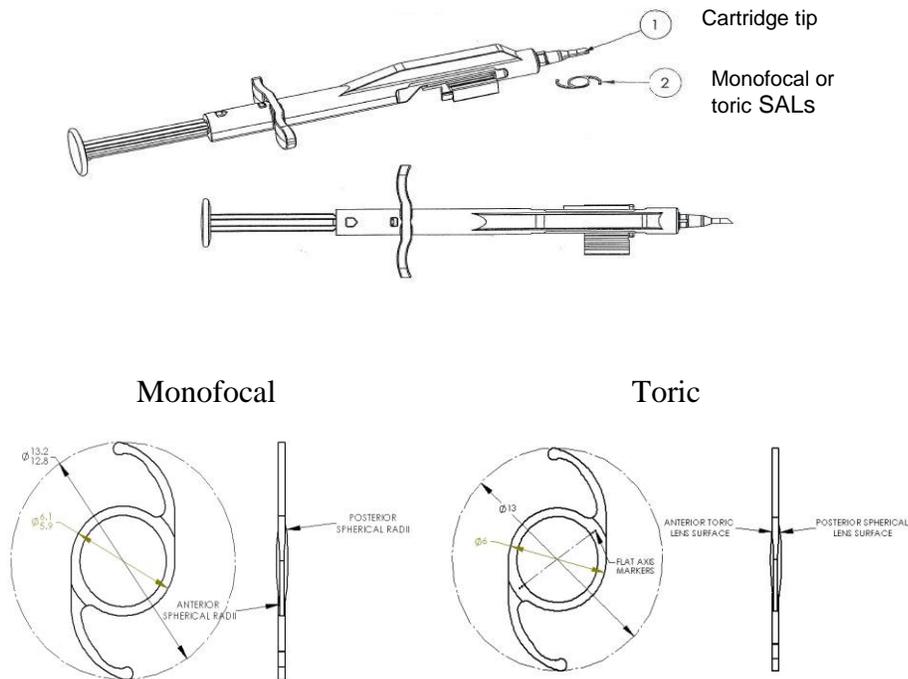
MADE IN USA

DEVICE DESCRIPTION

The Millennium Biomedical PreciSAL Preloaded Soft Hydrophobic Acrylic Intraocular Lens System is a fully preloaded lens implantation delivery system at 2.4 mm or less incision with clear (UV filtering) and yellow (UV+blue light filtering) monofocal (302A and 302AC) or toric (T302A and T302AC) IOL for a safe, reliable and efficient minimal invasive surgery.

The MBI Preloaded Soft Hydrophobic Acrylic intraocular lenses (PSAL) are foldable one-piece posterior chamber, UV or UV+blue light filtering aspheric optical implant lenses with a square edge used for the replacement of the human crystalline lens in the visual correction (monofocal and toric) of aphakia and pre-existing corneal astigmatism (toric only) in adult patients with and without presbyopia. The yellow SAL also contains MBI's proprietary blue light filtering chromophore that filters light in a manner that approximates a young human crystalline lens in the 400-475 nm blue light wavelength range.

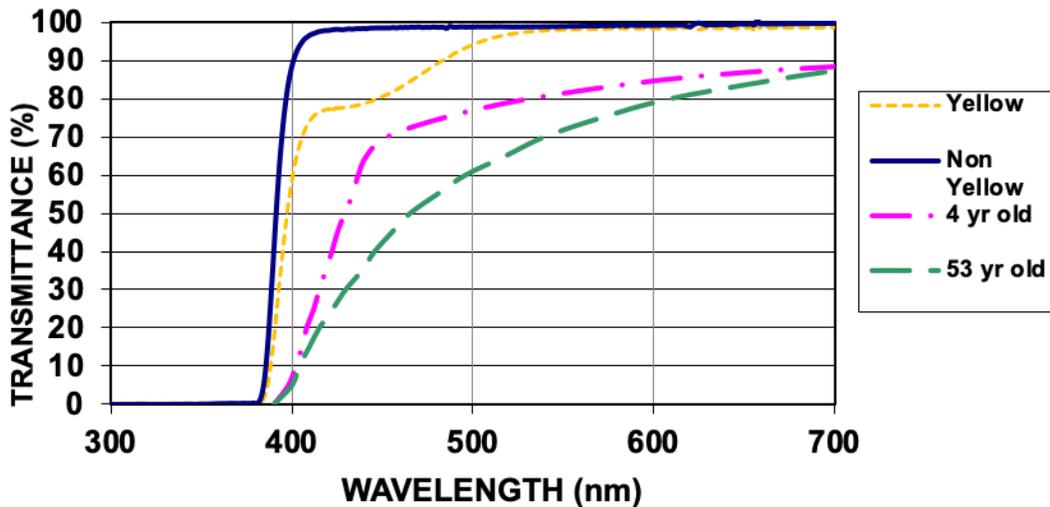
Physical Characteristics of PreciSAL Lens Delivery Systems (all dimensions in mm)



