Cirrus HD-OCT

Certainty in seconds. Certainty for years.

ZEISS

We make it visible.

We know you'll love a Cirrus.

Keeping both your patients and your practice in mind, Carl Zeiss Meditec, the global leader in OCT, developed Cirrus™ HD-OCT. Not only does it supply you with bar-setting imagery, it delivers detailed diagnostic and change analyses you can rely on time and again. Along with its small footprint and fast capture speeds, Cirrus is designed to improve workflow efficiency while helping you deliver better care to your patients.

It's time to see what you've been missing. It's time for Cirrus.

Superior analysis

With high-density cube data and proven segmentation, Cirrus delivers a diagnostic analysis you can trust.

Central Subfield Macular Thickness Repeatability Standard Deviation

No Disease	2.5 µm
AMD	8.7 µm
Macular Edema	7.0 µm
Diabetic Retinopathy	8.1 µm
VRI Disorder	4.3 µm

Source: 510(k) Summary: Cirrus HD-OCT with Retinal Nerve Fiber Layer and Macular Normative Databases, www.accessdata.fda.gov/cdrh_docs/pdf8/K083291.pdf.

Receiver Operating Characteristic Curves, Normal vs. Glaucomatous Eyes

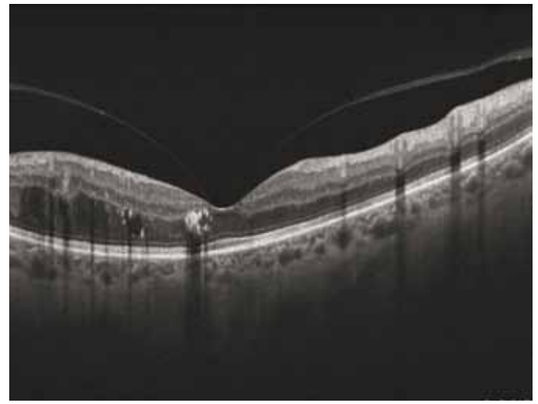
Parameter	Mild	Moderate to Severe
Average RNFL Thickness	0.893	0.993
Rim Area	0.912	0.999
Vertical Cup-to-Disc Ratio	0.890	0.995

Source: Mwanza et al. Ability of Cirrus HD-OCT optic nerve head parameters to discriminate normal from glaucomatous eyes. *Ophthalmology*. 2011;118(2):241–248.

Spectacular imagery

With legendary ZEISS optics and Cirrus, you'll experience brilliant, detail-rich visuals to help you diagnose and care for your patient.

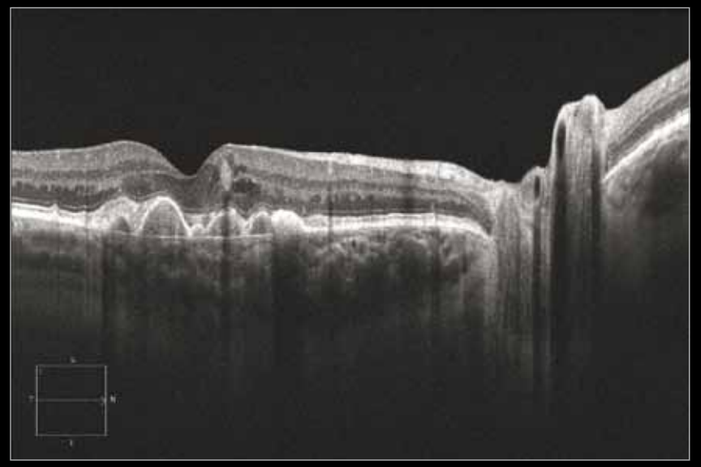
Cirrus uses Selective Pixel Profiling™ to optimize each pixel in its HD Raster Scans. It produces imagery that goes beyond mere image-averaging. It's a difference you need to see to believe.



One pathology. Multiple views.

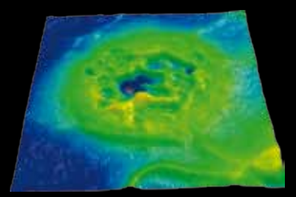
Cirrus gives you the ability to view pathologies from multiple vantage points—and with a range of at-a-glance visualization formats, you'll be able to better assess your patient's condition and determine the appropriate course of action.

