Multidisciplinary Imaging Platform
Optimized for the Anterior Segment

ANTERION®

HEIDELBERG ENGINEERING

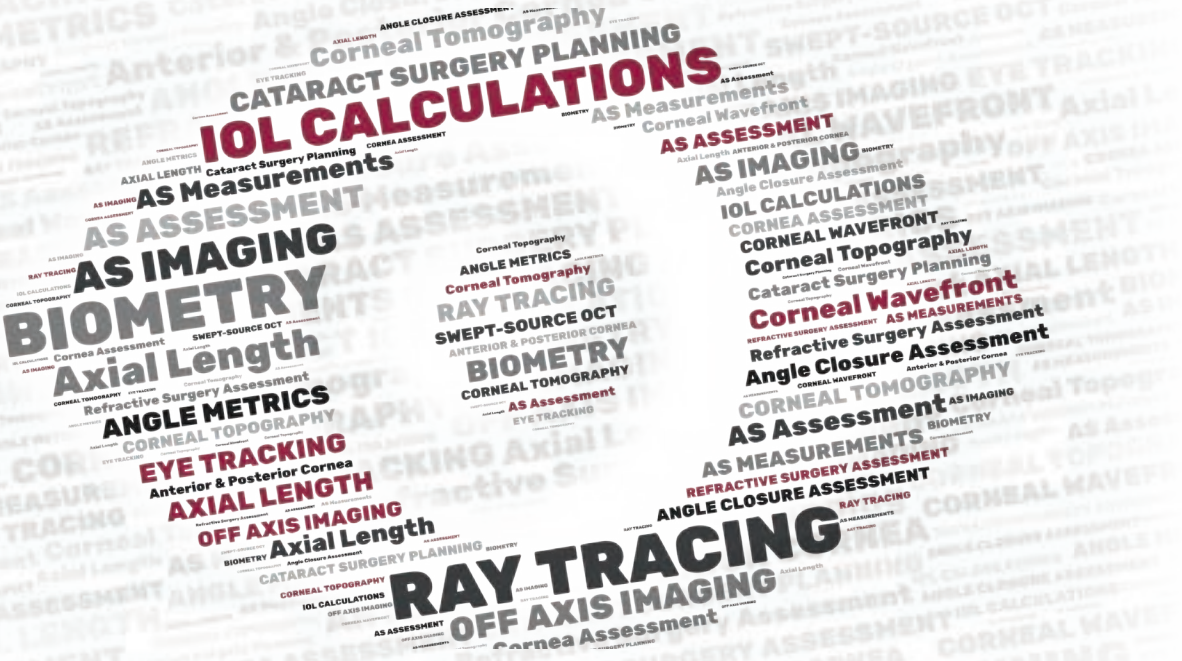
ANTERION®

Empowering You to Improve Patient Care

As an all-in-one upgradable solution for anterior segment, ANTERION combines biometry, IOL power calculation with corneal topography and tomography, anterior chamber metrics and high-resolution imaging to help revolutionize your day-to-day clinical routine. With this ONE imaging platform it is possible to:

- **Image and measure structural details**
- **Help optimize your clinical workflow**
- **Capture all biometric data needed for individualized IOL calculations**
- **Visually confirm measurements and reduce the risk of refractive surprises**
- **Customize cornea analysis**
- **Detect areas of asymmetry, track surgical outcomes, and monitor changes**
- **Detect and assess anterior chamber metrics automatically**
- **Visualize angle measurements in 360° and investigate changes to the architecture**

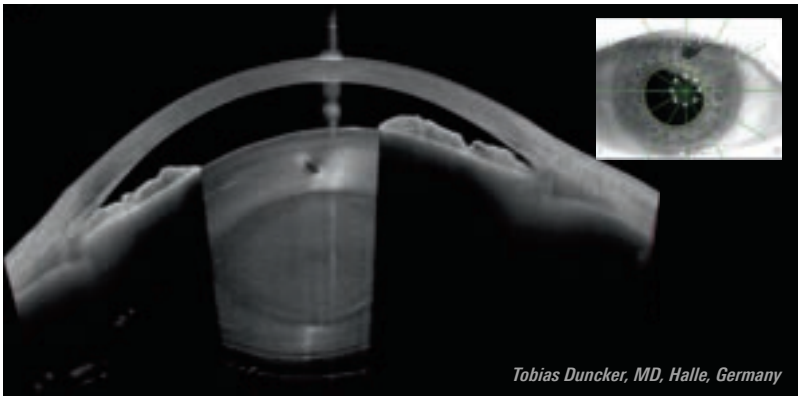
You can be confident that ANTERION, a swept-source OCT like no other, will empower you to do more for your patients.



ANTERION®

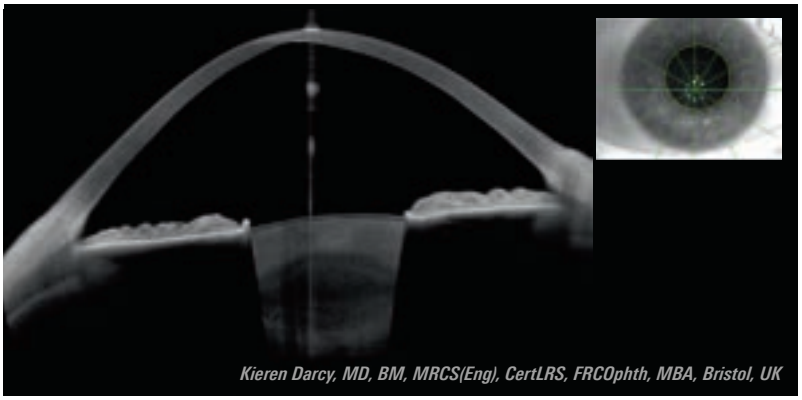
Build Confidence with High-Resolution Imaging

As a surgeon, you want to detect hidden anomalies before surgery, capture true measurements, and make fewer assumptions to achieve the best possible outcome. The measurements and stunning OCT images generated with ANTERION support your clinical decision-making and surgical planning in a multitude of clinical disciplines.