Physical Characteristics of PreciSAL Preloaded IOLs

Characteristics	Model			
	SAL P302A	SAL P302AC	SAL PT302A	SAL PT302AC
	Preloaded Monofocal IOL		Preloaded Toric IOL	
Optic Type	Biconvex Aspheric Optic		Biconvex Toric Aspheric Optic	
Optic/Haptic Material	Ultraviolet and blue light filtering Acrylic	Ultraviolet filtering Acrylic	Ultraviolet and blue light filtering Acrylic	Ultraviolet filtering Acrylic
IOL Powers (diopter)	+0.0 to +34.0		+5.0 to +34.0	
IOL Cylinder Power (diopter)	0		+1.0 to +6.0	
Index of Refraction	1.50			
Optic Edge	Square			
Optic Diameter (mm)	6.0			
Overall Length (mm)	13.0			
Haptic Angle	0°			

SPECTRAL TRANSMITTANCE CURVE



NOTE:

- Measurements were direct transmittance using a 6 mm aperture and a disc of thickness equivalent to the optic center of a 20.0 D lens.
- Human lens data from Boettner and Wolter. Transmission of the Ocular Media, Investigative Ophthalmology. 1962; 1:776-783.

Average % Transmittance of P302A and PT302A (20.0 D)

Model	400 nm	425 nm	450 nm	475 nm
P302A/PT302A	65	82	84	90

MODE OF ACTION

The MBI PreciSAL preloaded posterior chamber intraocular lenses are fully preloaded and provide surgeons a convenient, controlled means to reliably place these lenses into the capsular bag. The lenses are intended to be delivered in the preloaded injector and positioned in the posterior chamber of the eye, replacing the natural crystalline lens. This position allows the lens to function as a refractive medium in the visual correction (monofocal and toric) of aphakia and pre-existing corneal astigmatism (toric only) in

adult patients, with and without presbyopia. The toric IOLs have a biconvex toric aspheric optic with cylinder axis marks to denote the flat meridian (plus cylinder axis). Alignment of the toric IOL cylinder axis marks with the pre-operative steep corneal meridian allows the lens to correct astigmatism.

INDICATIONS

The PreciSAL preloaded monofocal and toric posterior chamber intraocular lenses are indicated for the placement of the human lens to achieve visual correction (monofocal and toric) of aphakia and pre-existing corneal astigmatism (toric) in adult patients when extracapsular cataract extraction or phacoemulsification is performed. The PreciSAL preloaded toric lenses provide patients with improved uncorrected distance vision, reduction of residual refractive cylinder, and increased spectacle independence for distance vision following removal of a cataractous lens. These lenses are intended for placement in the capsular bag.

WARNINGS

Physicians considering lens implantation should weigh the potential risk/benefit ratio for any circumstances that could increase complications or impact patient outcomes.

This lens should not be implanted under the following conditions:

1. If the posterior capsule is ruptured, if the zonules are damaged, or if a primary posterior capsulotomy is planned.
2. The Tyvek cover of the blister pack is found to be damaged or opened.
3. Suspected microbial infection.
4. Recurrent severe anterior or posterior segment inflammation or uveitis.
5. Patients in whom the intraocular lens may affect the ability to observe, diagnose, or treat posterior segment disease.
6. Surgical difficulties at the time of cataract extraction that might increase the potential for complications (e.g. persistent bleeding, significant iris damage, uncontrolled positive pressure, or significant vitreous prolapse or loss).
7. A distorted eye due to previous trauma or developmental defect in which appropriate support of the IOL is not possible.
8. Circumstances that would result in damage to the endothelium during implantation.
9. Children under the age of 2 years are not suitable for intraocular lenses.