Age-Related Macular Degeneration

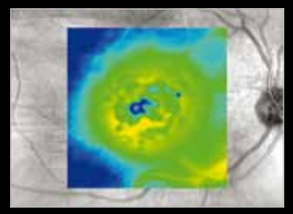


HD 5 Line Raster

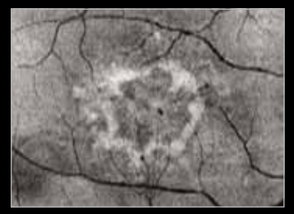
RPE Segmentation Map



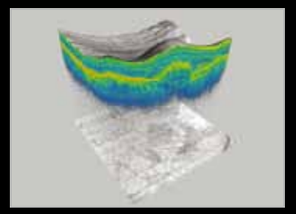
Macular Thickness Map



LSO Fundus Image with Macular Thickness Map

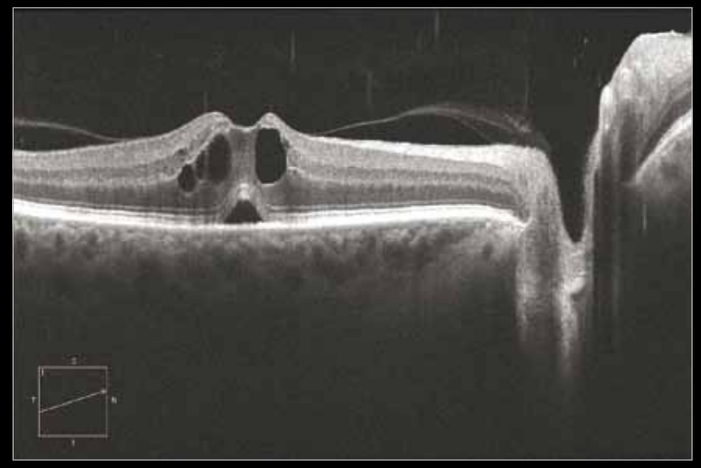


Advanced Visualization™ with RPE Fit Slab

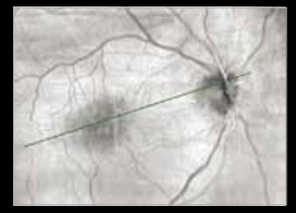


3D Visualization

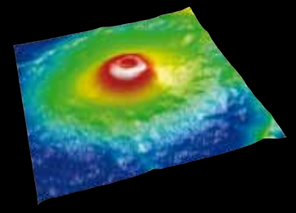
Postsurgical Pseudophakic Cystoid Macular Edema



