New:
with Total
Keratometry

ZEISS IOLMaster 700

Getting fewer refractive surprises

ZEISS

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ZEISS IOLMaster 700

// INNOVATION
MADE BY ZEISS

The ZEISS IOLMaster 700 with Total Keratometry

The ZEISS IOLMaster 700 with SWEPT Source Biometry® builds upon almost 20 years of experience in optical biometry. Its latest update features Total Keratometry (TK®) – a unique way to implement posterior corneal surface measurement into IOL power calculation. Once again, the ZEISS IOLMaster 700 demonstrates its technological leadership.

Defining next-generation biometry from ZEISS.

Your key benefits

- **Take advantage of Total Keratometry**
  Replacing assumptions with measurements
- **Get fewer refractive surprises**
  Detection of unusual eye geometries & poor fixation, visual measurement verification, fully integrated Barrett Suite
- **Optimize your workflow**
  >99% cataract penetration[1], indications for macular pathologies, speed, markerless toric IOL implantation
- **Improve your refractive outcomes**
  Repeatability, clinical foundation

Replace assumptions with measurements: Total Keratometry

"Total Keratometry has the potential to reduce refractive surprises to a minimum."

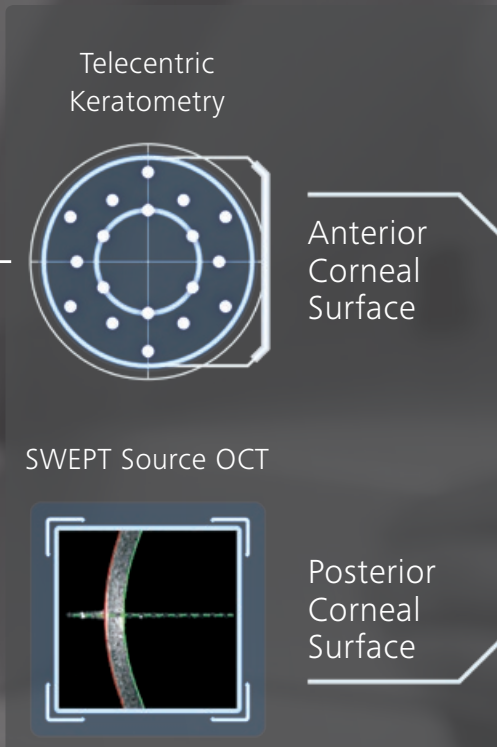
Graham Barrett, M.D.