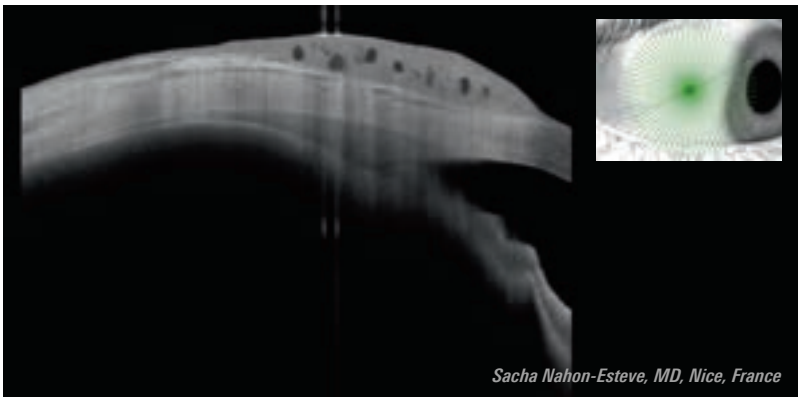
Cataracts

Short eye with narrow anterior chamber angle, thick lens and cataract



Corneal Details

Advanced keratoconus with central corneal scar

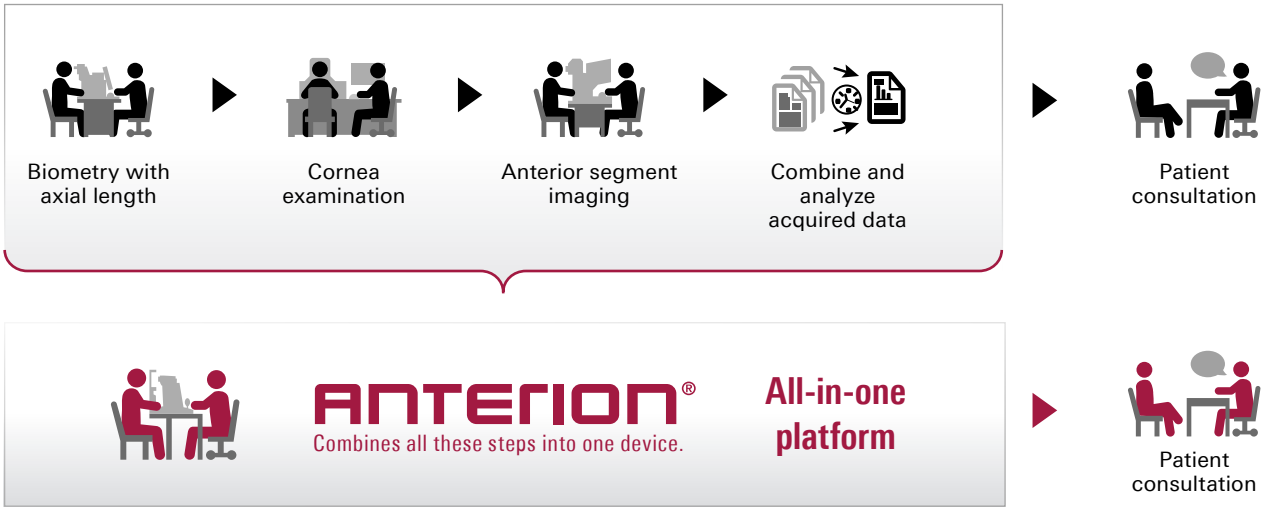


Peripheral Structures

Conjunctival nevus, acquired using the integrated external fixation light.

Optimize Your Clinical Workflow to Save Time

ANTERION allows you to perform the most important anterior segment examinations on a single device, which eliminates the need to move patients from machine to machine. With its fast acquisition speeds, intuitive device handling, and small footprint it is possible to save time and space.



Stunning Heidelberg Image Quality

Modular Design (Optional Apps)

Imaging App

- Anterior chamber and angle imaging
- Corneal and scleral imaging
- Visualization of the lens and both surfaces
- Customizable scan patterns
- Peripheral imaging

Cataract App

- Axial length
- Lens thickness
- Aqueous depth
- Central corneal thickness
- Anterior axial curvature
- Total corneal power
- Total corneal wavefront
- Monofocal and toric IOL calculator
- Formulas:
  - SRK/T
  - Haigis
  - Holladay I
  - Hoffer® Q
- Barrett formulas (Universal II, Toric, Tru-K, True-K Toric)
- Import options for IOL database
- OKULIX ray tracing

Cornea App

- Corneal topography
- Corneal tomography
- Pachymetry
- Total corneal power
- Corneal wavefront analysis
- Corneal differential maps
- Trend analysis
- Epithelial Thickness Module
- Ectasia View

