ANTERION®

Multimodal Imaging Platform
Optimized for the Anterior Segment

HEIDELBERG ENGINEERING

The multimodal functionality you need

The image quality you expect | The expandable design you want (optional)

Imaging App

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

+

Cornea App

- Corneal topography
- Corneal tomography
- Pachymetry
- Total corneal power
- Corneal wavefront analysis
- Corneal differential maps
- Progression analysis

Cataract App

- Axial length
- Lens thickness
- Aqueous depth
- Central corneal thickness
- Anterior axial curvature
- Total corneal power
- Total corneal wavefront
- Spheric and toric IOL calculator
- Formulas:
  - SRK/T
  - Haigis, Haigis L
  - Holladay I
  - Barrett formulas (Universal II, Toric, True-K, True-K Toric)
- ULIB import
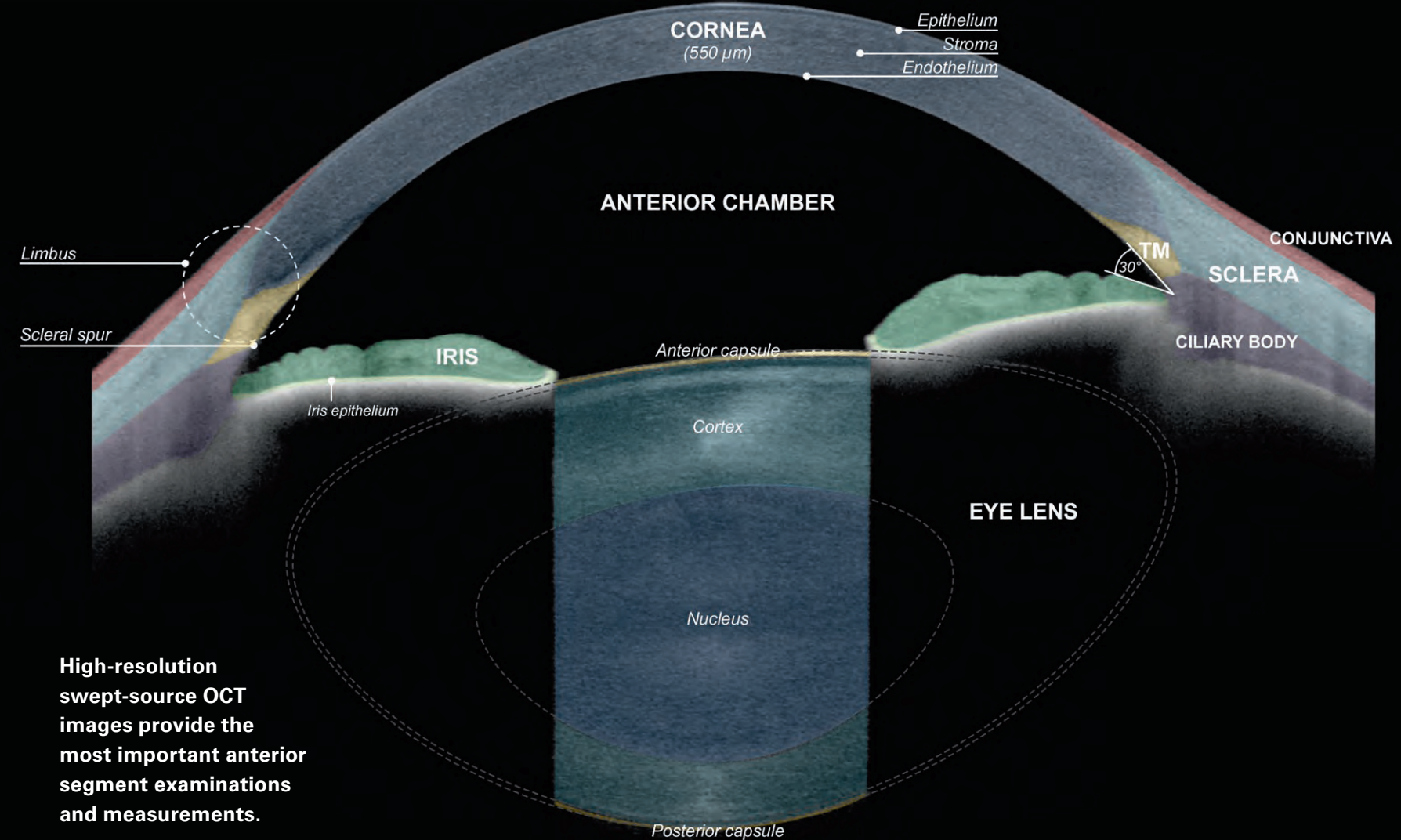- IOL CON import
- Okulix interface

Metrics App

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

Experience confident diagnostics and workflow optimization

- Visually confirm all measurements with exceptionally clear swept-source OCT images.
- Increase efficiency and save space with a customizable, compact platform that meets your individual needs.
- Simplify the patient journey and transform your clinical workflow.
- Discover the speed and security of HEIDELBERG EYE EXPLORER HEYEX 2 image management.

Anterior segment anatomy

CORNEA (550 µm)
Epithelium
Stroma
Endothelium
ANTERIOR CHAMBER
CONJUNCTIVA
TM
30°
SCLERA
CILIARY BODY
Limbus
Scleral spur
IRIS
Anterior capsule
Iris epithelium
Cortex
EYE LENS
Nucleus
Posterior capsule

High-resolution swept-source OCT images provide the most important anterior segment examinations and measurements.

Imaging App – Enhance your clinical confidence

The Imaging App comes as standard. Visualize various anterior segment pathologies or surgical results, such as keratoplasty, implanted IOLs, and corneal rings.

A detailed visualization of the sclera, ciliary body, and rectus muscle assists you in the diagnosis and management of pathologies that impact these anatomical structures.
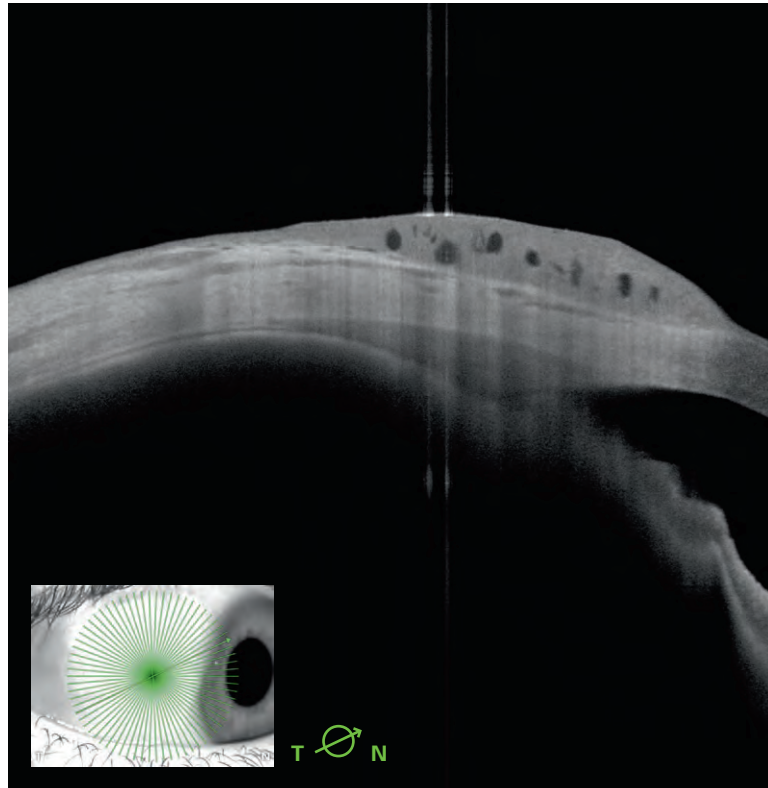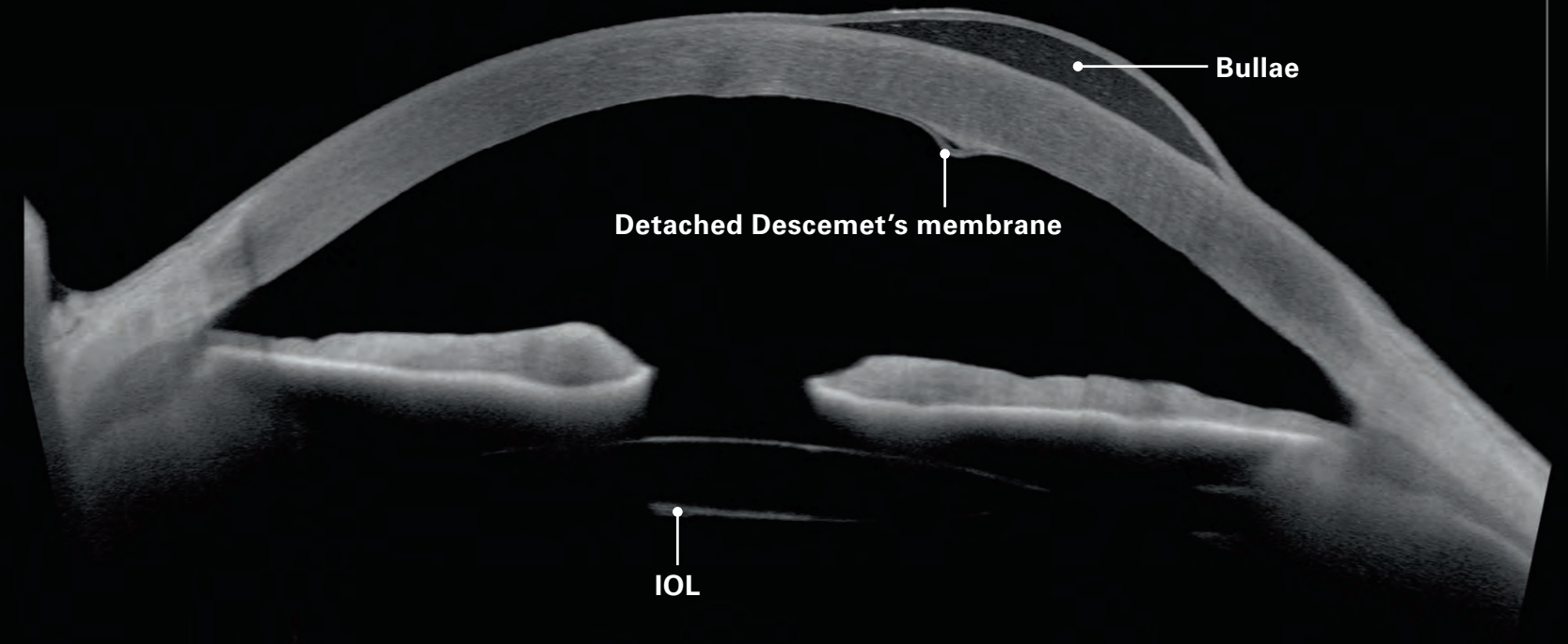