HD 5 Line Raster



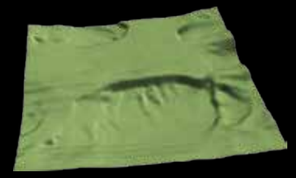
LSO Fundus Image with Raster Line



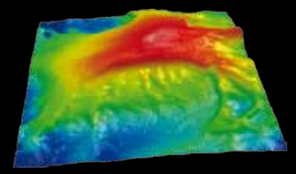
Macular Thickness Map

Epiretinal Membrane

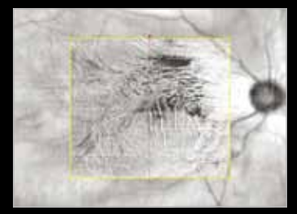
HD 5 Line Raster



ILM Segmentation Map

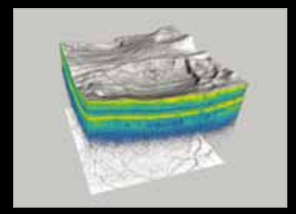


Macular Thickness Map



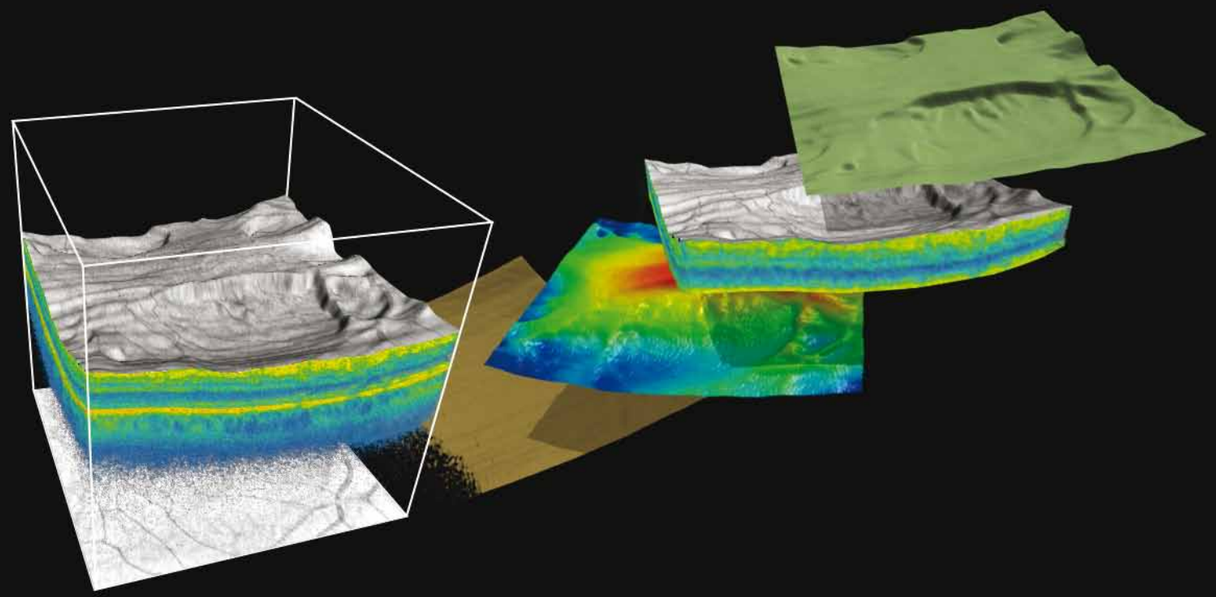
LSO Fundus Image with ILM Slab

Advanced Visualization™ with ILM Slab



3D Visualization

Discover the power of the Cirrus Cube.



Cirrus offers unsurpassed OCT technology. Capturing a tightly packed, detail-rich cube of data in just seconds, it allows you to both visualize and analyze your patient's condition. Because the cube is populated with such high-density data, you can explore pathologies without requiring additional scan patterns.

Scan Pattern	Data Points Per A-Scan	Total Data Points	Spacing Between Lines	Capture Time
512 x 128	1024	> 67 million	47 µm	2.4 s
200 x 200	1024	> 40 million	30 µm	1.5 s

Scan with greater granularity
Closely spaced B-scans within the cube ensure that even small areas of pathology are captured and easily viewable, unlike scans that are spaced further apart, which may miss the central fovea or nearby subtle defects.

Enhance your analysis
Millions of data points from the cube are fed into ZEISS proprietary algorithms for accurate segmentation, reproducible measurements and registration for change analysis.

Analysis you can trust.

Generating a comprehensive cube of data is only the beginning. Cirrus gives you the ability to see beyond the scan and transform information into insight, becoming an indispensable part of your day-to-day clinical decision-making process.

Algorithm excellence
Carl Zeiss Meditec and its research collaborators have developed advanced algorithms to measure and display layers.

Automatic, accurate centering of the measurement
FoveaFinder™ and AutoCenter™ technologies ensure that measurements are made in the correct locations, taking the pressure off the operator to center the scans perfectly.