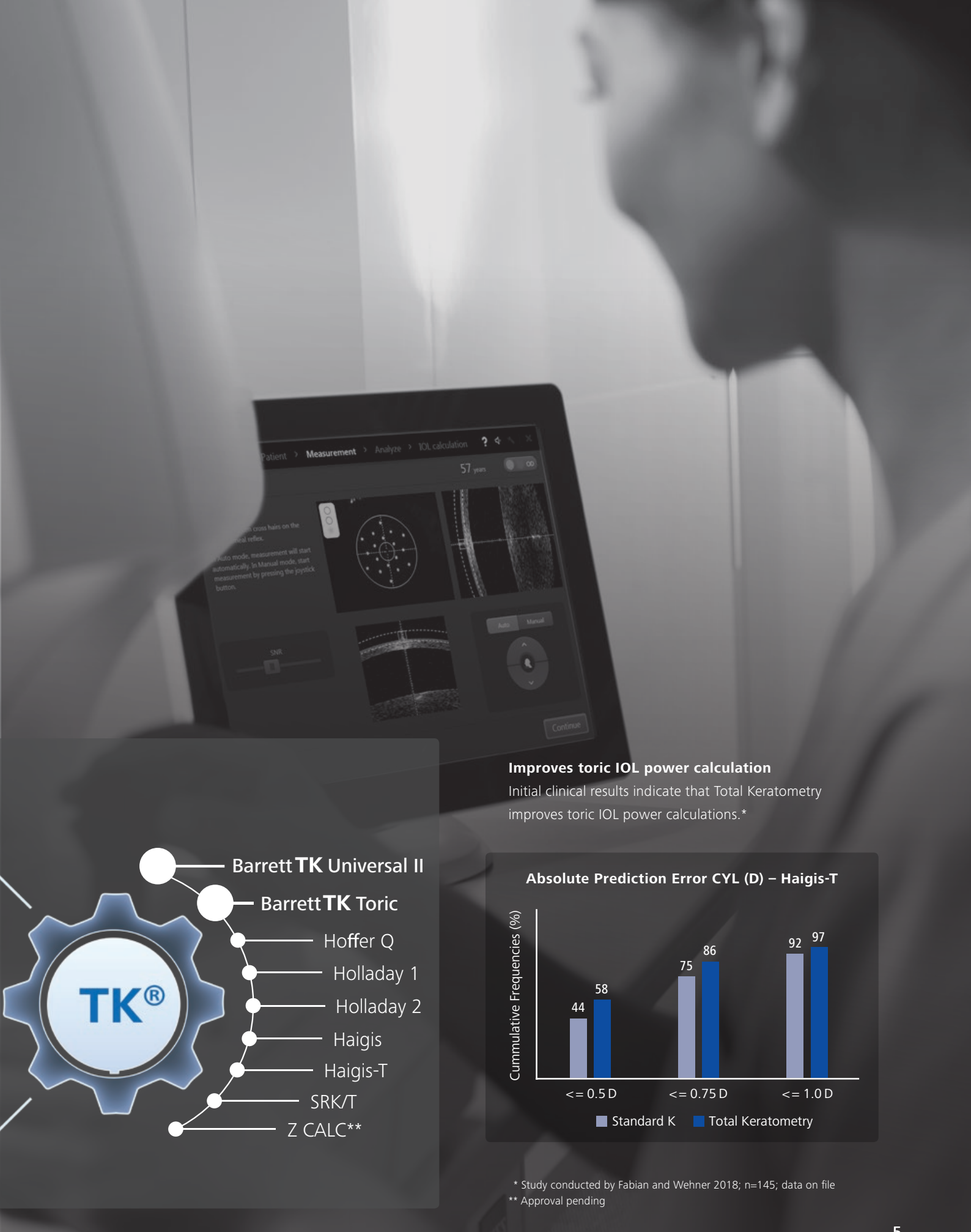
The current standard in IOL power calculation is based on a measurement of the anterior corneal surface and an estimate of the total corneal power by using eye model assumptions or nomograms. This does not address outliers in cases of unusual corneas, which could result in refractive surprises. Now featuring Total Keratometry (TK) the ZEISS IOLMaster 700 allows you to directly measure the posterior corneal surface using SWEPT Source OCT. **Replacing assumptions with measurements.**

New next-generation Barrett formulas
Graham Barrett has developed two new Barrett formulas exclusively for Total Keratometry: the **Barrett TK Universal II and Barrett TK Toric**.

Stick to a familiar workflow
Total Keratometry is compatible with existing IOL constants. It can therefore be used in classic IOL calculation formulas. No need for a second device, third-party software or an online calculator.

Unique telecentric keratometry
A unique telecentric, and thus distance-independent, keratometry allows robust and repeatable measurements – especially with restless patients – for superior keratometry measurements.



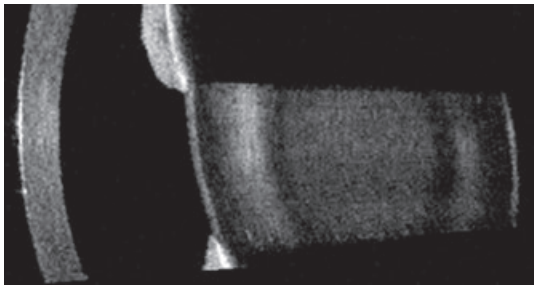


Improves toric IOL power calculation
Initial clinical results indicate that Total Keratometry improves toric IOL power calculations.*

* Study conducted by Fabian and Wehner 2018; n=145; data on file
** Approval pending

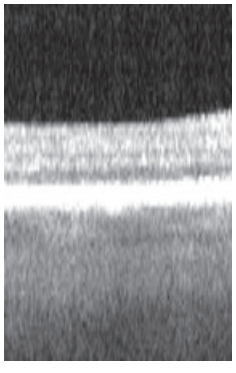
Get fewer refractive surprises

Detect unusual eye geometries
The patented Cornea-to-Retina Scan of the ZEISS IOLMaster 700 shows anatomical details on a longitudinal cut through the entire eye. Thus, unusual eye geometries, such as tilt or decentration of the crystalline lens, can be detected. If left undetected, such critical details can lead to an unsatisfactory post-operative visual experience.