Conjunctival nevus (lateral fixation)
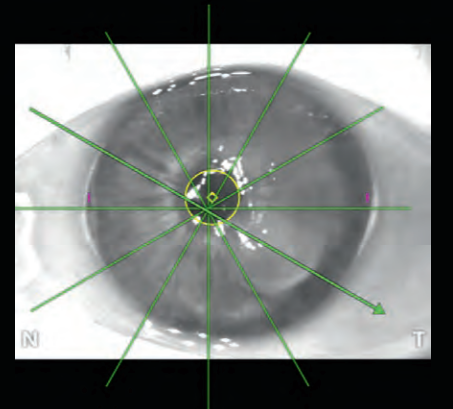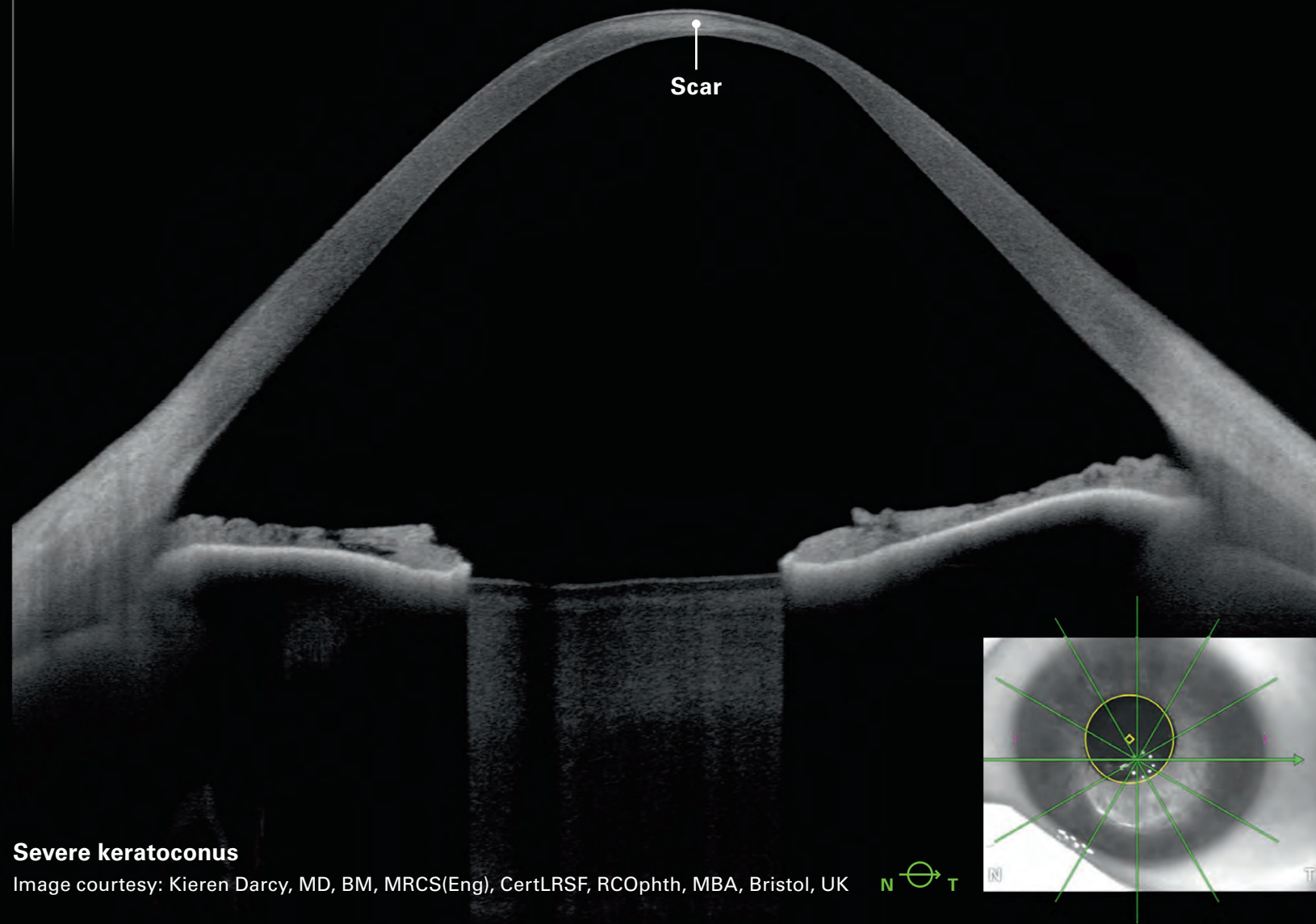Image courtesy: Sacha Nahon-Esteve, MD, Nice, France
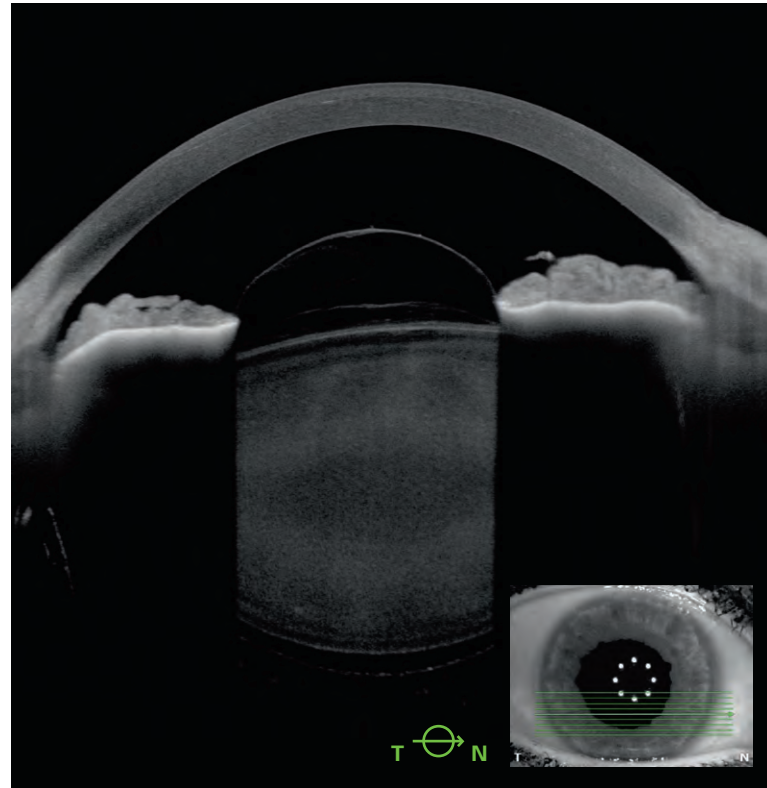
Post trauma, vitreous in the anterior chamber

Bullae

Detached Descemet's membrane

IOL

Bullae due to hydrops
Image courtesy: Kieren Darcy, MD, BM, MRCS(Eng), CertLRSF, RCOphth, MBA, Bristol, UK

Scar

Severe keratoconus
Image courtesy: Kieren Darcy, MD, BM, MRCS(Eng), CertLRSF, RCOphth, MBA, Bristol, UK

ICL

Vitreous

200 µm
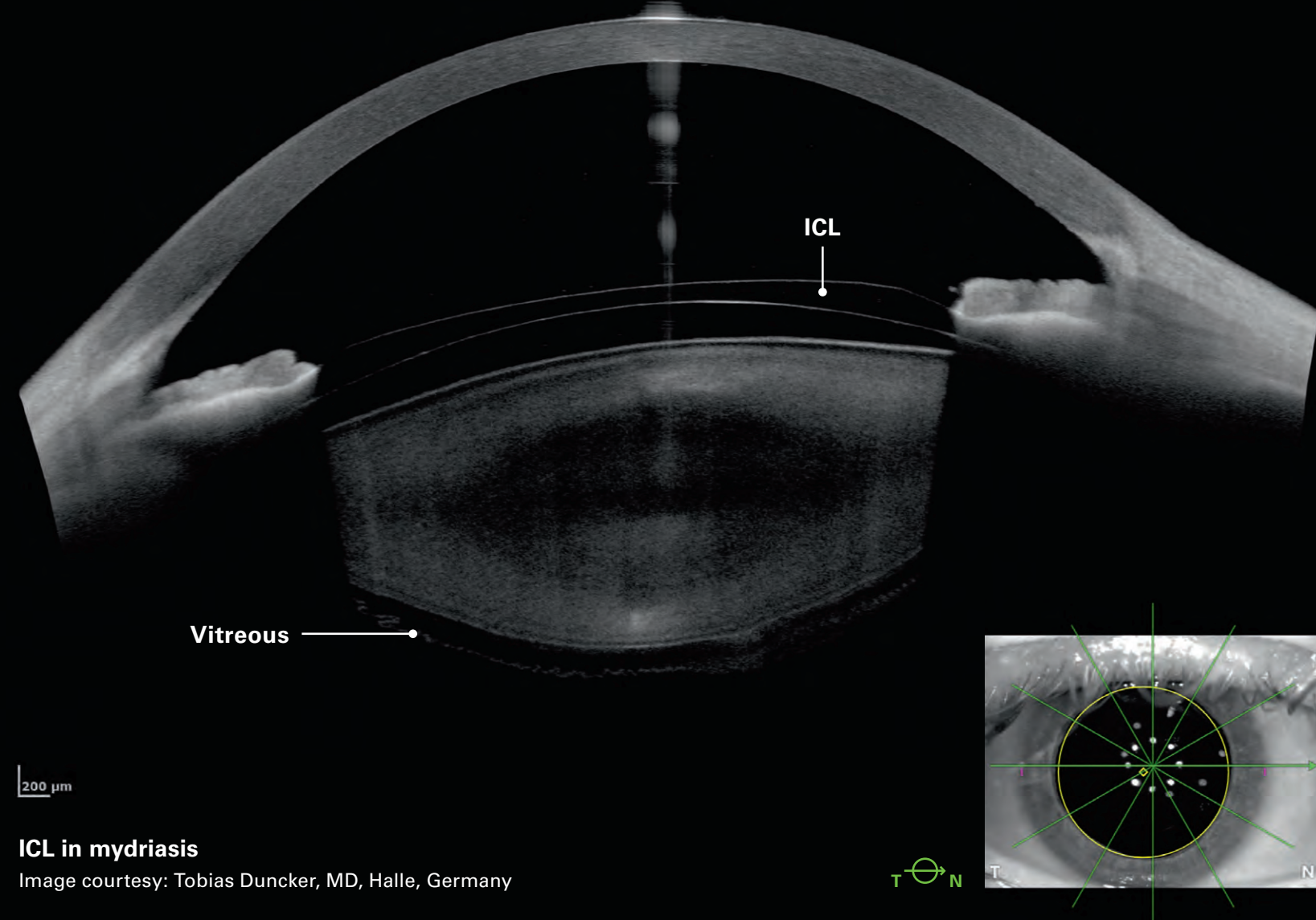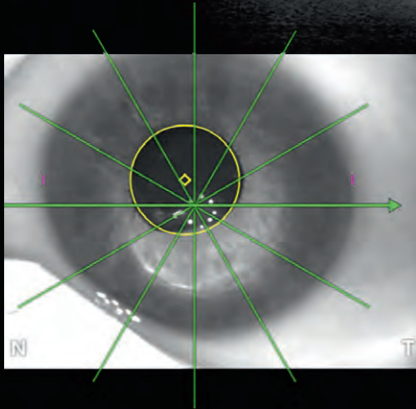
ICL in mydriasis
Image courtesy: Tobias Duncker, MD, Halle, Germany

