

TECNIS Toric Calculator

Frequently Asked Questions (FAQ)

1. What are the system requirements?

- An Apple® computer (Mac OS® 12) or a PC (Windows® 10 operating system).
- Safari®, Google Chrome™, Microsoft Edge® browser.
- A working internet connection.

2. Do I need a login and password for the calculator?

No, the TECNIS Toric Calculator is open to everyone for calculations.

3. What can I calculate with the TECNIS Toric Calculator?

The TECNIS Toric Calculator will calculate different cylinder power options for your patient, as well as the orientation in which the Intraocular Lens (IOL) should be placed to obtain results.

In addition, predicted postoperative residual astigmatism is calculated for each IOL cylinder power suggested, in order to facilitate the surgeon's lens selection.

4. What formula does the calculator use for these cylinder calculations?

In the TECNIS Toric Calculator, IOL toricity, and residual astigmatism are calculated for each particular eye in a customized fashion, using the Holladay 1 formula instead of using a fixed ratio based on average ocular physiology.

Optionally, an algorithm for posterior corneal astigmatism can be included in the calculations. The predetermined value for posterior corneal astigmatism can be included in the calculation by checking the box labeled "Include Posterior Corneal Astigmatism". The option to include the predetermined value of posterior corneal astigmatism is based on an algorithm that combines published literature¹ with a retrospective analysis of existing clinical data.

5. Why should I introduce spherical equivalent IOL power and axial length in the TECNIS Toric Calculator?

The TECNIS Toric Calculator performs a calculation of IOL toricity and orientation, together with the residual astigmatism for each individual eye. Therefore, the spherical equivalent IOL power and biometric data for each eye are required inputs.

¹ Koch DD et al. Contribution of posterior corneal astigmatism to total corneal astigmatism. J Cataract Refract Surg. 2012 Dec;38(12):2080-7

6. What are the advantages of doing a complete calculation against using a fixed ratio for Toric IOL power calculations?

- The larger differences between a complete calculation and the use of a fixed ratio prediction occur in eyes with an effective lens position (ELP) or spherical equivalent IOL power differing from the average pseudophakic eye.
- Using these calculations, large under corrections of the astigmatism in lower powered IOLs and overcorrections in higher powered IOLs may be avoided.

7. Which ratio between IOL toricity and corneal astigmatism is used in the Toric Calculator?

In the TECNIS Toric Calculator, IOL toricity and residual astigmatism are calculated for each particular eye in a customized fashion, using the Holladay 1 formula instead of using a fixed ratio based on average ocular physiology.

8. Which formula shall I use to calculate the spherical equivalent IOL power to introduce in the Toric Calculator?

Users are able to use their preferred method to calculate spherical equivalent IOL power.

9. How do I calculate lens powers for multiple patients?

Each eye is considered a separate calculation.

10. Can I see my calculations for previous patients?

No, the calculator does not save any portion of your calculation; we suggest that you "Print Results" to save for reference.

11. What A-constant should I use to calculate the lens power?

- Surgeons who haven't developed a personalized A-constant, Surgeon Factor, or Anterior Chamber Depth (ACD) constant for the TECNIS® Toric IOL will be offered the following options based on the drop-down menu choice named Method in the Biometry section:
 - i. If an optical biometry has been performed, Optical is chosen from the "Method" drop-down menu and the A-constant value that TECNIS has determined for the specific IOL model for Optical biometry is used for the Toric Calculation.
 - ii. If an ultrasound biometry was performed, Ultrasound is chosen from the "Method" drop-down and the A-constant value that TECNIS has delivered for the corresponding IOL model for Ultrasound biometry is used for the Toric Calculation.
- Surgeons with a personalized A-constant, Surgeon Factor or ACD constant for this IOL model may choose the "Personalized" option from the "Method" drop-down list and enter into the appropriate field either the personalized A-constant, surgeon factor, or ACD constant. Personalized constants for the corresponding non-Toric model (e.g. model ZCB00 for a TECNIS® Toric IOL) can be considered as starting point. Please note that the formula used for cylinder power calculation is the Holladay 1.

12. Who should I contact if I have clinical questions about the TECNIS® Toric lenses?

Please contact your local Customer Service office. They will relay your message and put you in contact with the local Clinical Specialist.

13. What is the spherical equivalent diopter range of the TECNIS® Toric lenses?

The available spherical equivalent diopter range will be shown in the corresponding drop-down menu in the pre-operative screen. This is an input that is used in the Toric Calculation.

14. What cylinder options are available for the TECNIS® Toric lenses?

The cylinder range can differ per approved model and region. The available options (up to three) will be shown in the Final Results section of the TECNIS Toric Calculator after completing a calculation for a specific lens selection in the appropriate country.

15. Can I have a consignment of TECNIS® Toric IOLs?

Please contact your Sales Representative to discuss consignment arrangements.

16. How can I place an order for the TECNIS® Toric IOL?

You may place your order by email, Fax, or Phone just as you order our other lenses.

17. What is the delivery time for a TECNIS® Toric IOL?

TECNIS® Toric IOLs will be delivered in the usual timelines for your market - i.e. within 24 or 48 hours. If you require a special delivery (e.g. before 10am), please note this on your order form.

18. Where should I return my TECNIS® Toric IOLs?

Please return your TECNIS® Toric lens through your usual returns process – to your Sales Rep, local office or local warehouse.



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