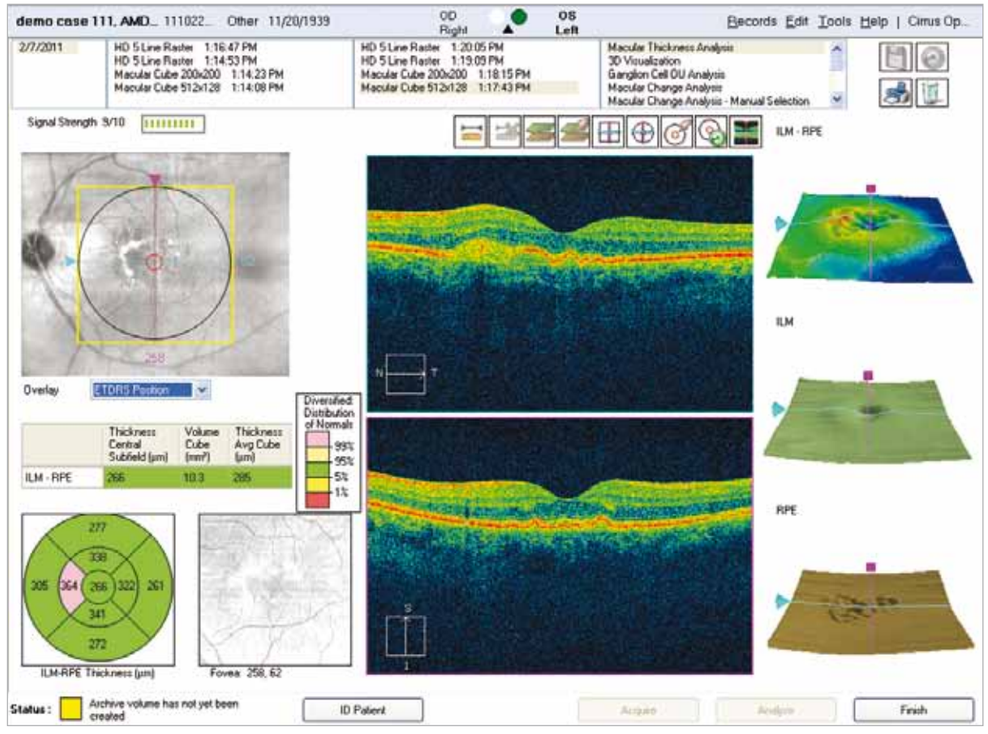
Cube registration to track change
Cirrus data cubes are automatically registered with data from prior visits, allowing for point-to-point comparisons.

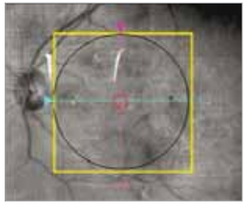
Normative data
Diversified normative databases for ONH, RNFL and macular thickness facilitate at-a-glance assessments.

// RETINA DIAGNOSTICS
MADE BY CARL ZEISS

Increase your diagnostic certainty

Cirrus enables rapid, careful assessment of the retina. By utilizing precise macular thickness analyses, providing detailed ILM and RPE layer maps and putting more than 100 B-scans at your disposal, Cirrus provides the framework to assess your patient's retinal condition.