Incision — DSAEK — Incision

IOL — Vitreous

200 µm
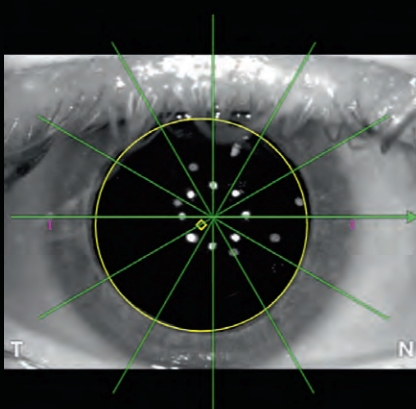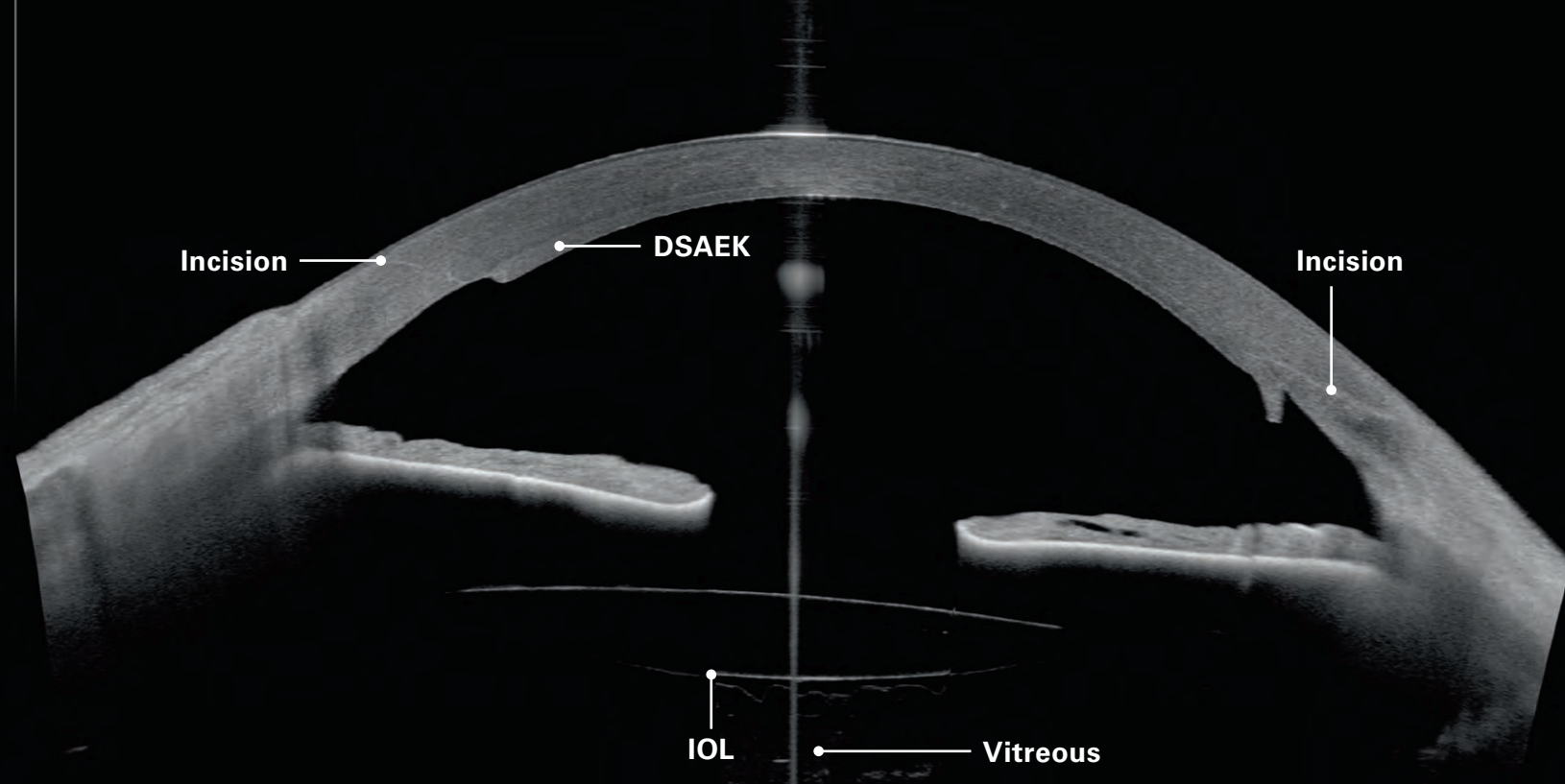
Descemet's Stripping Automated Endothelial Keratoplasty (DSAEK)
Image courtesy: Kieren Darcy, MD, BM, MRCS(Eng), CertLRSF, RCOphth, MBA, Bristol, UK

Incision — Detached DMEK — Incision

IOL
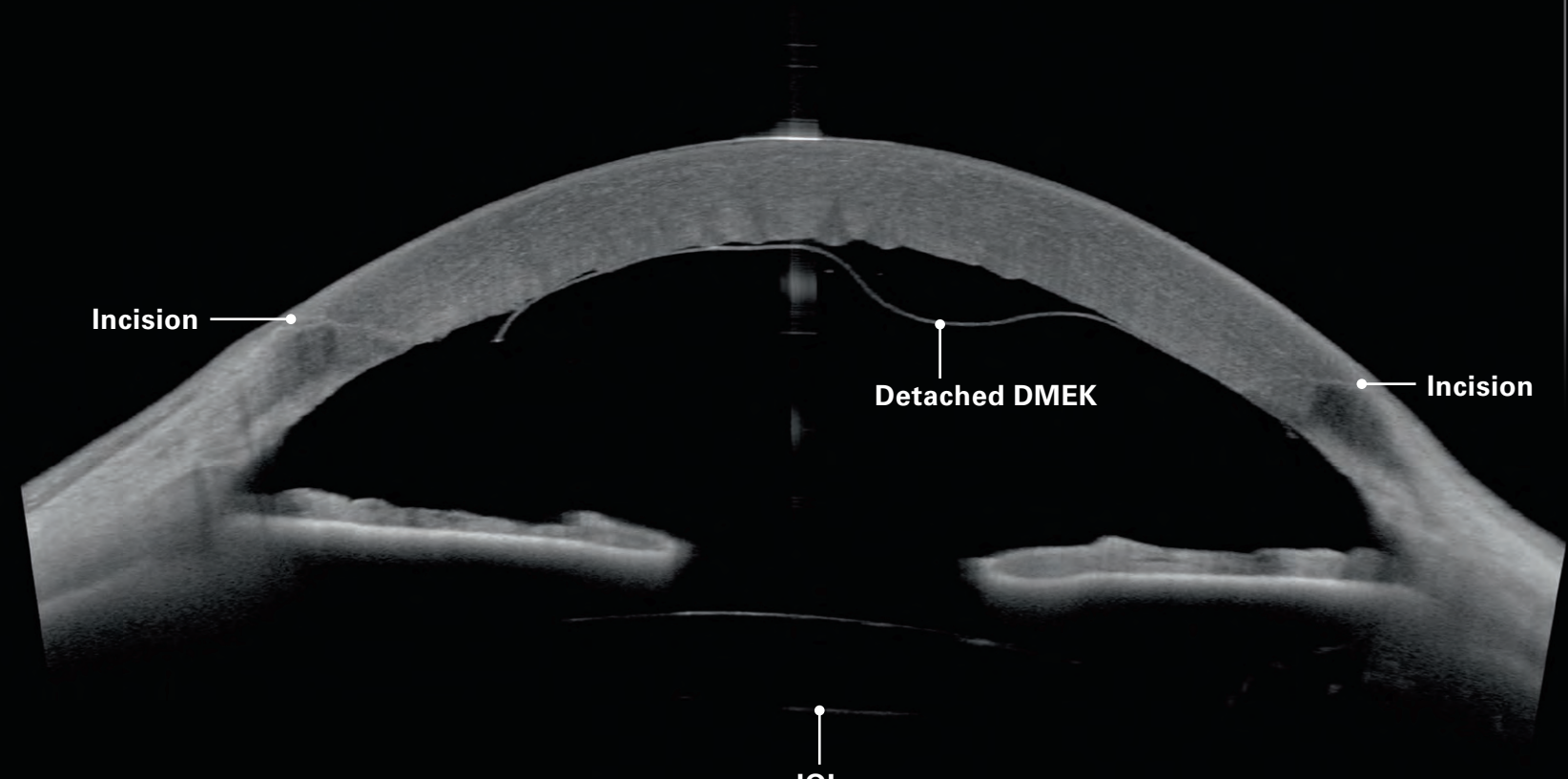
200 µm

Descemet's Membrane Endothelial Keratoplasty (DMEK)
Image courtesy: Tobias Duncker, MD, Halle, Germany

