

**Glaucoma Module
Premium Edition**



SPECTRALIS®

Technology matching pathology

The SPECTRALIS with Glaucoma Module Premium Edition contains the core DNA for high-contrast, high-resolution images that are matched to each eye's unique anatomy. These images are the source of the highly sensitive and specific information you need to reduce uncertainty and increase clinical confidence in the diagnosis and management of your glaucoma patients.

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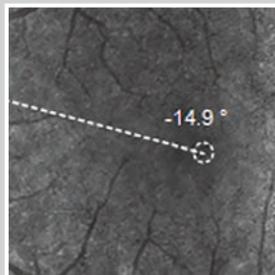
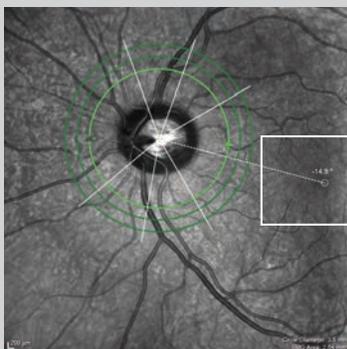
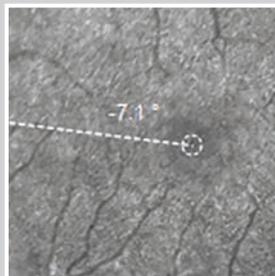
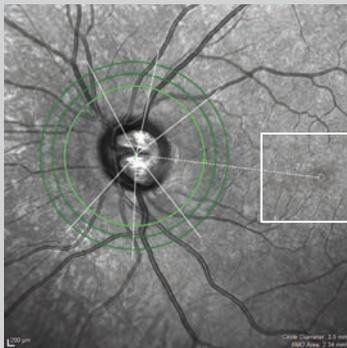
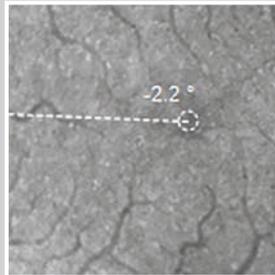
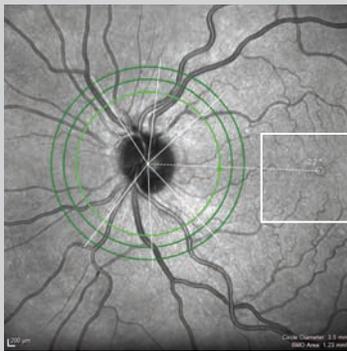
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●—● **Anatomic Positioning System (APS)**



The APS ensures that adjustments for the variable anatomy of each eye are made before comparing the results to the reference database, and this makes the BMO-MRW, RNFL, posterior pole, and ganglion cell layer analysis more accurate and precise.

Alex Huang, MD, PhD, Glaucoma Specialist,
Doheny Eye Institute, Pasadena, California, USA



Customize each scan to the patient's anatomy

The Anatomic Positioning System (APS) automatically identifies two fixed landmarks – the fovea and the center of Bruch's membrane opening – in order to place glaucoma scans on the correct anatomic location for each individual eye. This unique technology increases the precision and accuracy of the results by ensuring that all glaucoma scans are anatomically aligned with the reference database accounting for the individual configuration of axons in each eye. The personalized anatomic alignment provided by the APS allows for reliable diagnostic images and data that you can have confidence in.

●—● Bruch's Membrane Opening –

Minimum Rim Width

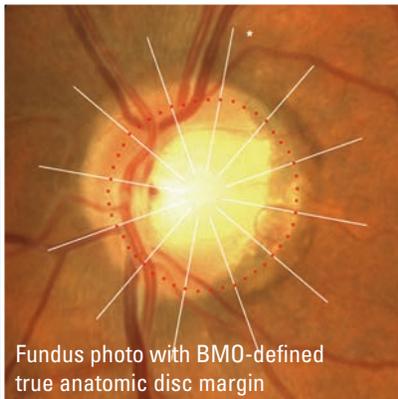


Assess the optic nerve head objectively

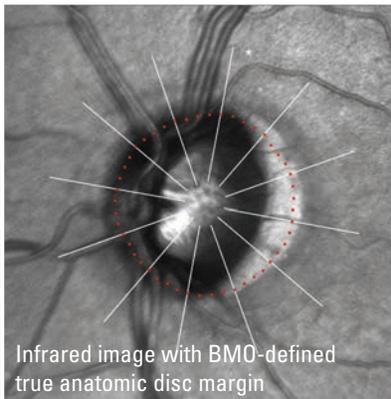
The minimum distance between the internal limiting membrane and Bruch's membrane opening around the optic nerve head – referred to as Bruch's membrane opening - minimum rim width (BMO-MRW) – is identified to provide you with the true anatomic disc margin and geometrically accurate measure of the neuroretinal rim. This ground-breaking BMO-MRW parameter is an objective, sensitive and specific diagnostic tool for both the detection and management of glaucoma that also helps differentiate glaucoma from other optic neuropathies.

I've been fortunate to try almost every OCT platform, but I believe the SPECTRALIS supplies the highest quality and most reproducible images. It enables us to image all the structures relevant in glaucoma on one platform – RNFL, ganglion cell layer, and neuroretinal rim.