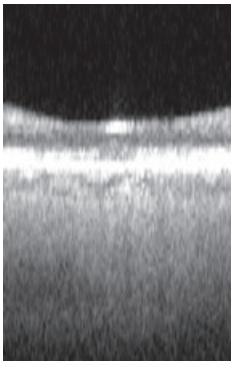


*Suspected tilted lens**

Detect poor fixation
The unique Fixation Check of the ZEISS IOLMaster 700 provides you with more confidence in biometry. Can you see the foveal pit? If so, you can reduce the risk of refractive surprises due to incorrect measurements caused by undetected poor fixation. If not, educate your patients to always fixate on the target.

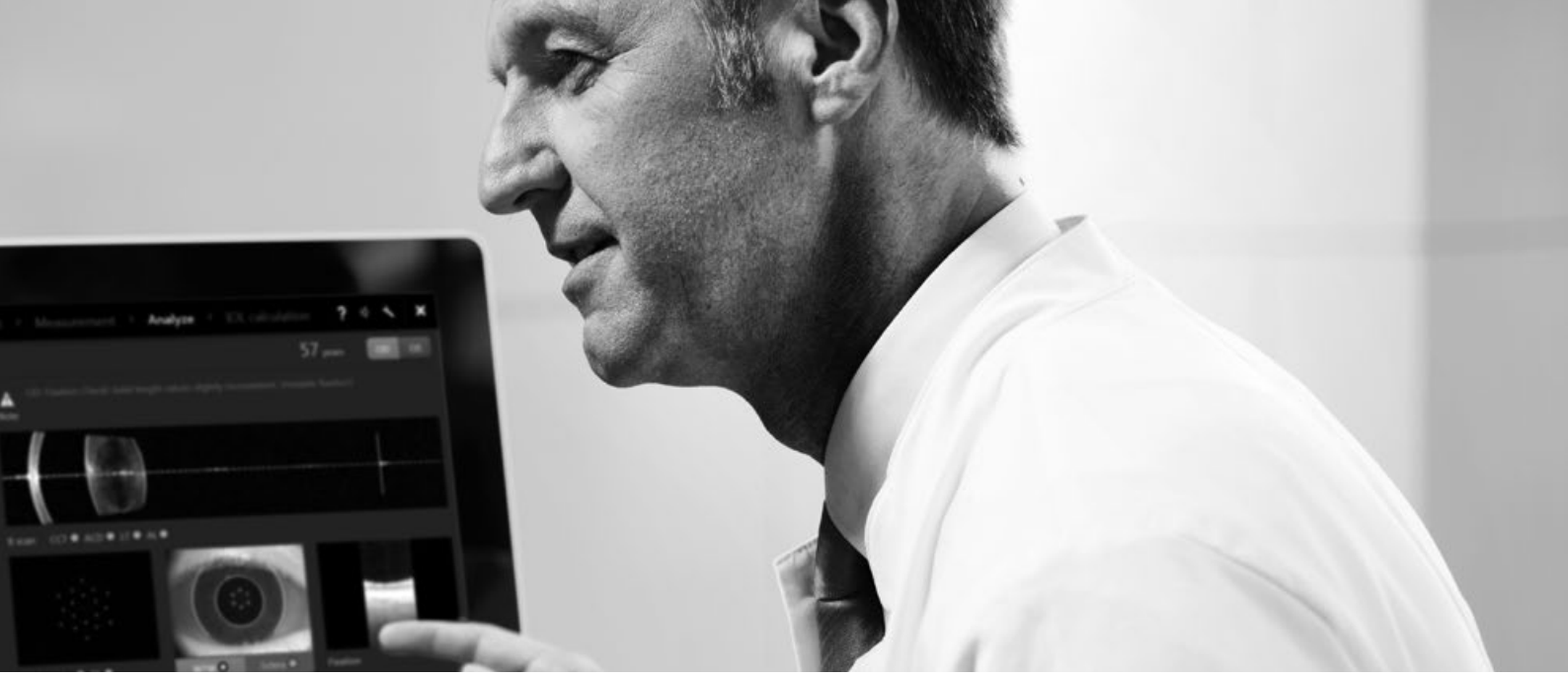


*Poor fixation***

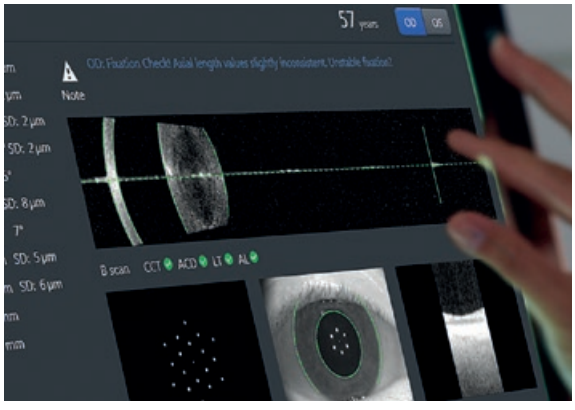


*Correct fixation***

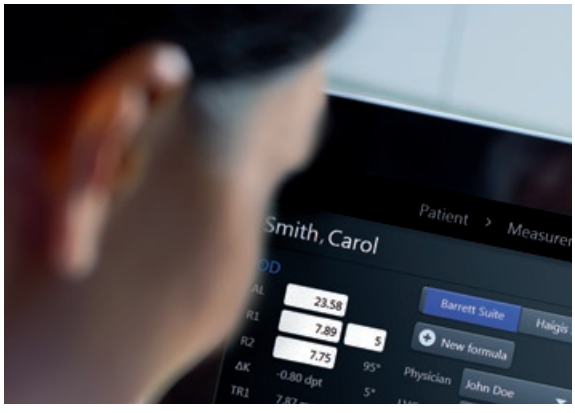
** Image courtesy of Prof. W. Sekundo, Philipps University Hospital Marburg, Germany*
*** Image by Carl Zeiss Meditec AG*



Visually verify your measurement
All measurement calipers are shown on the patented Cornea-to-Retina Scan generated by the ZEISS IOLMaster 700. This allows you to visually verify what structure of the eye has been measured. The complex interpretation of A-scans and guesswork as to which peak should be measured are no longer necessary. Thus, potential sources of error can be eliminated.



Benefit from the integrated Barrett Suite
The ZEISS IOLMaster 700 fully integrates the Barrett Universal II, True-K and Toric into one suite. This allows you to incorporate the predicted influence of the posterior corneal surface into your IOL calculation.[2,3,4] The directly measured posterior surface can be considered by using Total Keratometry in classic formulas and the new Barrett TK formulas.



Optimize your workflow

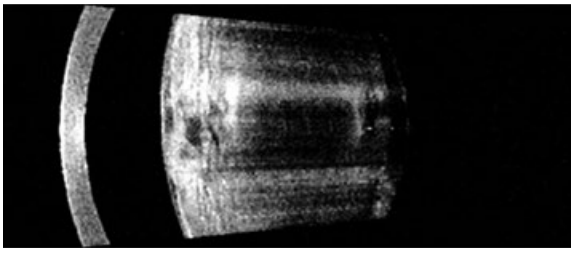
Fast and easy to use

Measure both eyes in less than 45 seconds, thanks to SWEPT Source Biometry.[5] Alignment assistance functions make the results largely independent of the user and therefore easy to delegate.