Metrics App

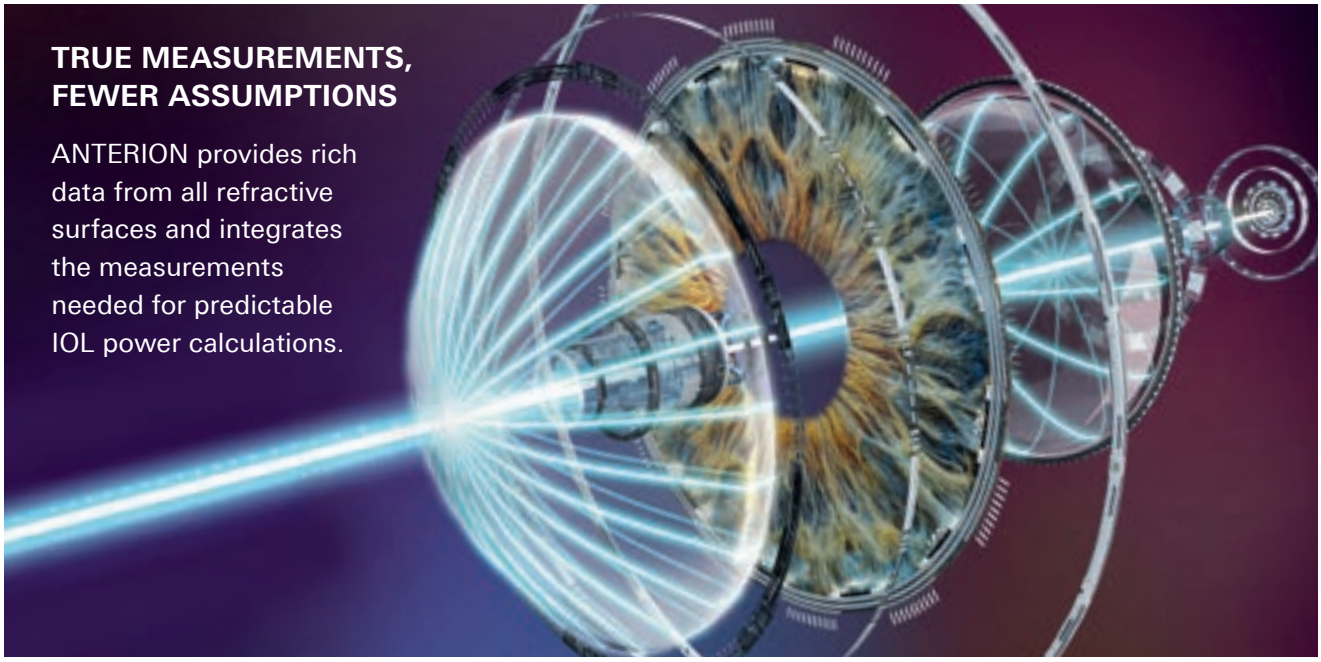
- Anterior chamber angle assessment
- 360° graphs of angle parameters
- Anterior chamber volume
- Lens vault
- Lens thickness
- Free-hand measurements

ANTERION®

for CATARACT

Capture Biometric Data for Fewer Assumptions

As the definitive toolbox for cataract surgery planning, ANTERION acquires precise biometric distance measurements, as well as the full power of the cornea (~16.000 data points), all with optimized swept-source OCT technology. This helps to improve clinical outcomes, even in the most challenging cases.



Parameter	Measurement Range
Central Corneal Thickness	300 – 1700 µm
Anterior Chamber Depth	1.50 – 4.80 mm
Lens Thickness	2.40 – 6.50 mm
Axial Length	14.00 – 32.00 mm
SimK Mean Anterior (3 mm)	6.00 – 110.00 D
K Mean Posterior (3 mm)	-14.80 – -0.70 D
Astigmatism Anterior	0.00 – 15.50 D
Astigmatism Posterior	-2.10 – 0.00 D
White-To-White	9.40 – 15.30 mm
Pupil Diameter	0.20 – 14.10 mm

Visually Confirm Measurements to Support Planning

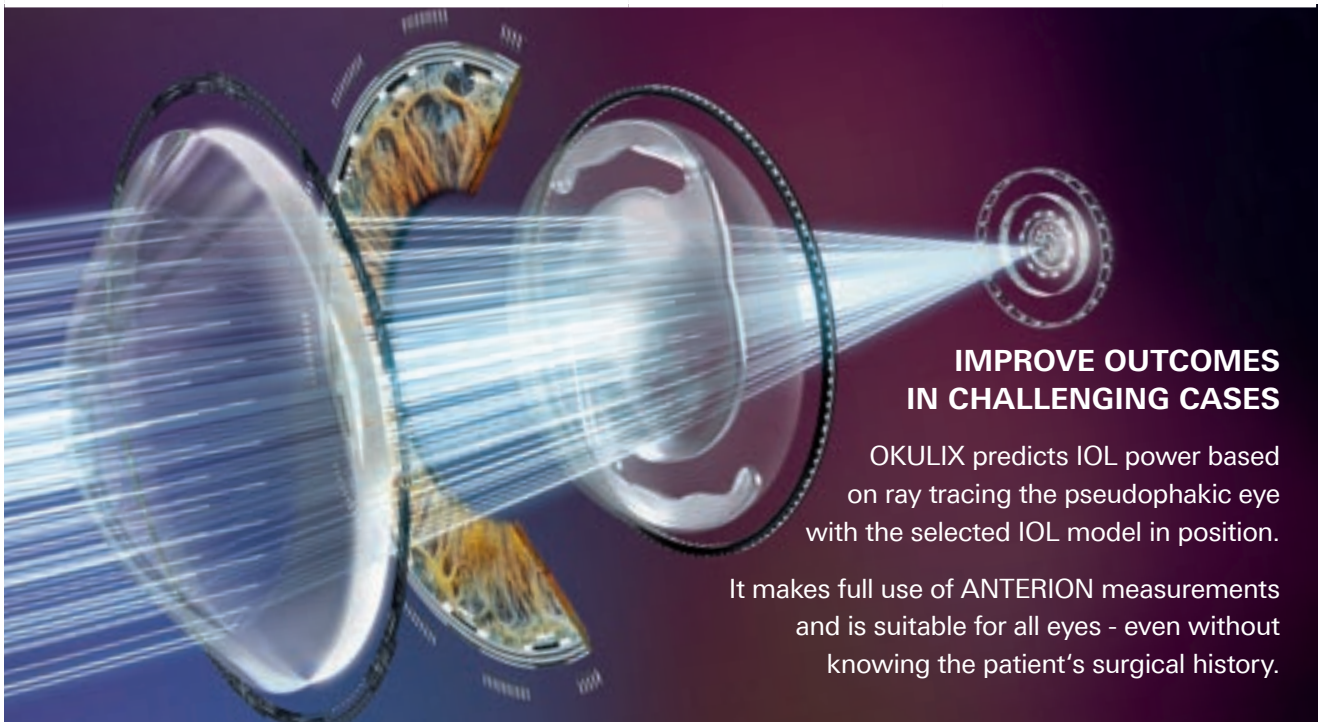
IOL calculation is often the most challenging and risky aspect of surgical planning. Having the ability to confirm measurements using OCT images helps remove unwanted guesswork to support your surgical planning decisions.