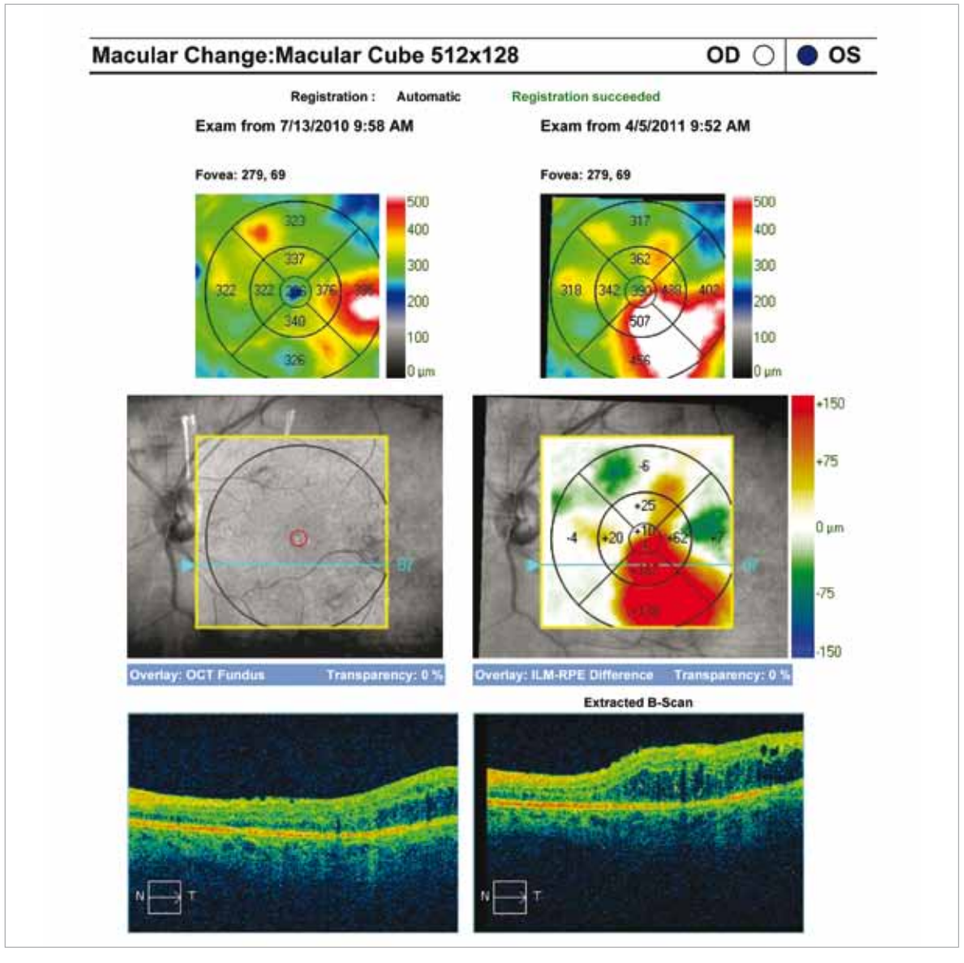


FoveaFinder™

With FoveaFinder™, Cirrus automatically and accurately locates the fovea, centers the ETDRS measurement grid and presents you with the B-scan through the fovea by default.

Track subtle macular change

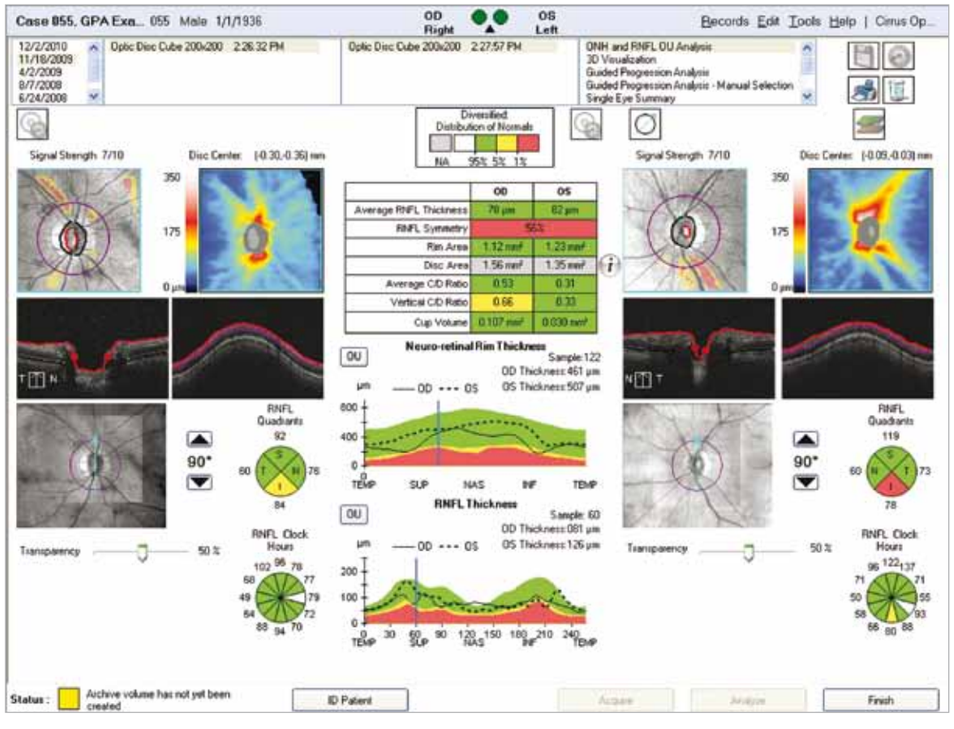
Cirrus data cubes are automatically registered with data from prior visits after the scan is acquired. This enables side-by-side visualization of the same location on the retina for each visit. Cirrus compares measurements from the current and prior visits to provide a thickness change map and helps you determine next steps for your patient.