Contact lens

Donor cornea

Anterior synechia

Host cornea

Anterior synechia

IOL
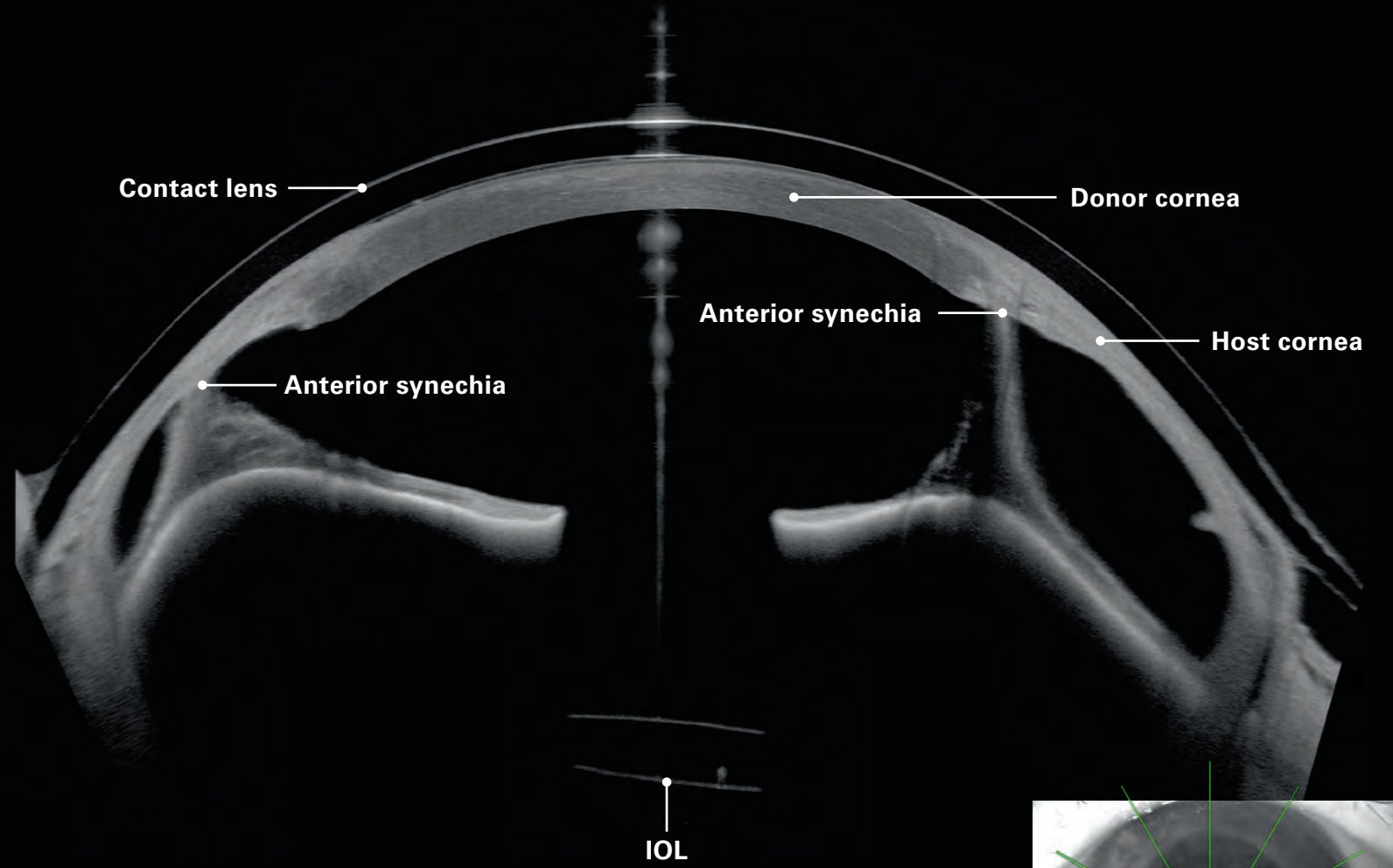
200 µm

Keratoplasty, anterior synechia, pseudophakic eye with contact lens
Image courtesy: Tobias Duncker, MD, Halle, Germany

N T

LASIK flap

200 µm

LASIK

T N
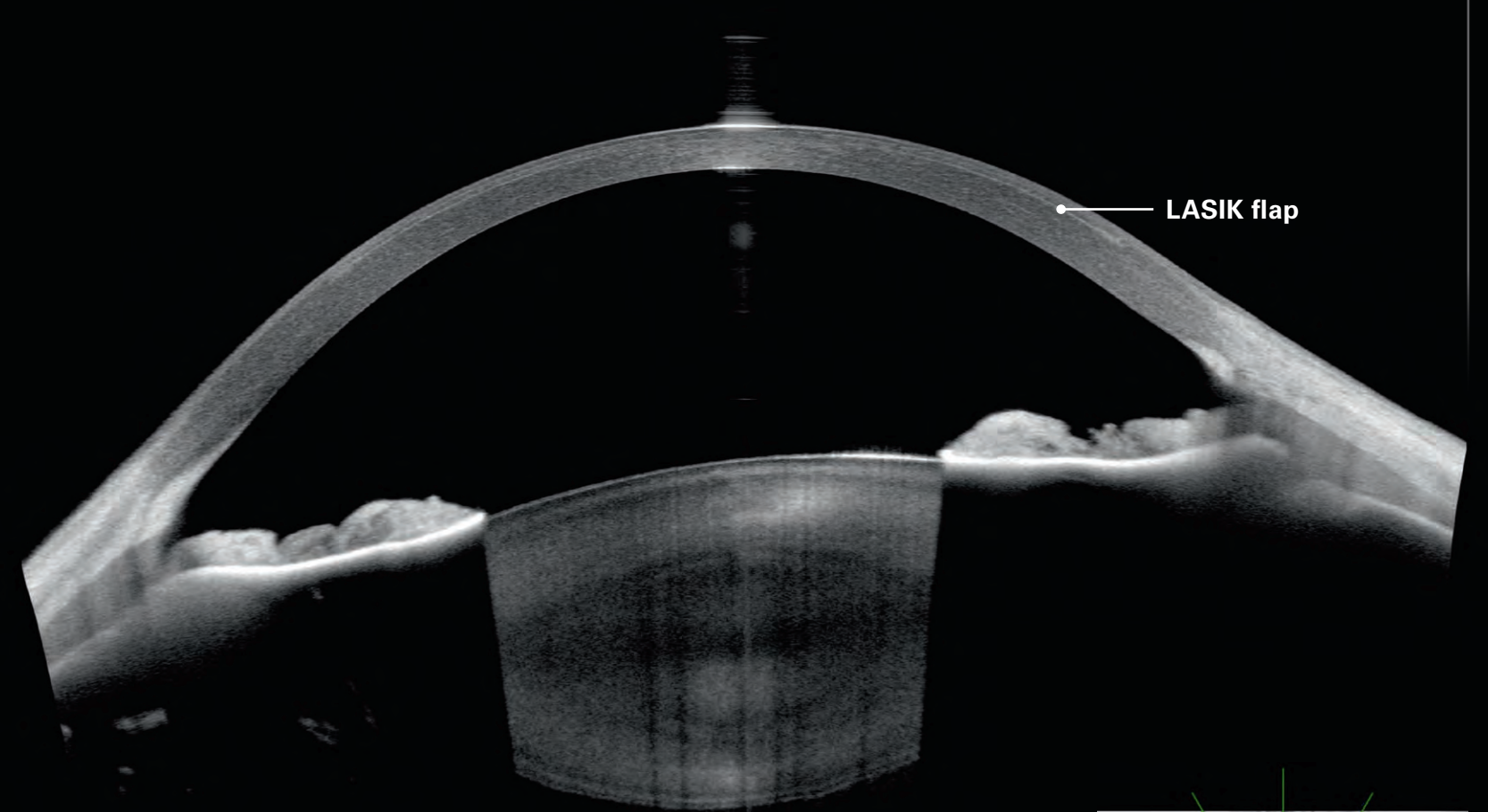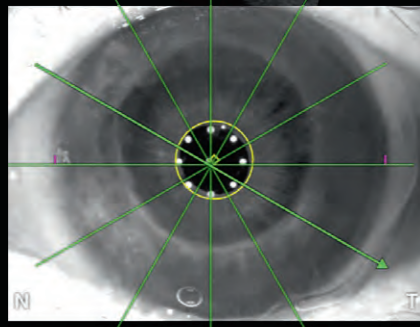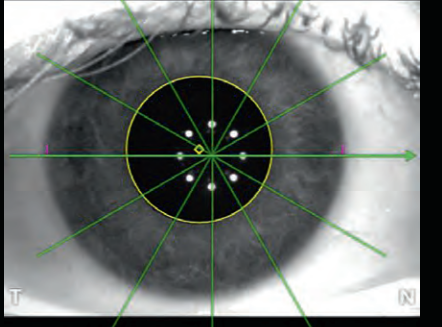
Cornea App – Customized reports enhance your workflow

Anterior axial curvature
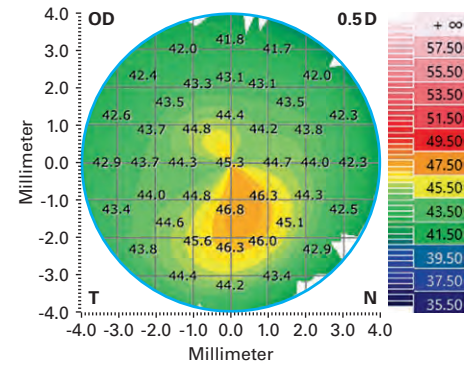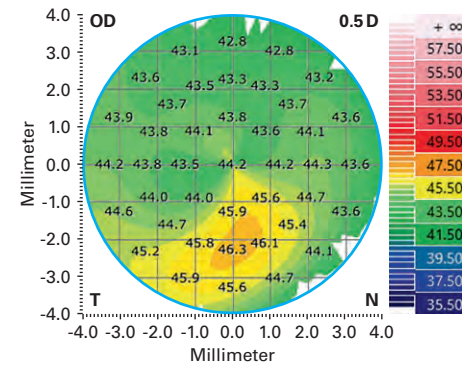

Anterior tangential curvature
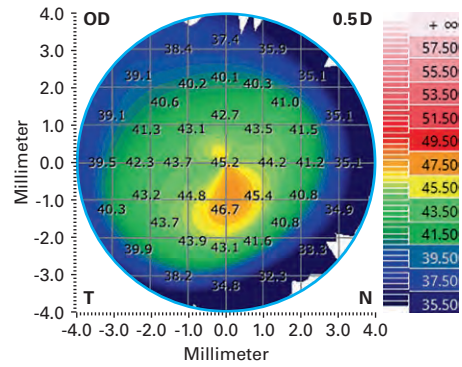
Pachymetry
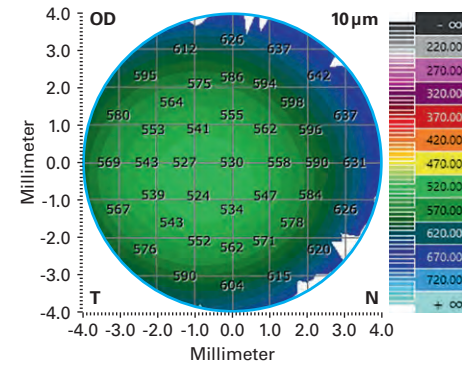
Posterior axial curvature
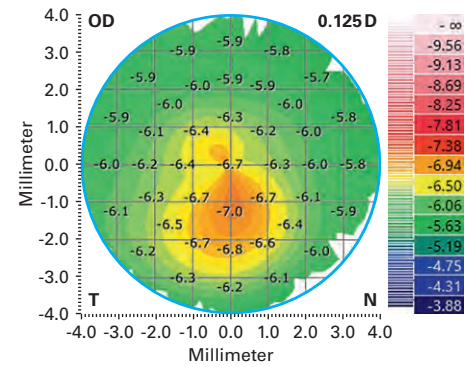
Posterior tangential curvature
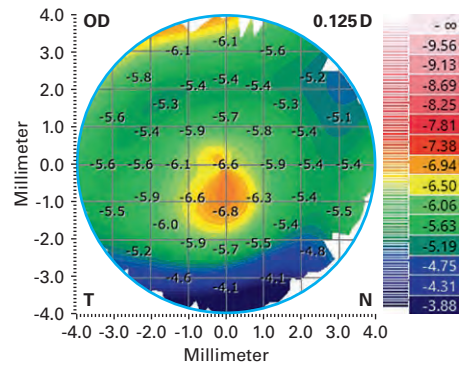
Total corneal power

Keratoconus Multiview

Image courtesy: Oliver Findl, MD, MBA, FEBO, Vienna, Austria

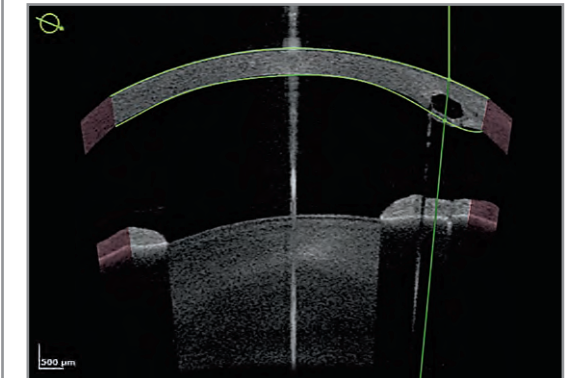# Corneal maps correlate with camera and OCT images