Offering both monofocal and toric IOL calculation, you are armed with the data needed to calculate the most suitable IOL for each patient without the need to transfer data or change devices. Furthermore, the ability to compare detailed pre- and post-operative metrics can enhance doctor to patient communication.

Individualize IOL Calculations for Personalized Care

ANTERION also provides a comprehensive corneal analysis and details on astigmatism to support premium IOL calculation for challenging eyes. Select the calculation method that best fits your clinical needs - in standard and challenging cases.

Barrett Suite: Universal II, Toric, True-K, True-K Toric	Haigis	Holladay 1
OKULIX Ray Tracing	SRK/T	Hoffer® Q



Reduce the Risk of Refractive Surprises

Include the detailed topographic and tomographic data of the ANTERION Cornea App in cataract surgery planning to further reduce risks.

With all measurements conveniently accessible on the same platform, you can quickly identify the potential sources that could lead to a post-operative refractive surprise.

ANTERION®

for CORNEA

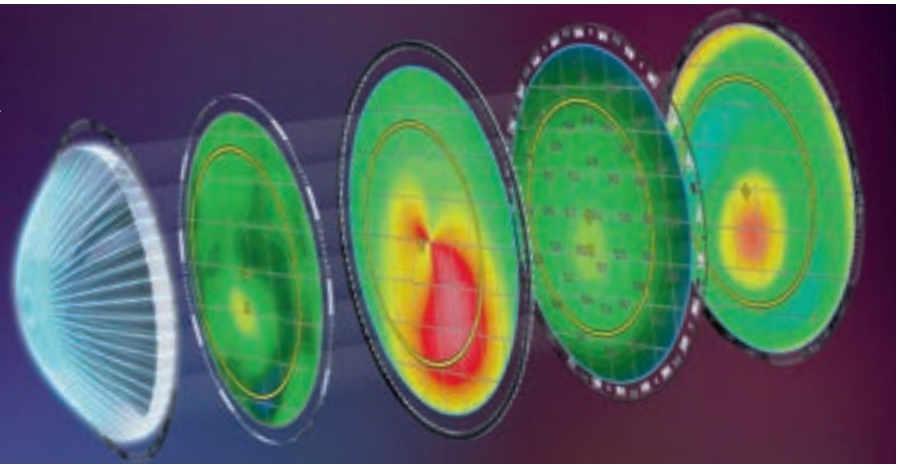
Customize Cornea Analysis to Your Needs

ANTERION distinguishes itself further by providing a comprehensive set of corneal measurements for the evaluation of the patient's corneal geometry.

Derived from tomography, this data provides the precise measurements and high repeatability without sacrificing acquisition speed or patient comfort. For increased efficiency, all data can be viewed at a glance using customizable templates, presets, and reports.

CONSIDER THE FULL POWER OF THE CORNEA

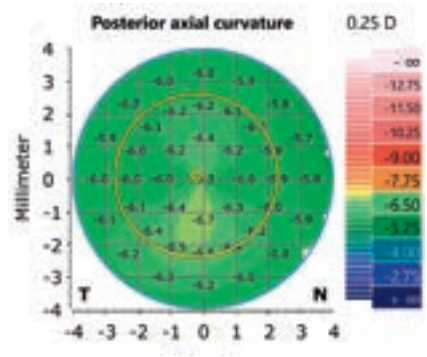
The ANTERION Cornea App performs 65 OCT B-scans in less than one second, which results in more than 16.000 datapoints of both the anterior and posterior corneal surface.



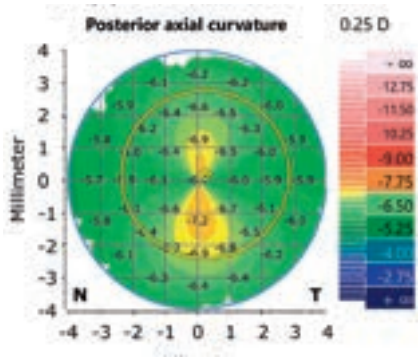
Detect Areas of Asymmetry Quickly and Easily

Compare topographic and tomographic data of your patient's left and right eye with OU View. Differential maps for any selected corneal parameter help detect areas of asymmetry easily to reduce refractive surprises.

