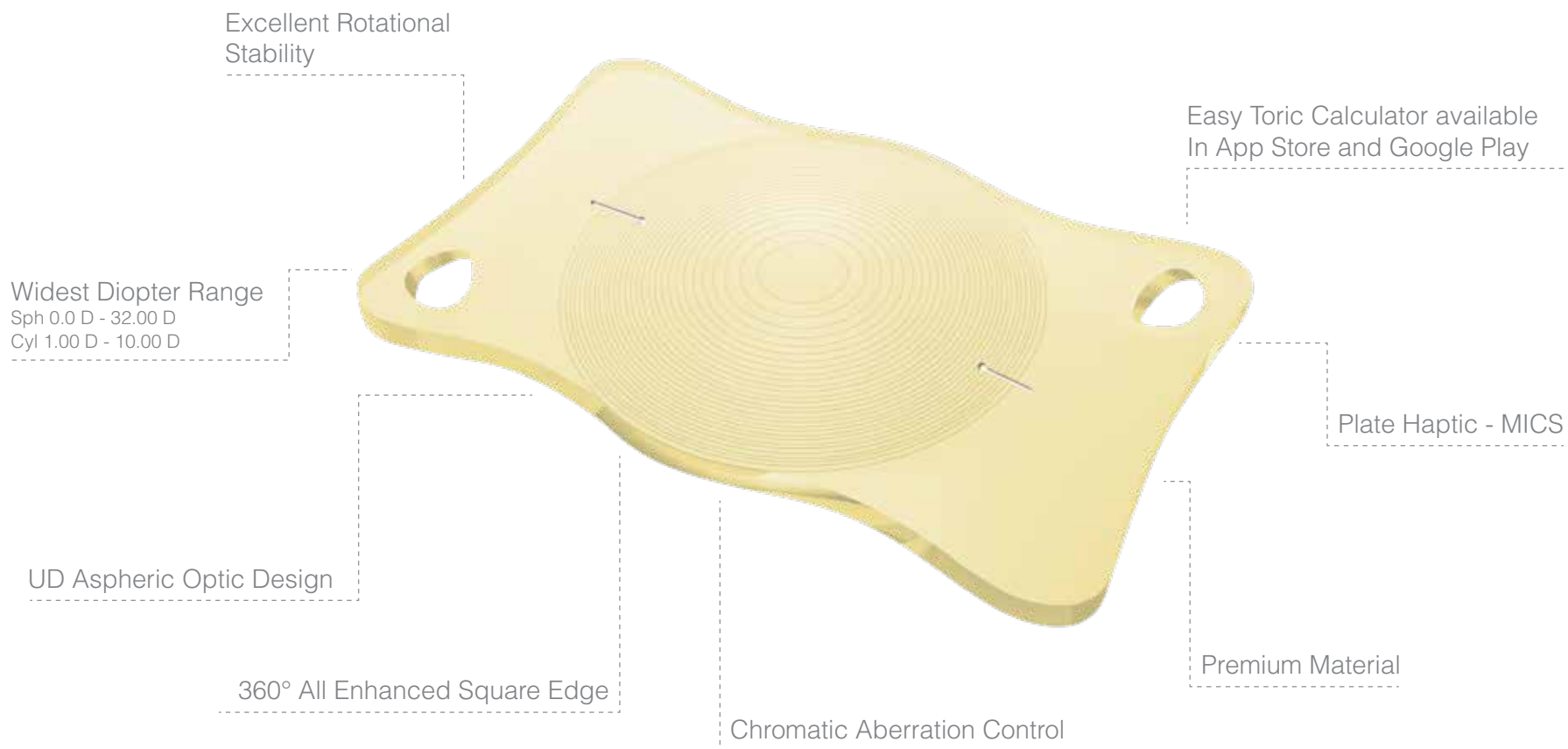




Trifocal Toric / Monofocal Toric

# All Features in One Design

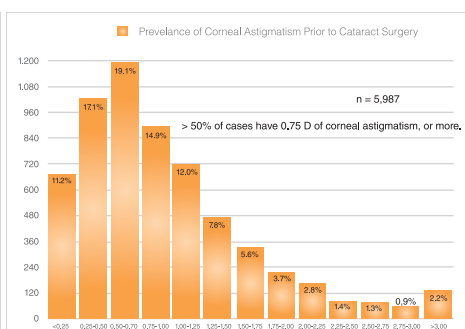
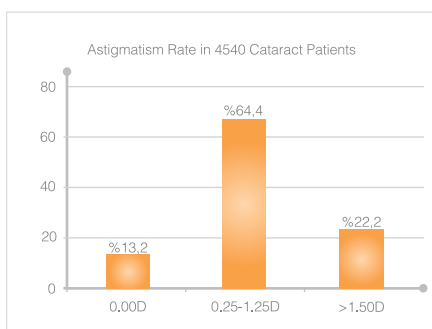


# Treat Astigmatism

## 1 Prevalence of Astigmatism

### More Than Expected

It has been proven that astigmatism is more prevalent than expected among cataract patients. High prevalence of corneal astigmatism has been reported in many research articles. After toric implantation, residual postoperative corneal astigmatism of 0.75D or lower may improve uncorrected visual acuity and reduce symptomatic blur, ghosting of images, and halos<sup>1</sup>.