Multi-touch screen

>99% cataract penetration rate

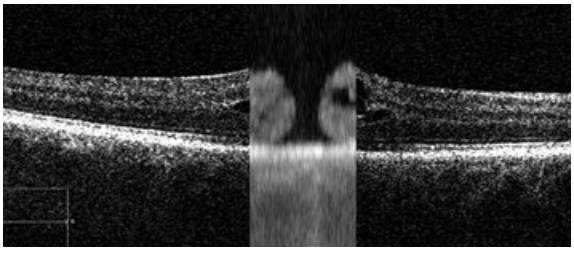
A comparative clinical study with more than 1,200 eyes showed that the ZEISS IOLMaster 700 achieves a cataract penetration rate of more than 99%. As a result, the number of ultrasound cases can be reduced by 92%, saving you valuable time.[6]



*Very dense cataract that was measured successfully**

Get indications for macular pathologies

With the Fixation Check you can identify macular pathologies in your daily routine. Although the ZEISS IOLMaster 700 is clearly not intended to be used for diagnostics***, in high-volume practices the ability to detect these eyes preoperatively can be invaluable.[7,8]



*Macular hole: Fixation Check image (middle) combined with ZEISS CIRRUS retina OCT image (via photo editor program)***

Implant toric IOLs markerless

The ZEISS IOLMaster 700 is an integral part of the ZEISS Cataract Suite. It acquires a reference image that is used for intra-operative matching with the live eye image during surgery. Pre-operative corneal marking of the toric IOL implantation axis becomes obsolete.

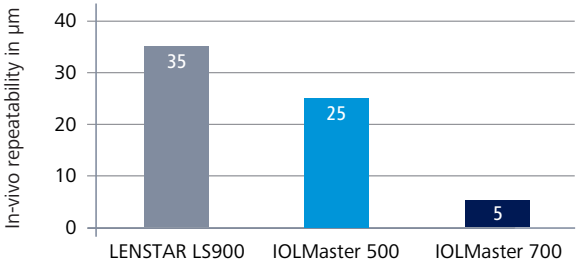
Markerless toric IOL implantion with the ZEISS Cataract Suite

** Image courtesy of Prof. M. de La Torre, DLT Ophthalmic Center, Peru*
*** Image courtesy of Prof. W. Sekundo, Philipps University Hospital Marburg, Germany*
**** Findings need to be verified and pathologies diagnosed with a dedicated retina OCT*

Improve your refractive outcomes

Outstanding repeatability

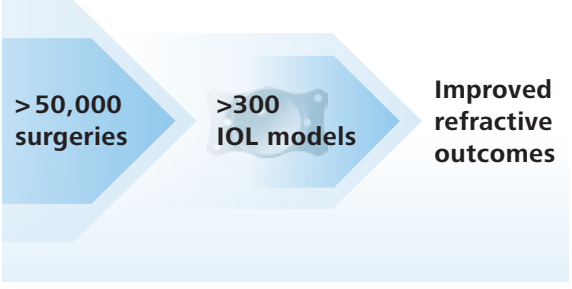
Repeatability is essential for good refractive outcomes. Thanks to its unique SWEPT Source Biometry with 2,000 scans per second, the repeatability of the ZEISS IOLMaster 700 is absolutely outstanding.



Comparison of the repeatability of axial length measurement[9]

Get the broadest basis of clinical data

The biometry of the ZEISS IOLMaster 700 is 100% compatible with former versions of the IOLMaster. Therefore, you can leverage the complete "User Group of Laser Interference Biometry" (ULIB) database. Find optimized lens constants for more than 300 IOL models based on data from over 50,000 cataract surgeries specifically collected for the IOLMaster – to help you to improve your refractive outcomes.[10]



Enjoy comprehensive service

Join the Cataract Community
The Cataract Community offers you quick and easy access to global cataract expertise. Discover the latest research results, interesting cases and everything you need to know about the ZEISS IOLMaster 700. Get easy access to optical biometry experts and answers to your specific questions.

Register now at
cataract-community.zeiss.com

Receive support whenever you need it
The ZEISS OPTIME service packages available for the ZEISS IOLMaster 700 set new industry standards. They support outstanding system availability over the long term with the backing of dedicated and reliable assistance from an experienced and trusted partner.

Make a smart investment – financing with ZEISS
Whether you want to start your own practice, fuel expansion or diversify services, tight budgets are an issue almost everywhere these days. We at ZEISS can offer you financial solutions tailored to your specific requirements. ZEISS financing options cover traditional means of financing medical equipment with leasing contracts and customized full-service contracts.

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