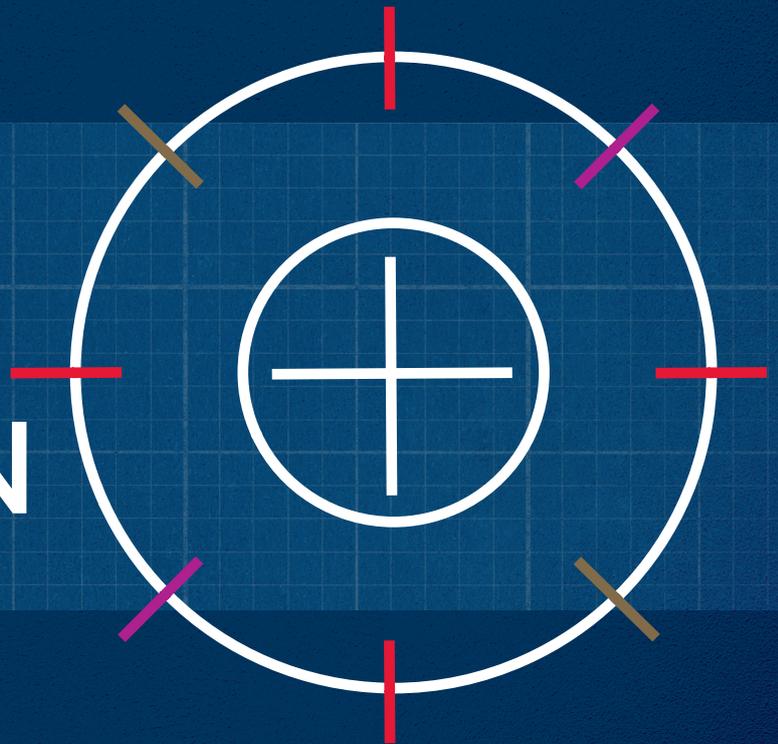




# TORIC CALCULATOR

With Abulafia-Koch Formula

WHEN  
PRECISION



MEETS  
INNOVATION

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TORIC CALCULATOR



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# TORIC CALCULATOR

## How to achieve the most accurate correction for your astigmatic patients?

Our goal is to assist surgeons with precise and reliable IOL calculations. The new calculation method informs physicians about the appropriate toric IOL model and as such improves toric outcomes in astigmatic patients.

### Clinical background

Standard keratometric and topography machines tend to yield inaccurate results in assessing the net corneal astigmatic power. Astigmatism is present on the posterior corneal surface, which is independent in magnitude and meridian from the astigmatism of the anterior surface. Residual postoperative astigmatism occurs often in eyes with toric IOL implantation.

Effective IOL Cylinder Power at Corneal Plane (D)	WTR (D)	ATR (D)
0.00	≤1.69 (PCRI if > 1.00)	<0.39
1.00	1.70–2.19	0.40*–0.79
1.50	2.20–2.69	0.80–1.29
2.00	2.70–3.19	1.30–1.79
2.50	3.20–3.79	1.80–2.29
3.00	3.80–4.39	2.30–2.79
3.50	4.40–4.99	2.80–3.29
4.00	5.00–	3.30–3.79

ATR = against the rule; IOL = intraocular lens; PCRI = peripheral corneal relaxing incision; WTR = with the rule

\*Especially if spectacles have more ATR

### What do the studies say?

“In eyes with toric IOL implantation, corneal astigmatism prediction errors with devices that measure anterior corneal astigmatism only were 0.5 to 0.6 D WTR in WTR eyes and 0.2 to 0.3 D WTR in ATR eyes, showing the effect of posterior corneal astigmatism.”

Reference:

D.D. Koch, MD, et al.: Correcting astigmatism with toric intraocular lenses: Effect of posterior corneal astigmatism, J Cataract Refract Surg 2013; 39:1803–1809.