### 40% of Cataract Patients Exhibit $\geq 1.0$ D Astigmatism

The study published by Dr. Ferrer-Blasco T et al. in 2009, consisting of 4540 patients with cataracts, show corneal astigmatism to be prevalent in 87% of the patients<sup>2</sup>.

Another clinical study of 5987 cataract patients performed by Dr. Warren Hill, reported that 52.5% of patients had preoperative astigmatism of more than 0.75D. The figure above shows the percentage of patients at various levels of preoperative astigmatism<sup>3</sup>.

### Clear Vision for Astigmatic Patients

More patients can become happy after surgery, when clear vision and spectacle-independence help them to live an enjoyable life. The Acryva<sup>UD</sup> Toric has the largest diopter range in the astigmatism correcting IOL market. It is exclusively Custom Made to perfection. Spherical power ranges from 0.0D to 32.0D and cylinder power range is available up to 10.0D in 0.5D increments.

#### References

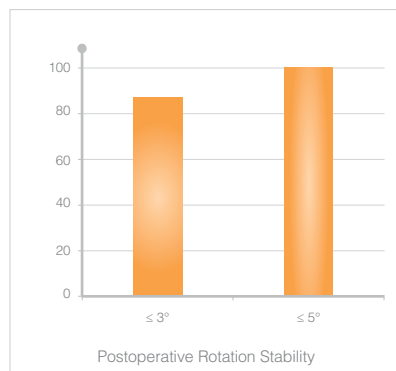
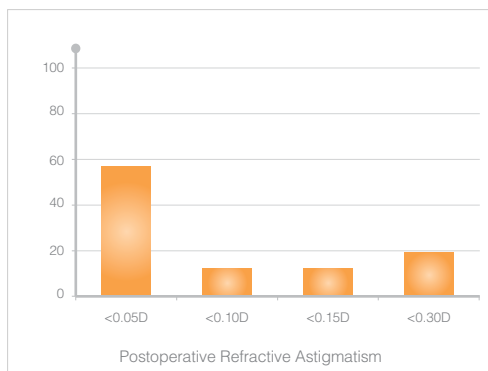
- 1- Nichamin LD., Astigmatism control. Ophthalmol. Clin. North Am. 19, 485-493 (2006).
- 2- Ferrer-Blasco T. et al. Prevalence of corneal astigmatism before cataract surgery. J Cataract Refract Surg 2009; 35:70-75.
- 3- Source: Warren Hill Keratometry database, Clinical study of 5987 US patients.

# Proven Platform

## 2 Clinical Outcomes

### Minimum Residual Astigmatism

Acriva<sup>UD</sup> demonstrates outstanding performance with only 0.3D residual astigmatism in a clinical study performed with 26 patients. Also, there was no residual astigmatism after 3-month follow-up for 57.6% of patients<sup>4</sup>.



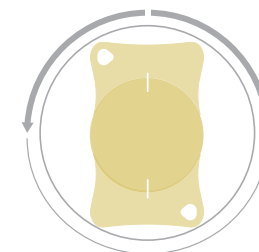
### Excellent Rotation Stability

The same study also presents that Acriva<sup>UD</sup> Toric has an excellent rotation stability in the capsular bag. Based on the mean axis deviation, 84% of all eyes had less than 3° rotation and all patients had less than 5° rotation after surgery<sup>4</sup>.

## 3 Best Solution is Plate Haptic

### Minimum SIA, Excellent Stability in MICS Design

Larger incisions cause surgically induced astigmatism and directly affect postoperative refractive outcomes. The Acriva<sup>UD</sup> Toric Plate Haptic is the best choice, since it enables implantation through a sub-2.0-mm incision, minimizes surgically induced astigmatism and stays in the capsular bag without rotation.



Alignment of the Acriva<sup>UD</sup> Toric lens on both sides makes rotation easier during the procedure. Holding on to posterior capsular bag at four points, plate haptic design always delivers excellent rotational stability.

References  
4-Data on file.