PRECAUTIONS

1. Do not resterilize the lens by any method.
2. Do not store the lens at a temperature greater than 45°C (113°F).
3. Do not re-use the device. The device is for single use only. Re-use of the lens and/or injector may cause re- or cross-infection leading to patient infection or lens explanted.
4. Use only sterile intraocular irrigating solutions (such as BSS® or BSS PLUS®) to rinse/or soak lenses.
5. Handle lenses carefully to avoid damage to lens surface or haptics.
6. Do not attempt to reshape haptics in any way.
7. A high level of surgical skill is required for intraocular lens implantation. The surgeon should have observed and/or assisted in numerous implantations and successfully completed one or more courses on intraocular lens implantation before attempting to implant intraocular lens.
8. For PreciSAL Preloaded Toric Lenses:
 - a. Accurate keratometry and biometry in addition to the use of the MBI's Toric Calculator (www.mbius.com) are recommended to achieve optimal visual outcome.
 - b. Rotation of PreciSAL Toric IOLs away from their intended axis can reduce their astigmatic correction. Misalignment greater than 30° may increase postoperative refractive cylinder. If necessary, the lens repositioning should occur as early as possible prior to lens encapsulation. Some clinical cases suggest encapsulation is complete within four weeks of implantation.

- c. Carefully remove all viscoelastic from both the anterior and posterior sides of the lens. Residual viscoelastic may allow the lens to rotate causing misalignment of the PreciSAL Toric IOL with the intended axis of placement.
9. Use the Preloaded Delivery System at Operating Room temperatures between 18°C (64°F) and 23°C (73°F).

CONTRAINDICATIONS

Patients with any of the following conditions may not be suitable candidates for an intraocular lens because the lens may exacerbate an existing condition, may interfere with diagnosis or treatment of a condition, or may pose an unreasonable risk to the patient's eyesight. Careful preoperative evaluation and sound clinical judgment should be used by the surgeon to decide the benefit/risk ration before implanting a lens in a patient with one or more of the following conditions.

Before Surgery:

1. Choroidal hemorrhage
2. Concomitant severe eye disease
3. Extremely shallow anterior chamber
4. Microphthalmos
5. Non-age-related cataract
6. Proliferative diabetic retinopathy (severe)
7. Severe corneal dystrophy
8. Severe optic nerve atrophy
9. Irregular corneal astigmatism
10. Medically uncontrolled glaucoma
11. Chronic severe uveitis
12. Diabetic retinopathy
13. Clinically significant macular/RPE changes

During Surgery:

1. Excessive vitreous loss
2. Capsulotomy by any technique other than a circular tear
3. The presence of radial tears known or suspected at the time of surgery
4. Situation in which the integrity of the circular tear cannot be confirmed by direct visualization
5. Cataract extraction by techniques other than phacoemulsification or liquefaction
6. Situation where the need for a large capsulotomy can be anticipated (e.g., diabetics, retinal detachment in the fellow eye, peripheral retinal pathology, etc.)
7. Posterior capsular rupture (preventing fixation of IOL)
8. Zonular damage (Preventing fixation of IOL)
9. Uncontrollable positive pressure
10. Significant anterior chamber hyphema

COMPLICATIONS

The following lists the complications which have been associated with the implantation of intraocular lenses (this list is not intended to be all-inclusive):

Cumulative Adverse Events:

1. Corneal endothelial damage
2. Infection (endophthalmitis)
3. Hyphema
4. Hypopyon
5. Lens Dislocation
6. Cystoid macular edema
7. Corneal edema

8. Pupillary block
9. Cyclitic membrane
10. Iris prolapse
11. Retinal detachment
12. Vitritis
13. Transient or persistent glaucoma
14. Secondary surgical intervention (excluding retinal detachment and posterior capsulotomy), include, but not limited to the following:
 - a) Iridectomy for papillary block
 - b) Vitreous aspiration for papillary block
 - c) Repositioning of lens
 - d) IOL removal for inflammation
 - e) IOL replacement
 - f) Wound leak repair

Persistent Adverse Events:

1. Corneal Stroma Edema
2. Cystoid Macular Edema
3. Iritis
4. Raised IOP requiring treatment

DIRECTION FOR USE

1. Examine the label on the unopened outer box for proper lens model, diopter power and expiration date. Verify the diopter power matches that of the patient.
2. Open the outer box to remove the sealed blister pack containing the intraocular lens in the preloaded lens injector loading chamber and verify that the label information on the blister pack (e.g. power, model, serial number, and expiration date) is consistent with the information on the outer box.
3. Ensure that the blister pack is not damaged and the seal is not broken.
4. Grip the corner of blister pack, carefully peel open the Tyvek cover fully and transfer the device to a sterile environment. If the device appears to have damage, particulates or deformation after inspection, use another preloaded lens injectable system.
5. Inject a very small amount of the OVD only under the lens by placing the OVD cannula alongside the plunger under the loading chamber cover under the lens. (Figure 1). Do not use Viscoat in the injector. Instead use Sodium Hyaluronate or HPMC only. High viscosity or high concentration of OVD is not recommended.
6. Inject a moderate amount of Balanced Salt Solution (BSS) through the cartridge tip until the BSS reaches behind the lens in the folding chamber (Figure 2) while holding the injector in the horizontal position to prevent generating any bubbles in the cartridge.
7. Insert OVD cannula into the cartridge tip filled with BSS and slowly inject OVD into the tip while pulling out the cannula at the same time (Figure 2). DO NOT close the mechanism until the surgeon is ready to inject the lens.

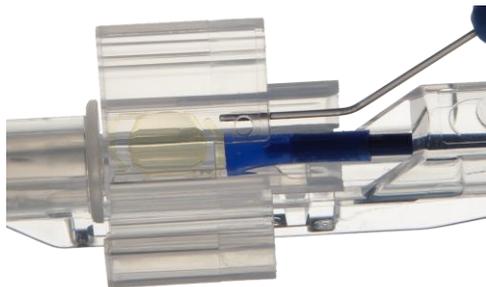


Figure 1



Figure 2

8. **IMPORTANT: ONLY when the surgeon is ready to inject the lens**, close the preloading chamber flap (the IOL automatically folds in chamber) until the click-lock mechanism engages. (Figures 3 and 4).



Figure 3



Figure 4



Figure 6

9. Immediately after closing the loading chamber flap push the plunger smoothly until middle of the barrel (Figure 5). Pass the injector to the surgeon.



Figure 5

10. Rotate the injector clockwise 90°, as indicated in Figure 6. Insert the cartridge tip in the incision. Proceed to push the plunger forward **smoothly but continuously** until the lens is properly placed in the capsular bag.
NOTE: Should the leading haptic start to rotate upon injection in the eye, rotate the injector slightly in the opposite direction to ensure correct lens placement in the capsular bag.
11. Observe the progress of the blue plunger, **inject only until the distal end of the plunger reaches the proximal end of the bevel**. DO NOT inject further to avoid the blue plunger squeezing out of the tip and expanding.

Additional Note:

- There are **various** surgical procedures, which can be utilized, and the surgeon should select a procedure, which is appropriate for the patient.
- **DO NOT** reuse this preloaded IOL lens delivery system. This device is for single use only. Discard the injector after use. Re-use of the lens and/or injector may cause re- or cross-infection leading to patient infection or lens explanted.

HOW SUPPLIED

The MBI Preloaded Soft Hydrophobic Acrylic Intraocular Lenses are supplied dry, fully preloaded in an injector packaged in a blister pack sealed with a Tyvek peel cover and terminally sterilized by ethylene oxide. The preloaded lens system must be opened only under aseptic conditions (See DIRECTIONS FOR USE above).

EXPIRATION DATE

The packaged PreciSAL preloaded Soft Hydrophobic Acrylic Intraocular Lens is sterile unless the Tyvek cover seal is damaged or opened. There is a sterility expiration date clearly indicated on the blister pack and the outside box label. The Preloaded Soft Hydrophobic Acrylic Intraocular Lens should not be used after the expiration date.

SYMBOLS USED IN LABELLING

SYMBOL	ENGLISH	SYMBOL	ENGLISH
	Manufacturer		Do not reuse
	Authorized representative in the European Community		Consult instructions for use
	Sterilized using ethylene oxide		Do not use if package is damaged
	Use by YYYY-MM		CE-certified
	Temperature limit		Serial number
	Keep away from sunlight		Do not resterilize
	Keep dry		Cylinder



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