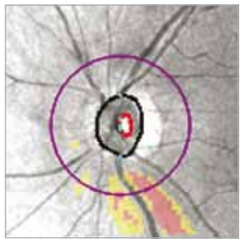


Identify and track RNFL and ONH for glaucoma management

With Cirrus, all traditional RNFL measurements based on the 3.4 mm circle are present; however, Cirrus enables you to see past the circle-based assessments. Spotting wedge defects and other patterns of loss is simplified with Deviation Maps, which show comparisons to normative data for each superpixel in the 6 x 6 mm area.

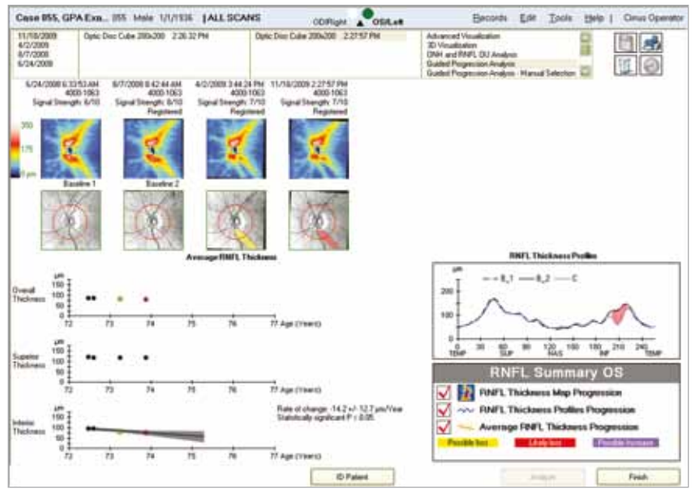
Unique Cirrus Optic Nerve Head analysis provides automated identification of the optic disc and cup boundaries. The analysis is generated using the dense data in the Optic Disc 200 x 200 data cube in tandem with a proprietary ZEISS algorithm. This algorithm precisely measures the neuroretinal rim while accounting for tilted discs, disruptions to the RPE and other challenging pathologies.



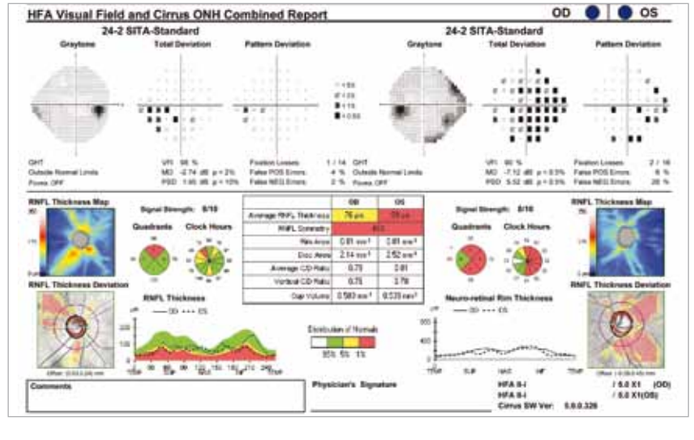


AutoCenter™
After the scan is acquired, Cirrus automatically centers the measurement circle around the disc. The placement is not operator-dependent.

Guided Progression Analysis™ (GPA™) compares RNFL thickness measurements from data cubes obtained during different visits and allows you to determine if statistically significant change has occurred over time.