# Plan Your Surgery

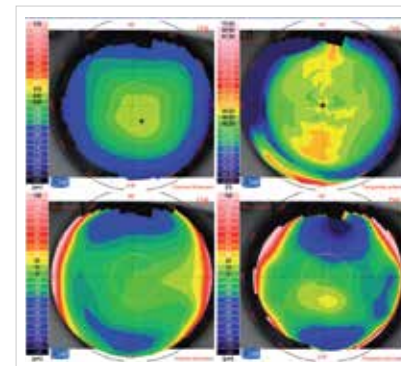
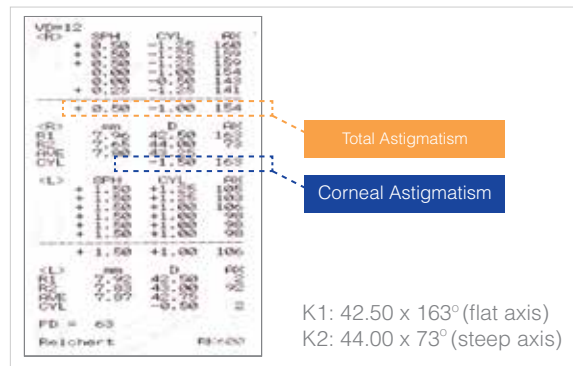


## A Preoperative Diagnosis

### Amount and Axis of Astigmatism

Successful toric implantation starts with precise examination and evaluation of the amount and axis of corneal astigmatism. Keratometry, biometry, pupillometry, aberrometry, videokeratoscopy, or any other devices are recommended for use in preoperative diagnostic evaluation.

Measurements should be repeated under certain conditions if significant differences are found among different methods, because precise determination of power and axis of astigmatism are essential. The accuracy of axis and power measurement depends substantially on the instruments used for a successful procedure.



### Inclusion Criteria

Optimum postoperative results are based on correct patient selection. Recommended inclusion criteria should be followed in a preoperative toric surgery plan. Total astigmatism of the eye is the value measured in routine clinical practice which includes both cornea-dependent external astigmatism and neutral lens-dependent internal astigmatism. Only external astigmatism must be taken into consideration in toric IOL calculation since the lens is removed during surgery<sup>5</sup>.

Recent studies have shown the importance of taking the posterior corneal surface into consideration when determining total corneal astigmatism and planning astigmatism correction. The posterior cornea acts as a minus lens and it should be evaluated during pre-operative planning<sup>6,7</sup>.

#### References

- 5-Ferreira TB, Marques EF, Rodrigues A, Montes-Mico R. Visual and optical outcomes of a diffractive multifocal toric intraocular lens. J Cataract Refract Surg. 2013;39(7):1029-35.
- 6- Visser N, Nuijts RM, de Vries NE, Bauer NJ. Visual outcomes and patient satisfaction after cataract surgery with toric multifocal intraocular lens implantation. J Cataract Refract Surg. 2011;37(11):2034-42.
- 7- Munoz G, Cardoner A, Albarran-Diego C, Ferrer-Blasco T, Belda-Salmeron L. Iris-fixated toric phakic intraocular lens for myopic astigmatism. J Cataract Refract Surg. 2012;38(7):1166-75.

# Plan Your Surgery

## B Acriva<sup>UD</sup> Easy Toric Calculator

### Simple Tool For Toric Surgical Plan

The Acriva<sup>UD</sup> Easy Toric Calculator is developed for you to plan your surgery easily and to maximize the benefits of the selected toric lens.



Acriva<sup>UD</sup> Easy Toric Calculator



You can access the Acriva<sup>UD</sup> Easy Toric Calculator by visiting [www.vsybiotechnology.com](http://www.vsybiotechnology.com) or downloading the application from the App Store or the Play Store.

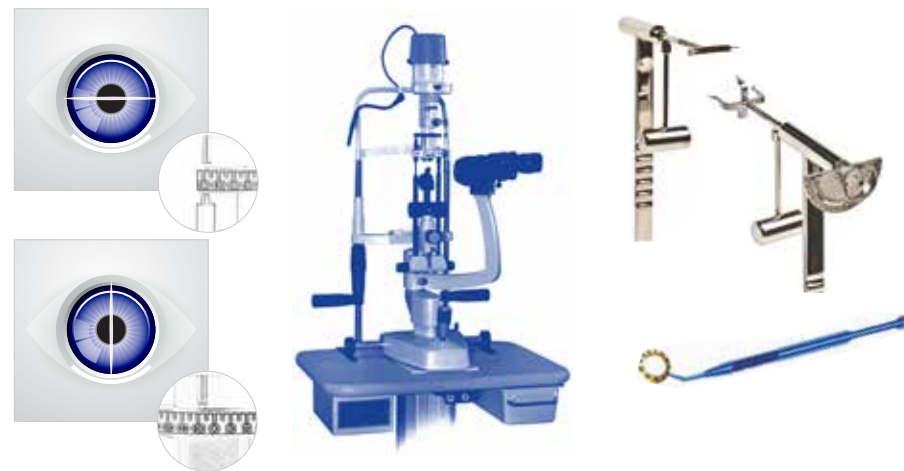
For more information see Acriva<sup>UD</sup> Easy Toric Calculator User Guide.