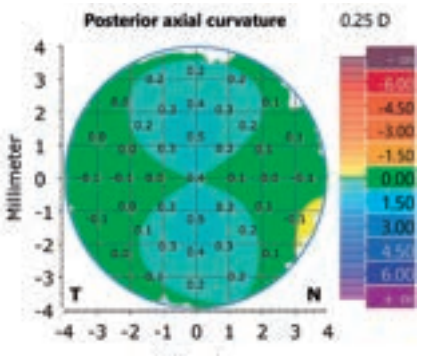
OD



OS



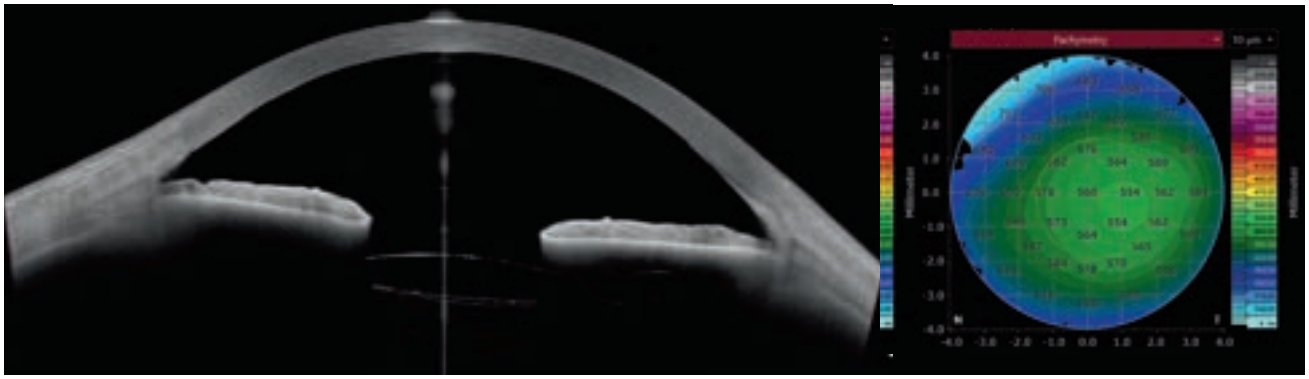
Difference



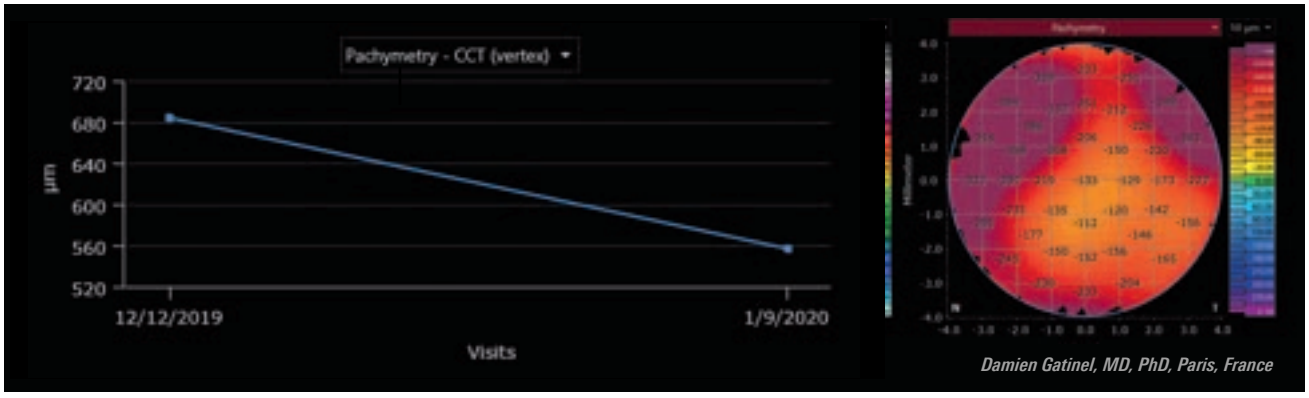
Track Surgical Outcomes and Monitor Change

Comprehensive tomographic data and high-resolution OCT images make it possible to evaluate surgical procedures in detail in the Follow-Up View. With the ability to compare images and data from prior visits, you can closely monitor corneal disease states over time.

Eye after DMEK surgery, showing a thick and edematous cornea.



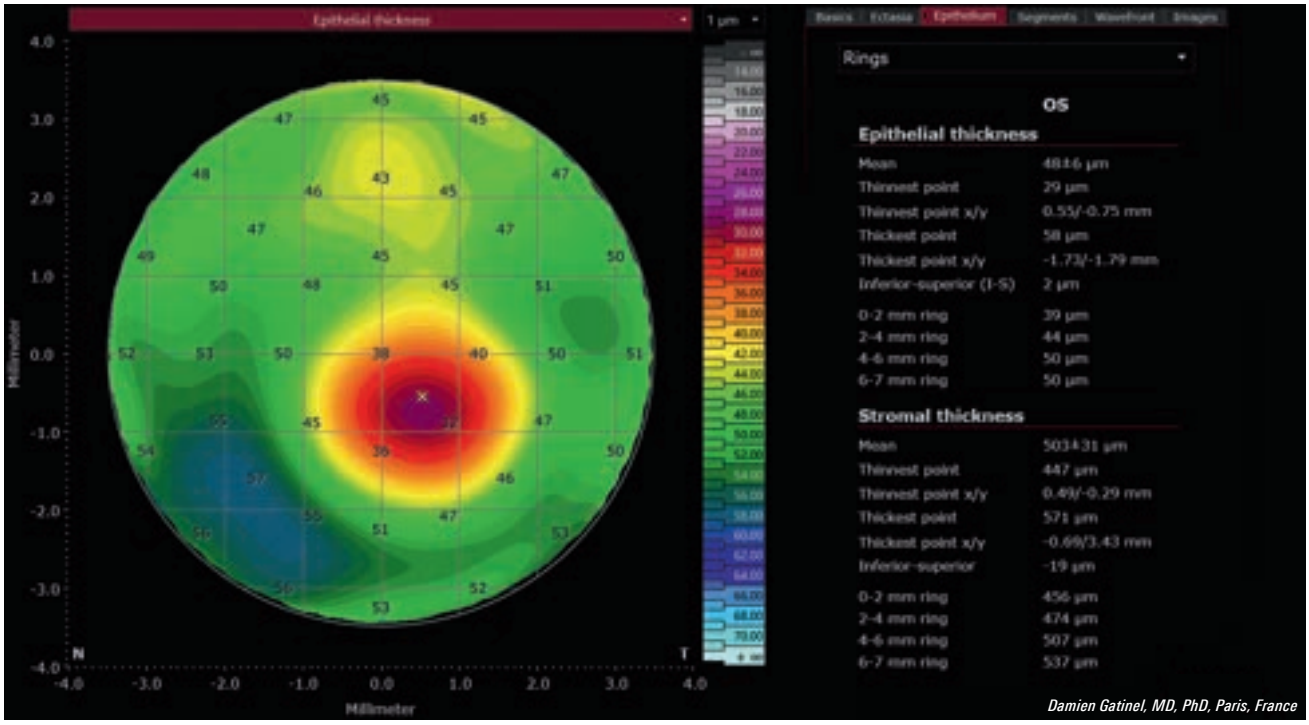
Eye after one month of surgery, showing recovered cornea.