Total corneal power map
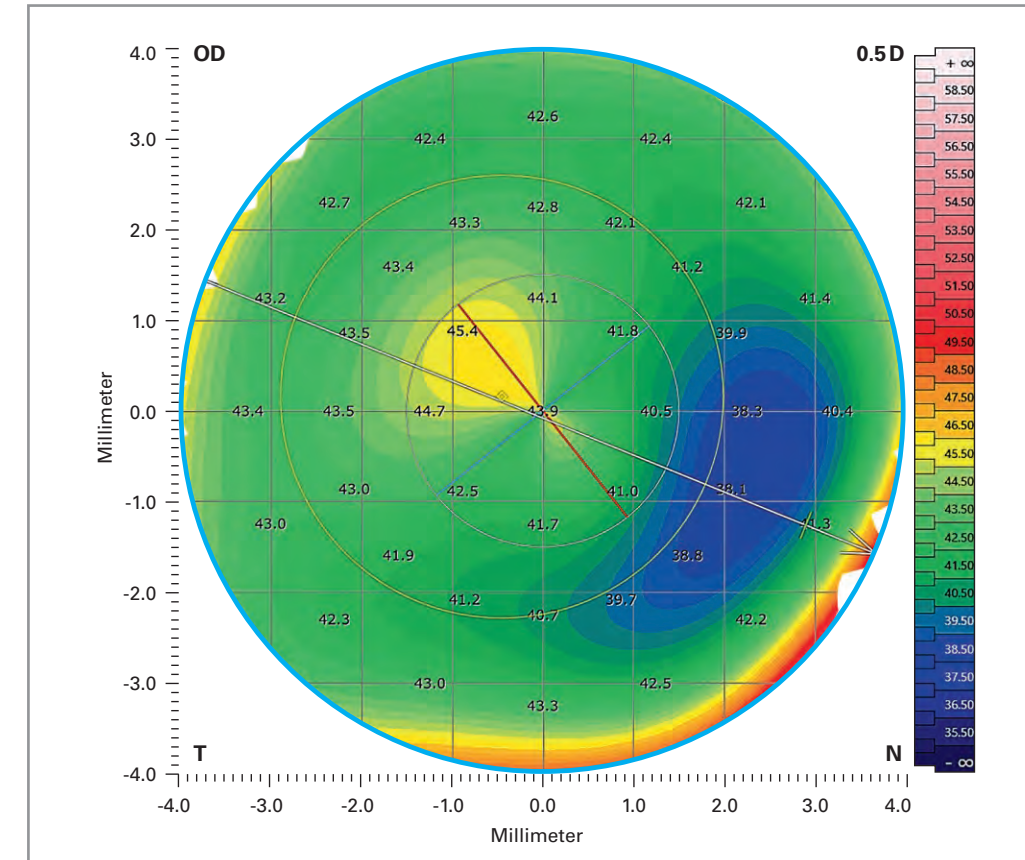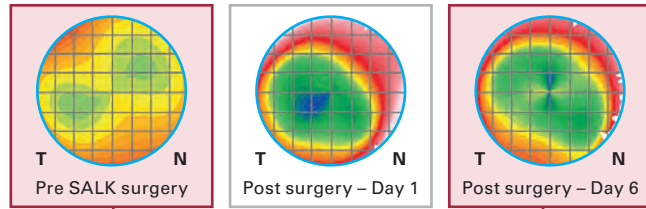

IR camera image
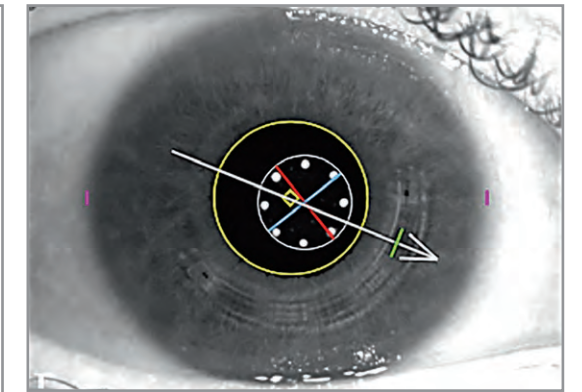
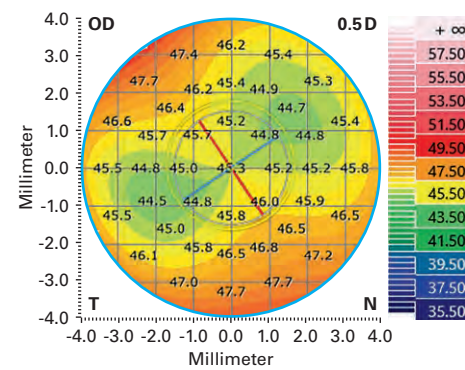## OCT cross-sectional scan

Intrastromal corneal ring segment

Image courtesy: Oliver Findl, MD, MBA, FEBO, Vienna, Austria
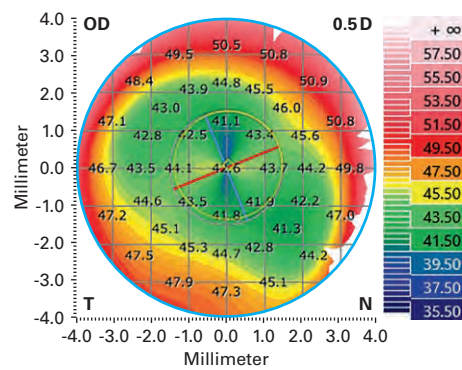
Visualize, measure and document progression
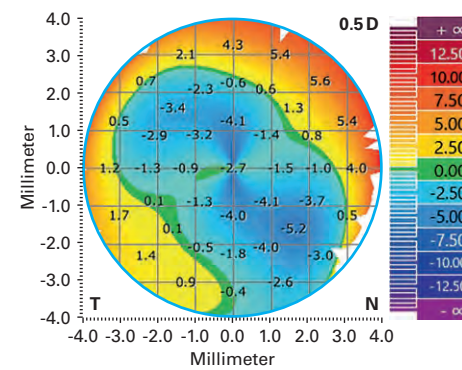
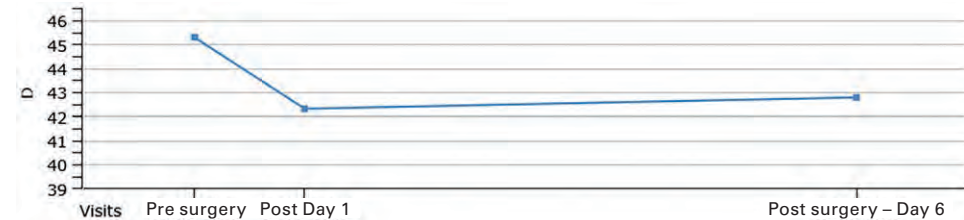**Examinations –
Total corneal
power map:**

Pre SALK surgery

Post surgery – Day 1

Post surgery – Day 6

Baseline Pre SALK surgery

Follow-up Post surgery – Day 6

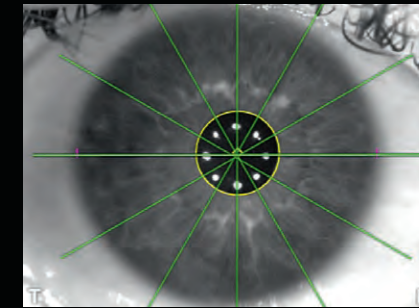**Follow-up – Baseline Difference**

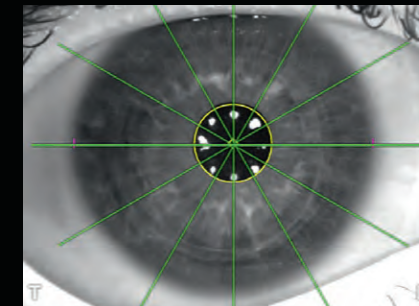**Trend analysis** Total corneal power – K (average)

Superficial Anterior Lamellar Keratoplasty – SALK

Image courtesy: Kieren Darcy, MD, BM, MRCS(Eng), CertLRSF, RCOphth, MBA, Bristol, UK
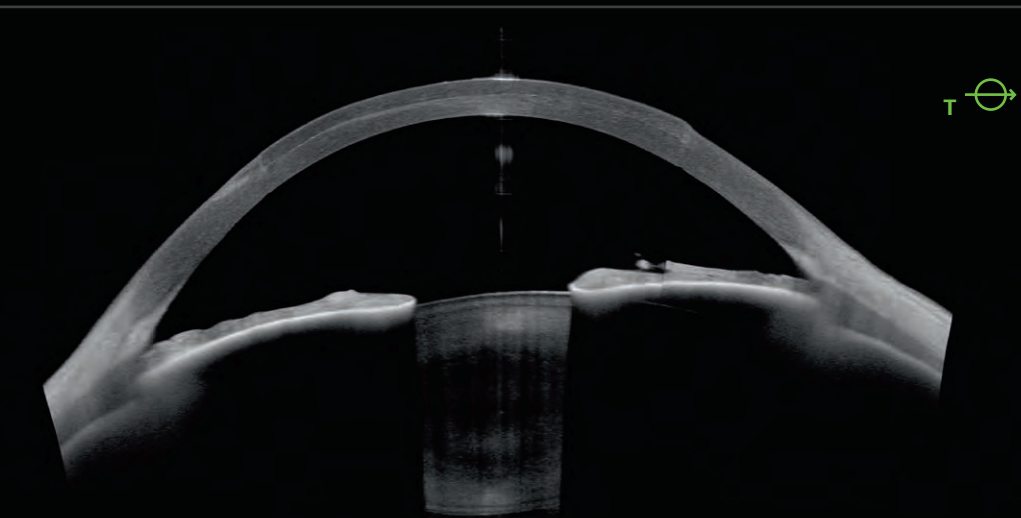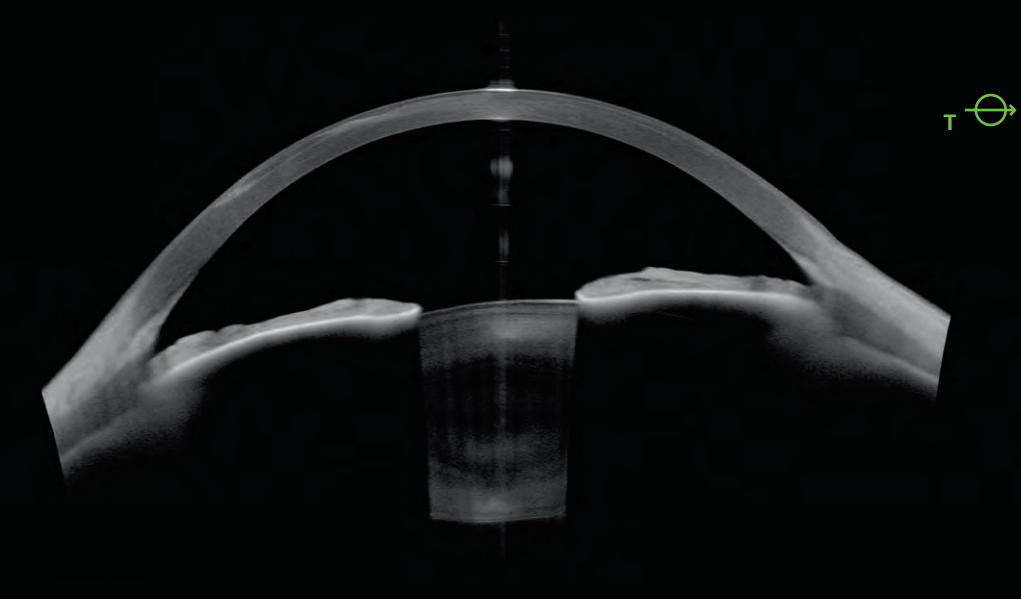
Baseline – Pre SALK surgery