## C Marking the Eye

### Preoperative Marking

To limit the cyclotorsional effect that would expose the eye when switching from vertical to horizontal position, performing preoperative reference marking while the patient is seated is recommended. Mark the reference axis, ideally with the help of a slit lamp and with a marking pen or ink pad. Slit lamp may also be used for targeting the axis by changing the lamp position to the desired angle.



### Intraoperative Marking

After changing patient sitting position to supine position, mark the targeted axis with a fixation rings as Mendez's with the guide of reference point. Pendulum markers is another option in which gravity allows the marking. Accurate axis marking is crucial in toric implantation as any misalignment could result in a lack of cylindrical correction.



monofocal  
toric

BB T UDM 611



trifocal  
toric

Trinova Toric

General	Monofocal Toric, Foldable, Single Piece, Aspheric, Achromatic, Hydrophobic Surface, UV, Violet, and Blue Filter	
Optic Size	6.00 mm	
Optic Design	Biconvex	
Haptic Size	11.00 mm	
Haptic Design	Plate Haptic	
Haptic Angle	0°	
Material	Hydrophobic Surface, BB (Blue Balance), Natural Chromophore, Dynamic Photofiltration	
Aspheric Value	Ultra Definition Mild Negative Correction	
Abbe Number	58	
Square Edge	360° All Enhanced Square Edge	
Acoustic (Nominal) A Constant	118.0	
Optical A Constants	SRK-II	: 118.5
	SRK-T	: 118.3
	Haigis a0	: 0.83
	Haigis a1	: 0.4
	Haigis a2	: 0.1
	Hoffer Q pACD	: 5.06
	sf	: 1.28
	Barrett Universal II - LF: 1.67	
Diopter Power Range	Spheric: From 0.0D to +32.00D (0.50D increments) Cylindric: From +1.00D to +10.00D (0.50D increments)	
Refractive Index Wet	20°C / 35°C 1.462 / 1.462 ± 0.002	
Recommended Injector	Acrijet Green 1.8 (Up to Sph 25.0D Cyl 5.0D) Acrijet Green 2.0 (Up to Sph 28.0D Cyl 5.0D) Acrijet Green 2.2 (Up to Sph 30.0D Cyl 5.0D)	



General	Trifocal Seamless Vision Technology, Foldable, Single Piece, Aspheric, Achromatic, Hydrophobic Surface, UV, Violet, and Blue Filter	
Optic Size	6.00 mm	
Optic Design	Trifocal Toric SVT (Patented Technology)	
Haptic Size	11.00 mm	
Haptic Design	Plate Haptic (suitable for MICS)	
Haptic Angle	0°	
Material	Hydrophobic Surface, BB (Blue Balance), Natural Chromophore, Dynamic Photofiltration	
Aspheric Value	Ultra Definition Mild Negative Correction	
Abbe Number	58	
Light Transmission	92.0%	
Light Distribution	Photopic Condition 41% far - 30% intermediate - 29% near Mesopic Condition 45% far - 25% intermediate - 30% near	
Square Edge	360° All Enhanced Square Edge	
Acoustic (Nominal) A Constant	118.0	
Optical A Constants	SRK-II	: 118.0
	SRK-T	: 117.9
	Haigis a0	: 0.58
	Haigis a1	: 0.4
	Haigis a2	: 0.1
	Hoffer Q pACD	: 4.82
	sf	: 1.04
	Barrett Universal II - LF : 1.31	
Diopter Power Range	Spheric: From 0.0D to +32.00D (0.50D increments) Cylindric: From +1.00D to +10.00D (0.50D increments)	
Refractive Index Wet	20°C / 35°C 1.462 / 1.462 ± 0.002	
Recommended Injector	Acrijet Green 1.8 (Up to Sph 25.0D Cyl 5.0D) Acrijet Green 2.0 (Up to Sph 28.0D Cyl 5.0D) Acrijet Green 2.2 (Up to Sph 30.0D Cyl 5.0D)	





BB T UDM 611



Trinova Toric