### Solution

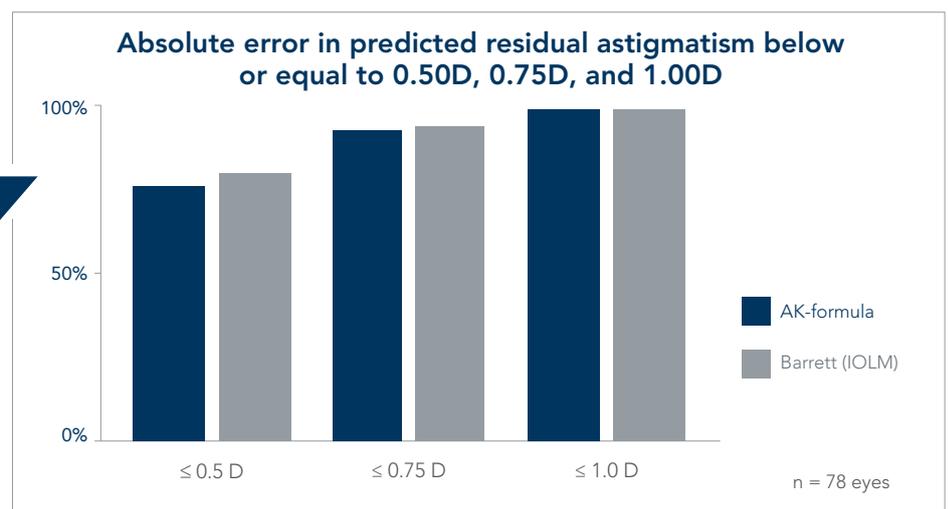
The PhysiOL toric calculator model uses the new **Abulafia-Koch regression Formula** developed in order to compensate for the posterior corneal astigmatism effect.

### What do the studies say?

“The prediction of postoperative astigmatic outcomes can be optimized by adjusting the PhysiOL toric IOL calculator with the Abulafia-Koch regression Formula.”

Reference:

A. Abulafia, MD, D.D. Koch, MD, L. Wang, MD, PhD, W.E. Hill, MD, E.I. Assia, MD, M. Franchina, MD, G.D. Barrett, MD: A new regression formula for toric IOL calculations, J Cataract Refract Surg 2016; 42:663–671.



## What are the new features?

- 1 Abulafia-Koch regression Formula, which reportedly theoretically accounts for posterior corneal astigmatism. This calculation method uses the standard keratometry measurements (anterior K values) and estimates the total corneal astigmatism based on the Abulafia-Koch regression Formula to improve the prediction of postoperative astigmatic outcome. Calculation using the Standard K method is still possible.
- 2 HELP-button at each bloc that will help you understand and fill in each parameter.
- 3 Predictive patient-specific effective lens position (ELP)

The calculator still offers the possibility to use the Standard K calculation method as with the previous version.

Annotations on the screenshot:

- 1 Abulafia-Koch regression Formula (points to the Calculation Method section)
- 2 HELP-button (points to the question mark icon in the Pre-surgery Details section)
- 3 Predictive patient-specific effective lens position (points to the Biometry section)

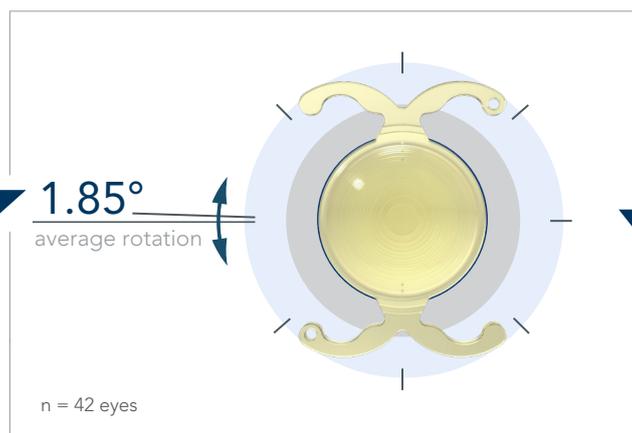
## Double C-loop technology: optimal stability

Besides its postoperative rotational stability, the double C-loop platform offers easy maneuverability, both clockwise and counterclockwise, for accurate axis placement of the IOL.

### What do the studies say?

"Double C-loop haptics design provides excellent capsular bag stability associated with a low amount of PCO."

Reference:  
O. Findl, MD: Capsular bag stability and posterior capsule opacification, Eurotimes, February 2017.



### What do the studies say?

"An exceptional average rotation of 1.85° +/- 1.01° was observed between 1 day and 3 months with the double C-loop IOL."

Reference:  
F. Poyales, MD: Comparison of two IOLs with the same optics, two designs, two materials, ESCRS 2014.

# TORIC CALCULATOR

## TORIC solutions

[www.physioltoric.eu](http://www.physioltoric.eu)



**FINEVISION**  
TRIFOCAL OPTIC



**ANKORIS**  
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**PODEYE**  
MONOFOCAL OPTIC



Please check the availability of the products on your market with your sales representative.

Note: The PhysiOL intraocular lenses are not FDA approved.

### Contact Information:

[www.bvimedical.com/customer-support/](http://www.bvimedical.com/customer-support/)

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