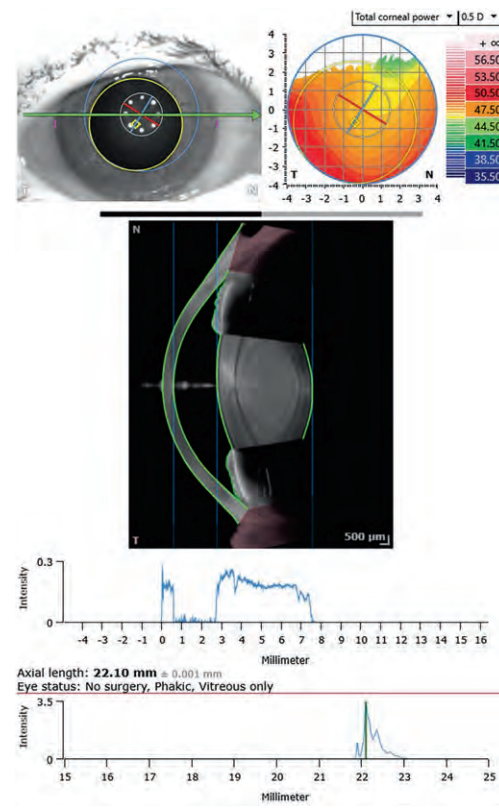**Follow-up – Day 6 –
Post SALK surgery**

Confirm the reliability of your data using the Imaging App if clinically indicated

Image courtesy: Kieren Darcy, MD, BM, MRCS(Eng), CertLRSF, RCOphth, MBA, Bristol, UK
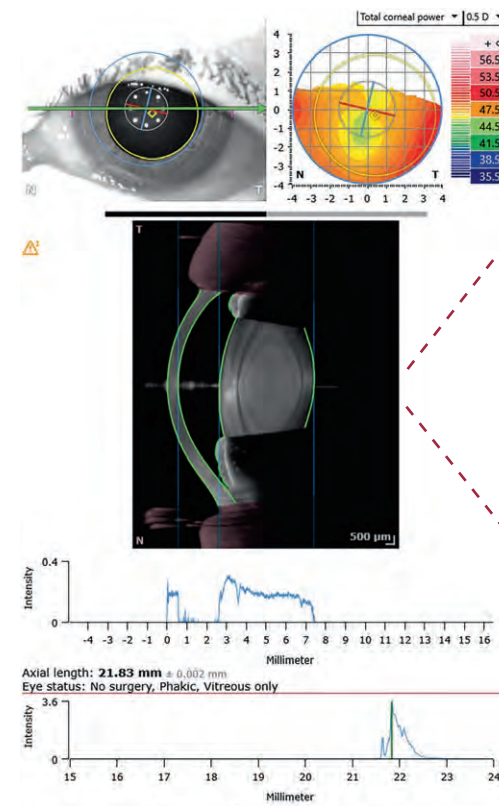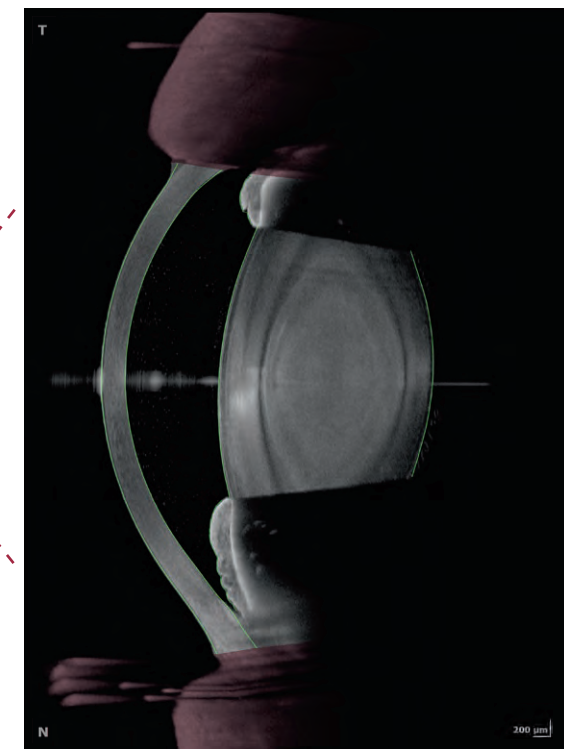
Cataract App – Confirm biometry on OCT images

Biometry OD

Biometry OS

OCT cross-sectional scan OS

Conveniently compare the biometry data of both eyes. Optimize your clinical workflow using OCT images to visually confirm your biometry data. See what you measure and measure what you see – for more confidence.

Save time and streamline your workflow

Parameter tab

Spheric calculator OS

Toric calculator OS

Using the dedicated parameter tab, you can easily identify differences between the right and left eye. The integrated spheric and toric IOL calculator adds further convenience to your pre-operative routine and streamlines your workflow.

PEX material

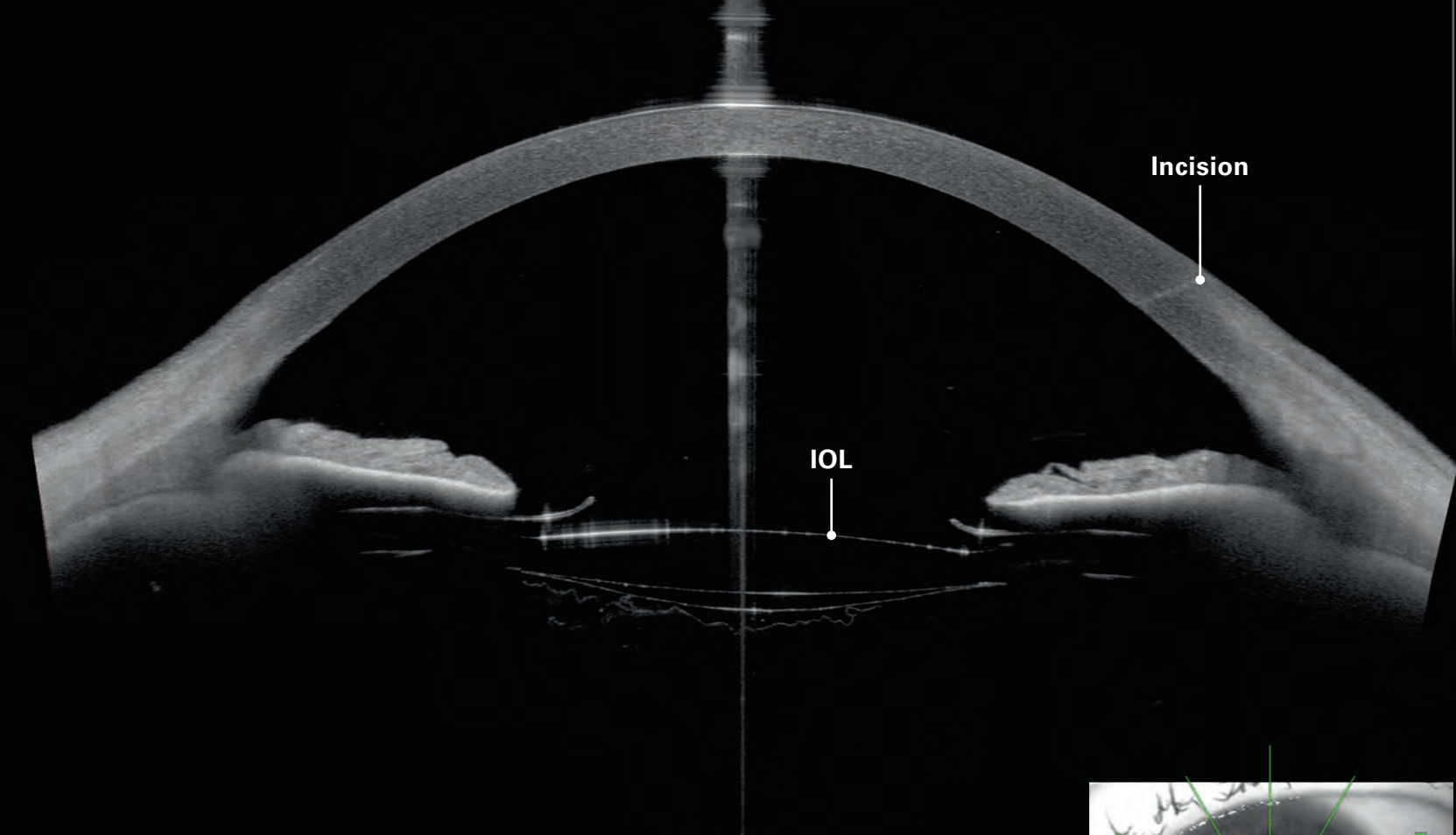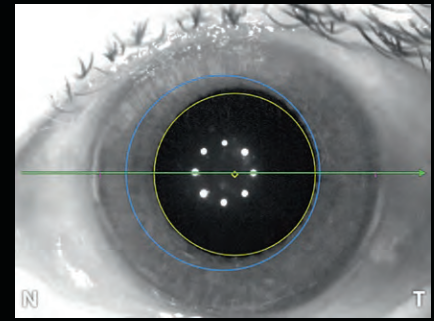**Opacified lens**