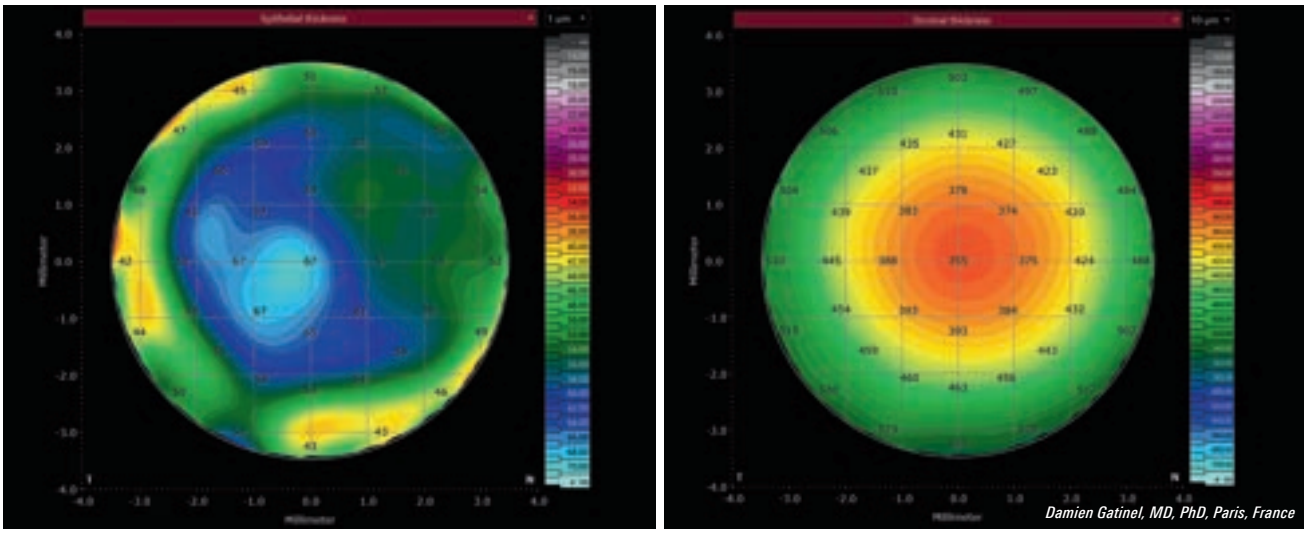
The graph shows the change of CCT over time.

Evaluate the Epithelium

The ANTERION Epithelial Thickness Module delivers essential data you need to assess epithelial and stromal thickness, supporting refractive surgery planning, ocular surface evaluation, corneal ectasia screening, and more. This comprehensive information helps you to make informed decisions, reduce chair time, and optimize patient outcomes.



Map and parameters for the epithelial thickness of an eye with keratoconus.