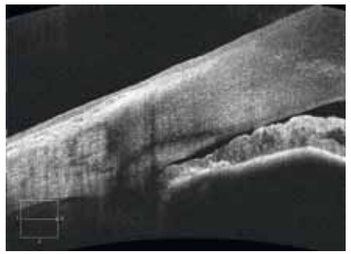


The HFA-Cirrus Combined Report, available exclusively with ZEISS FORUM®, summarizes patient structure and function information in a single display.

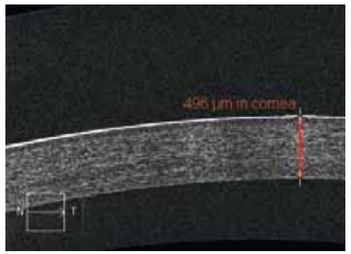


// ANTERIOR SEGMENT IMAGING
MADE BY CARL ZEISS

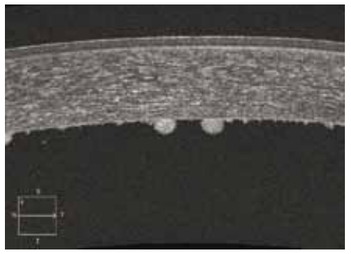
Expand your diagnostic insight
Cirrus offers anterior segment imaging of the angle and cornea and the ability to measure central cornea thickness.



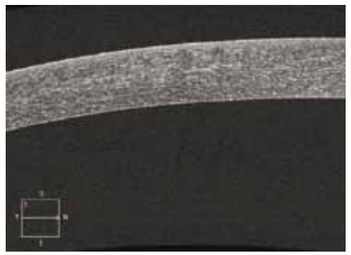
Narrow Angle Visualization



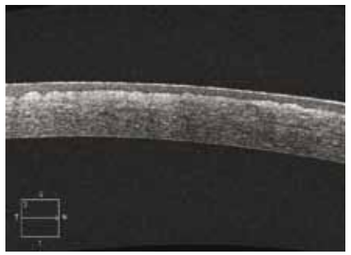
Central Corneal Thickness Measurement



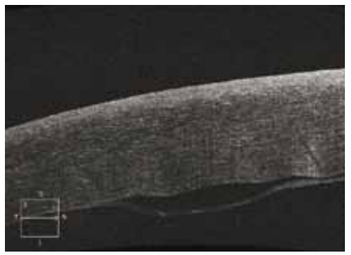
Keratic Precipitates



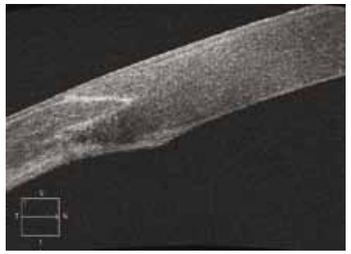
Microstriae



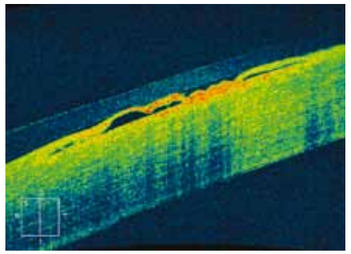
PRK Scar



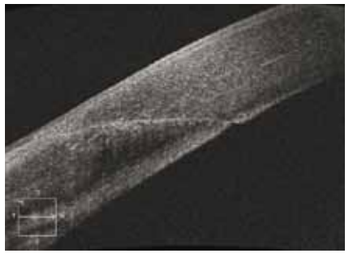
Descemet Detachment



IEK Zigzag



Bullous Keratopathy with BCL



Cataract Incision

From the industry leader in OCT, Cirrus is the best-selling spectral domain OCT in the world.

Cirrus represents the culmination of decades of patents, prototypes and progress. ZEISS is committed to delivering the excellence in installation, training and ongoing support you expect from the market leader.

As new diagnostic needs emerge and new therapies are developed, innovation continues with Cirrus.

In addition, recognizing the modern electronic workplace, Cirrus integrates seamlessly into EMRs and with FORUM®, our advanced data management solution for simplifying, centralizing and viewing the vast amounts of clinical data generated by ophthalmic instruments.

There's only one OCT that promises you Certainty in Seconds, Certainty for Years.™

There's only one Cirrus.

For videos, presentations, recent clinical literature and updated product information, visit:
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