200 µm

N ⊕ T
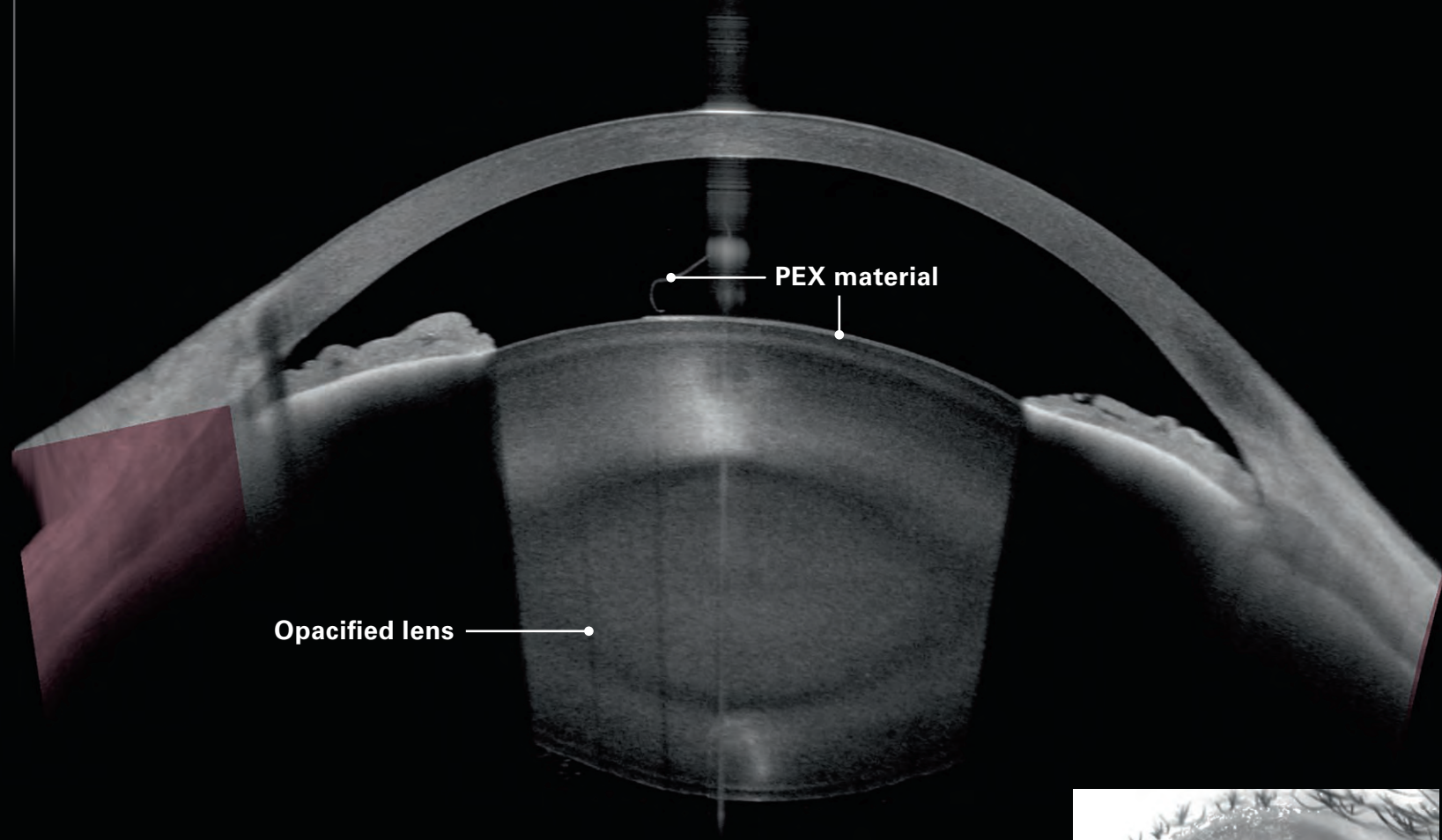
Nuclear 3+ cataract with pseudoexfoliation syndrome (PEX)
Image courtesy: Oliver Findl, MD, MBA, FEBO, Vienna, Austria
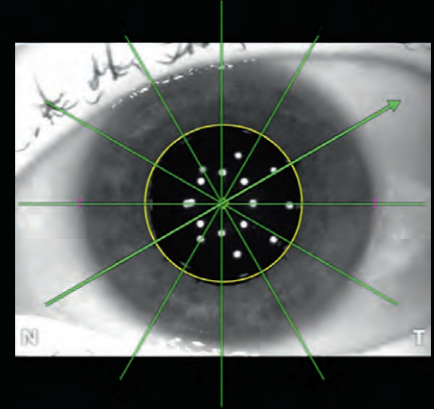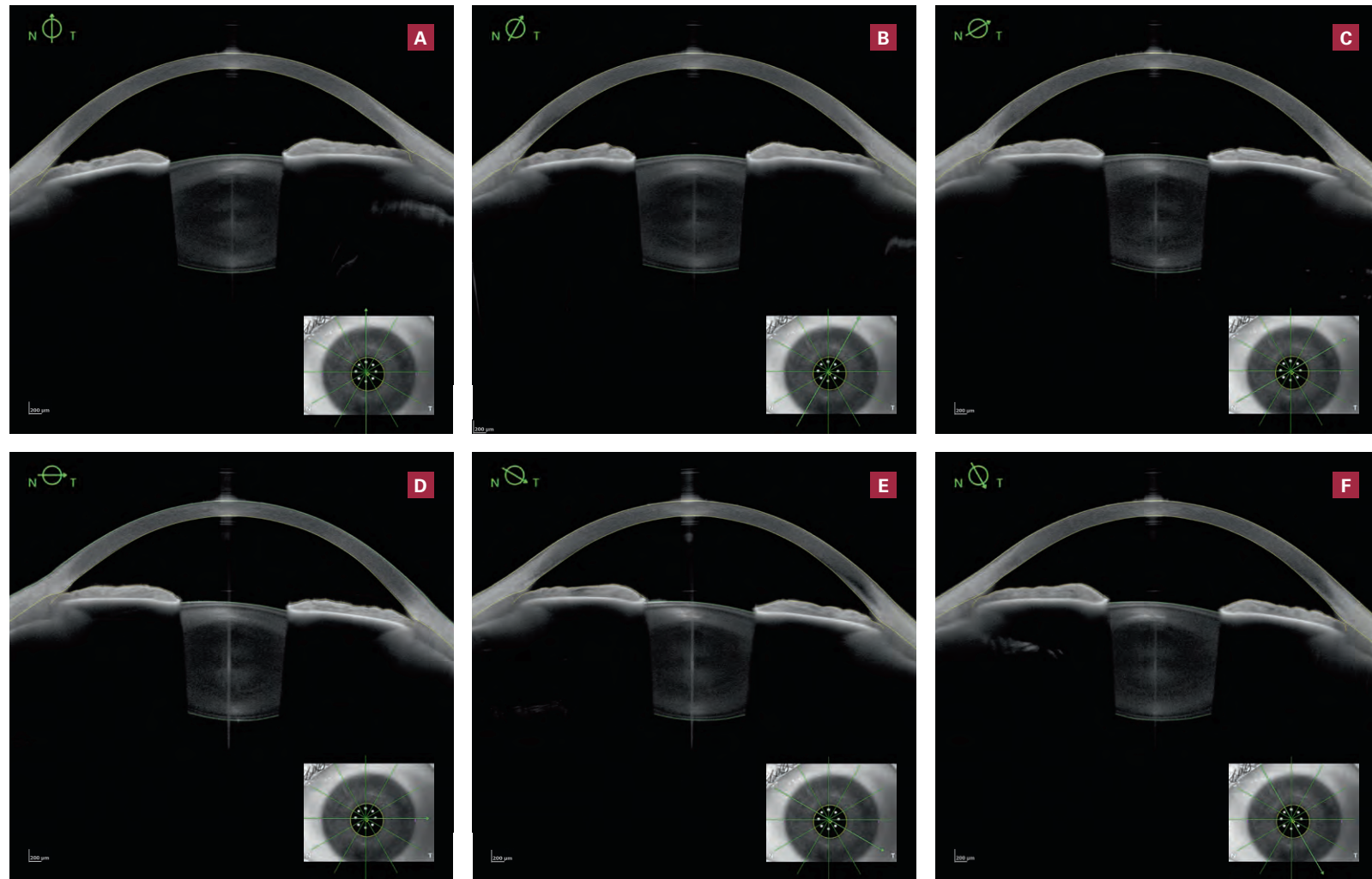
Incision

IOL

200 µm

N ⊘ T

Dilated pseudophakic eye, post cataract and capsulotomy
Confirm the reliability of your data using the Imaging App if clinically indicated.
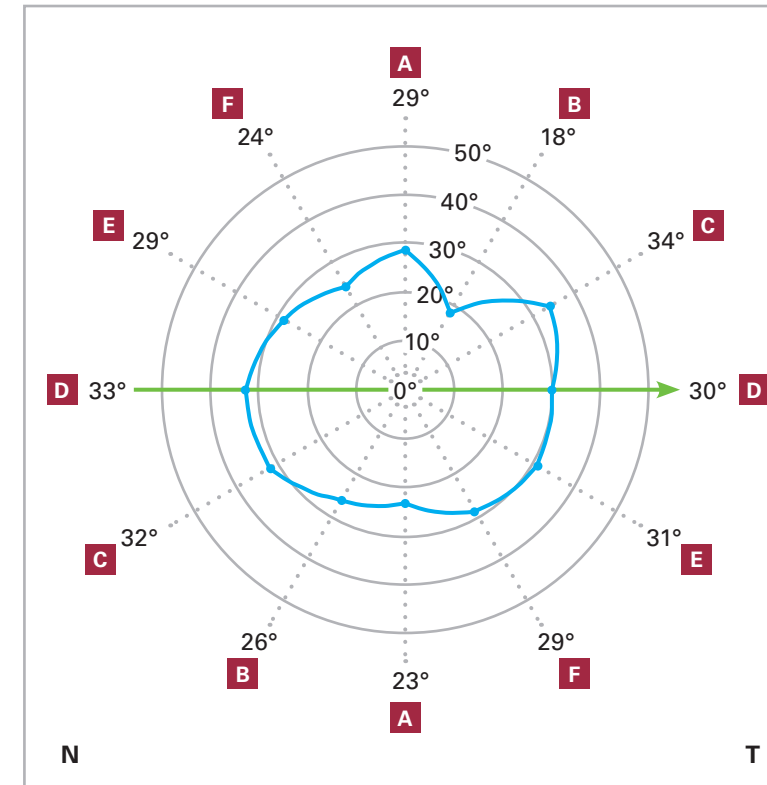Image courtesy: Ulrich Kellner, MD, Siegburg, Germany
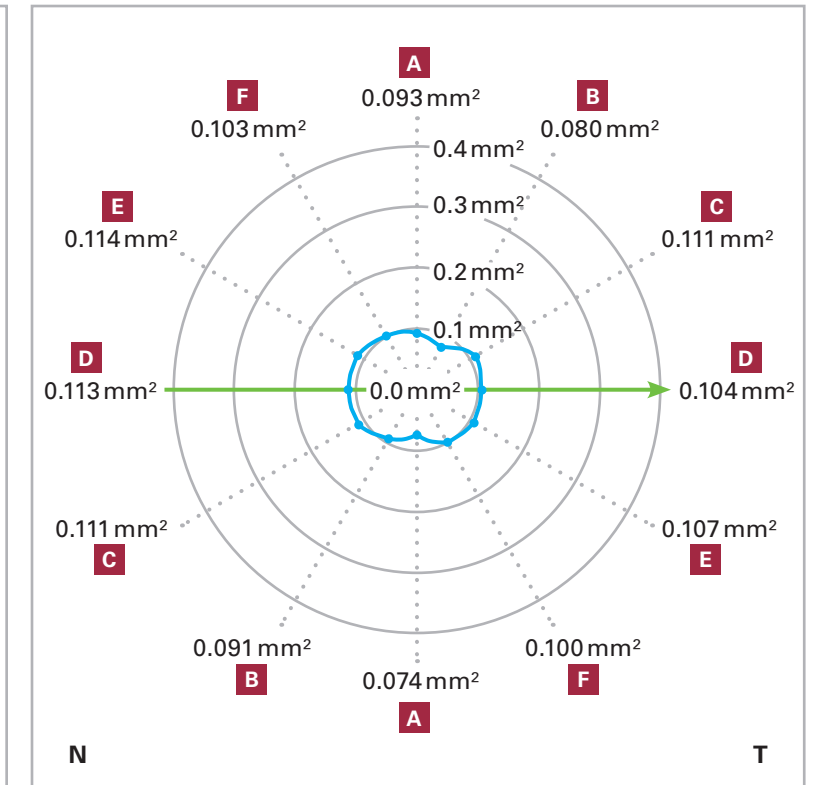
Metrics App – Measure what you see