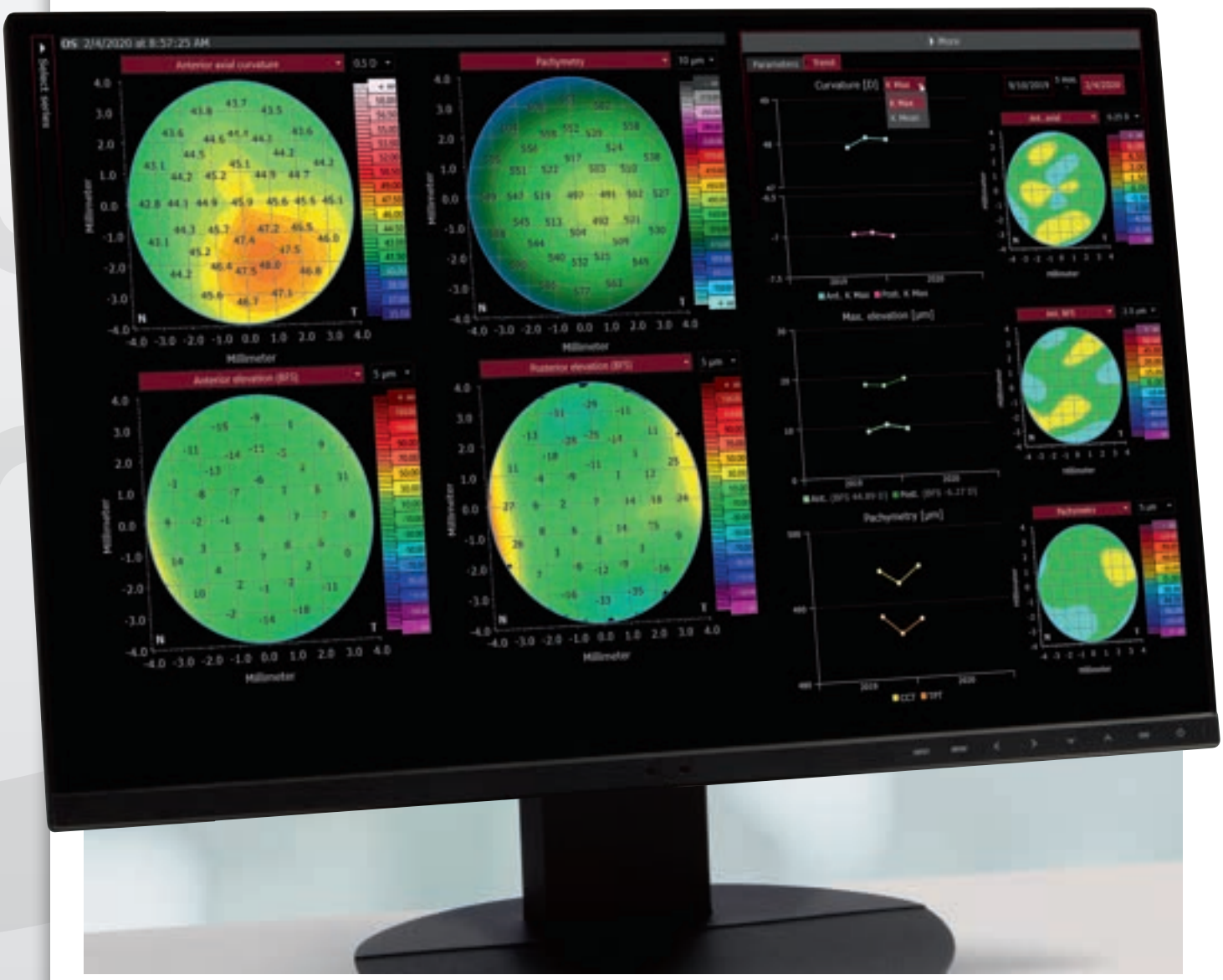


Maps for epithelial and stromal thickness of an eye after refractive surgery.

Assess, Monitor and Track Ectasia at a Glance

ANTERION provides a comprehensive toolset to help detect and analyze ectatic changes in the cornea.

- Customize views of the most important maps and parameters
- Combine all relevant information, including data from both eyes across multiple patient visits
- Track the details of progression with visualization tools, such as trend graphs and differential maps



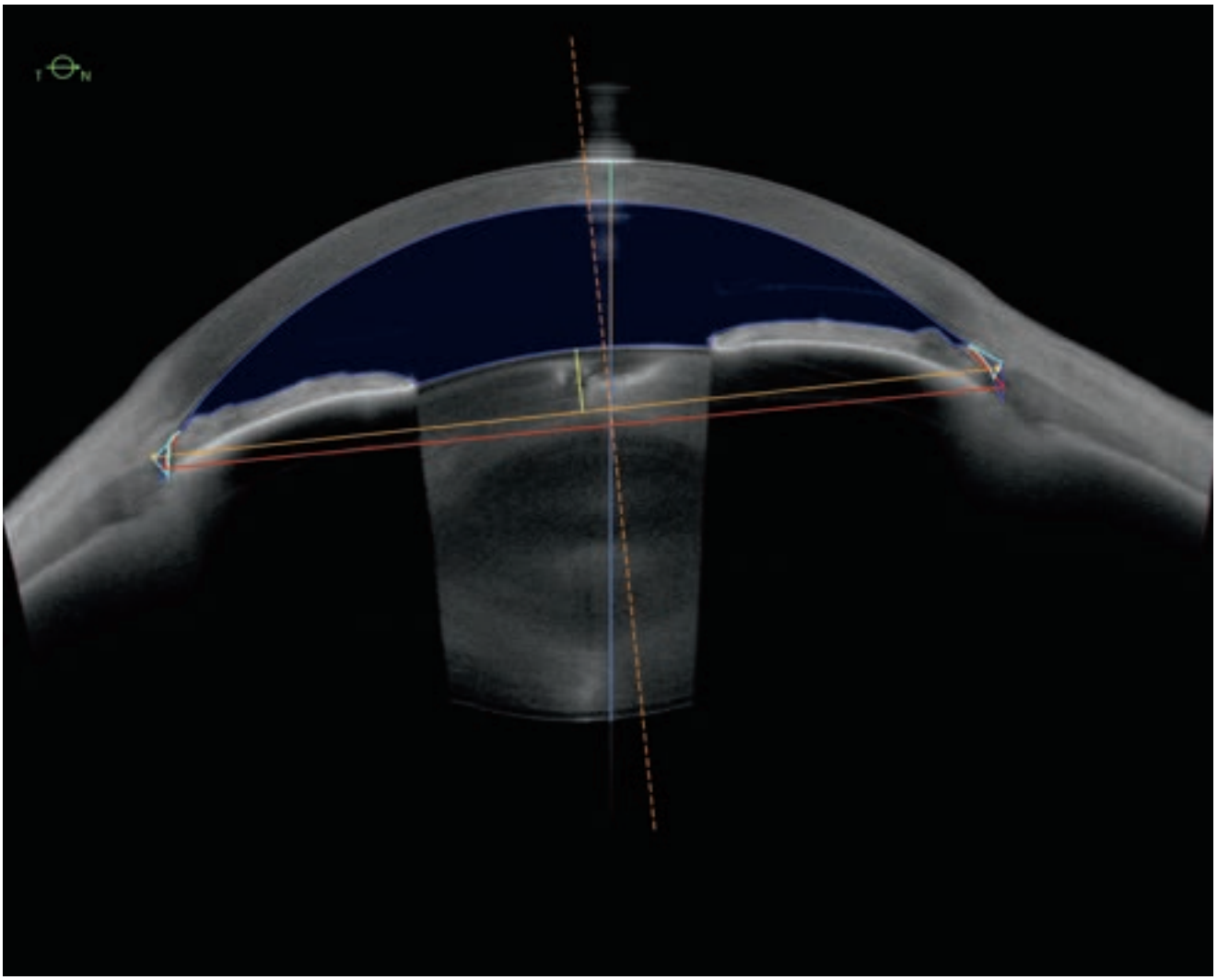
ANTERION®

for AC METRICS

Detect and Assess Metrics Automatically

Utilizing the technological advantages of long wavelength (1300 nm) swept-source OCT, the Metrics App delivers the data needed to support surgical planning. Unleash the power of this App to:

- Visualize the entire anterior chamber and to quantitively assess all relevant parameters
- Quantify changes in the anterior chamber with predefined measurements – including anterior chamber volume, lens thickness and vault, and angle metrics
- Measure region of interest directly on the image with refraction-corrected free-hand measurements

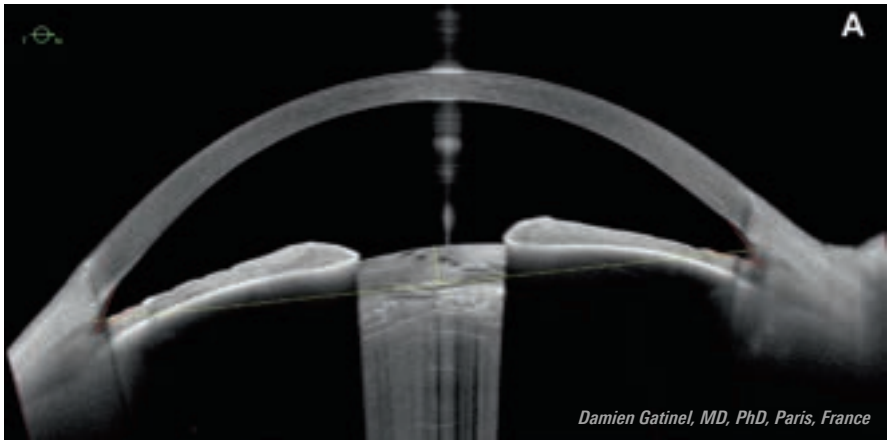


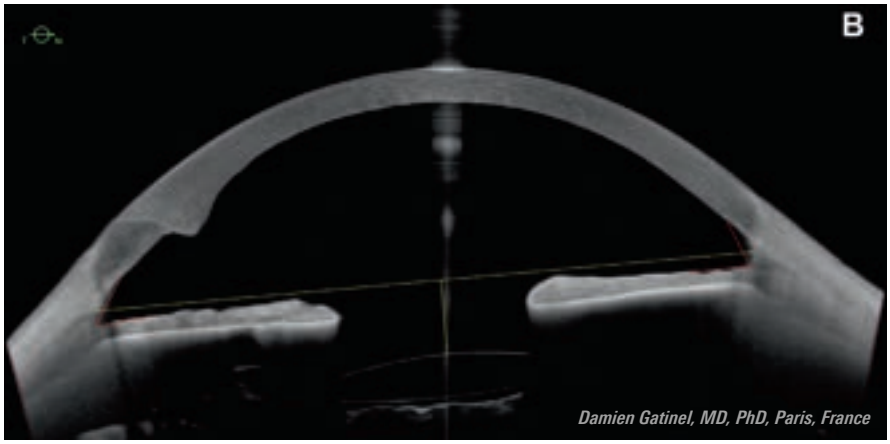
Visualize Angle Measurements in 360°

The ANTERION Metrics App is a valuable tool for non-contact assessment of iridocorneal angles. The precise measurements along with the visualization can serve as a complementary tool to gonioscopy and can support you in the assessment of angle closure disease. Navigating through six exceptionally clear OCT images or visualizing all relevant angle parameters in a 360° graph is possible with the Metrics App as illustrated in this image.

Investigate Changes to the Architecture

Whether planning or evaluating cataract surgery, phakic lens implantation, glaucoma surgery or another ophthalmic procedure, the Metrics App offers support. After the procedure, it can help assess and investigate the effects of the intervention on the anterior segment by comparing pre- and post-op measurements.

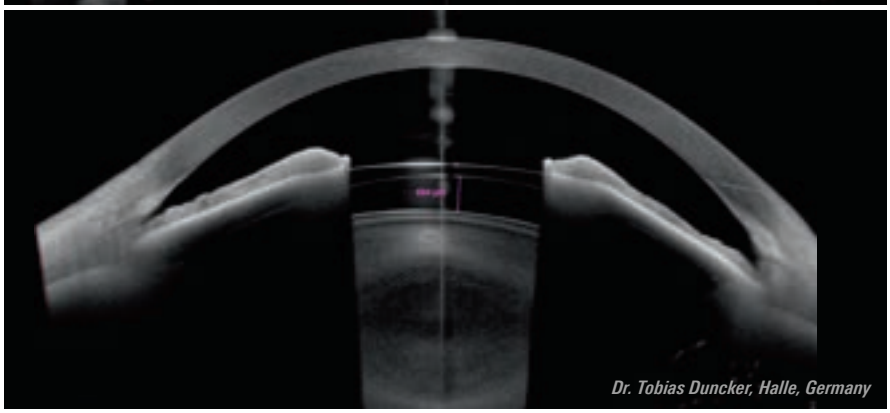




Evaluate Surgical Outcomes

Same eye before (A) and after (B) cataract surgery including measurements of lens vault and anterior chamber angles.

Visualization of dense lens, IOL, and lens capsule.



Customizable Measurements

Eye with implantable collamer lens (ICL), including manual measurement for lens vault.

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