Anterior segment parameters at a glance

ACA 500

TISA 500

Benefit from anterior segment parameters at a glance using the 360° graphs to optimize your daily clinical routine. The Metrics App features the essential anterior chamber metrics such as aqueous depth, anterior chamber angles (ACA), angle opening distance (AOD), scleral spur angle (SSA), trabecular iris space area (TISA), ACA distance, spur-to-spur distance, central corneal thickness, and white-to-white.
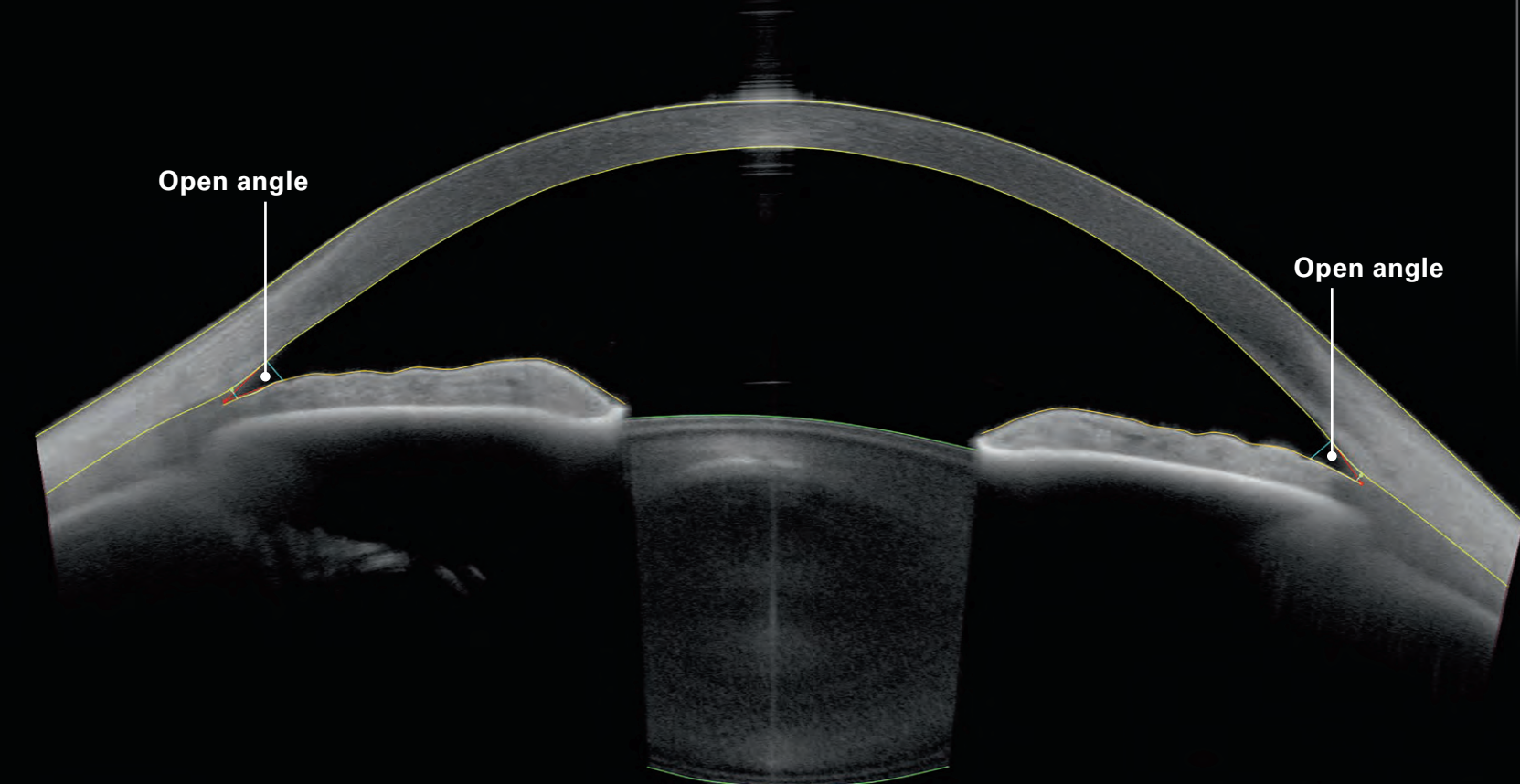
Narrow angle

Narrow angle
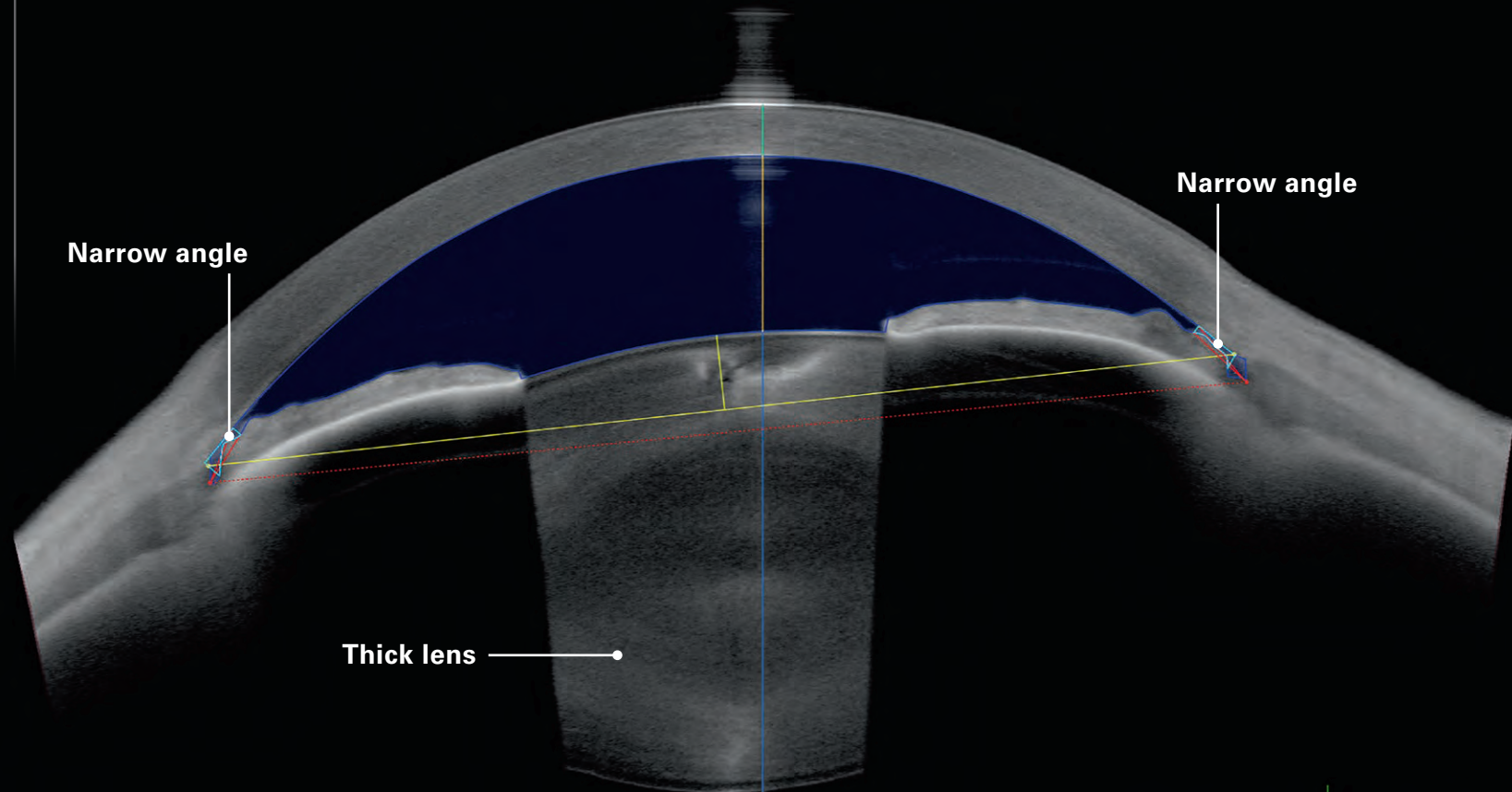
Thick lens

200 µm

Narrow anterior chamber angles and thick lens
Image courtesy: Ulrich Kellner, MD, Siegburg, Germany

T N T N
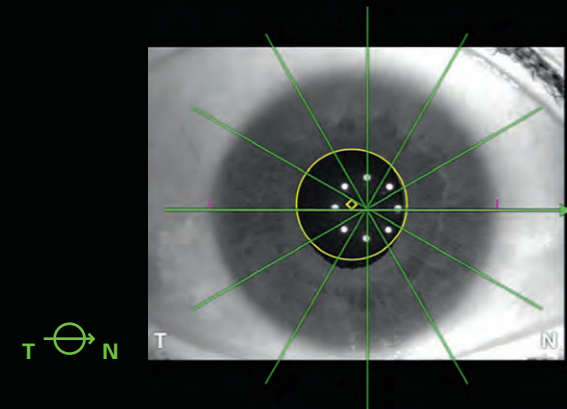
Open angle

Open angle
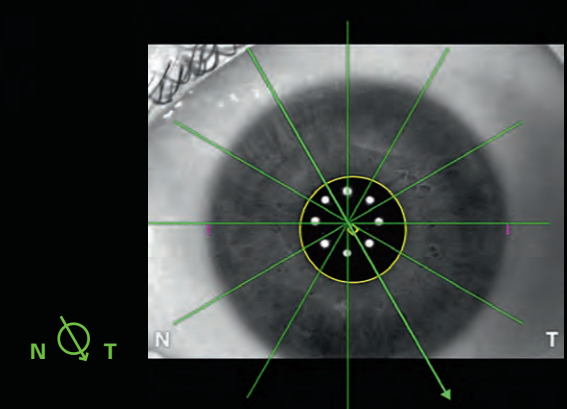
200 µm

Open anterior chamber angles
Image courtesy: Ulrich Kellner, MD, Siegburg, Germany

N T N T

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