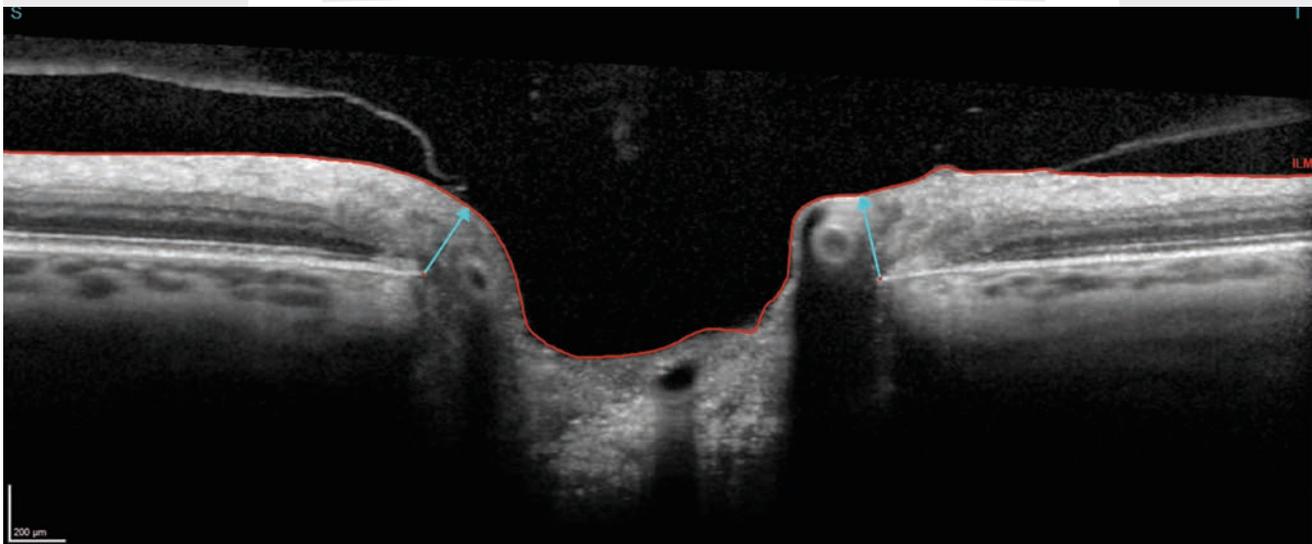
Andrew Tatham, MD,
Consultant Ophthalmic
Surgeon, Princess Alexandra
Eye Pavilion, Edinburgh, UK



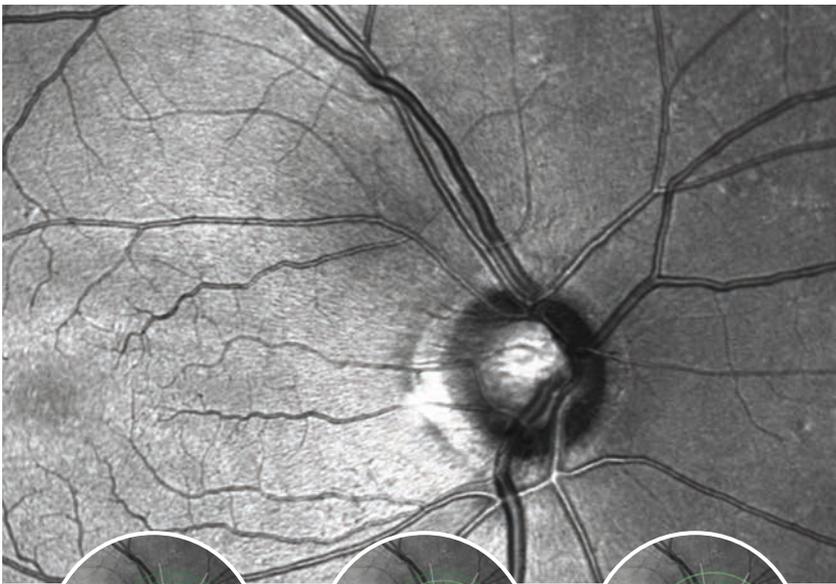
Fundus photo with BMO-defined true anatomic disc margin



Infrared image with BMO-defined true anatomic disc margin



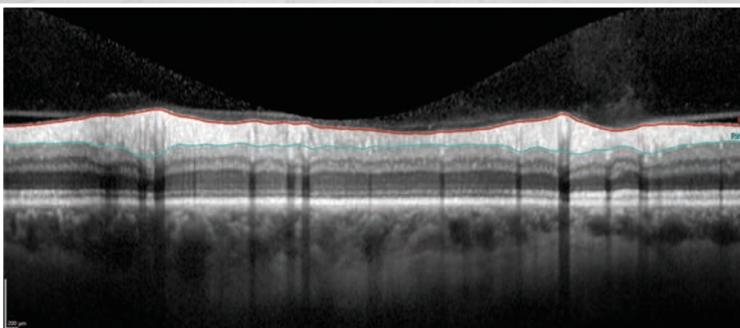
● — ● Retinal Nerve Fiber Layer



3.5mm

4.1mm

4.7mm



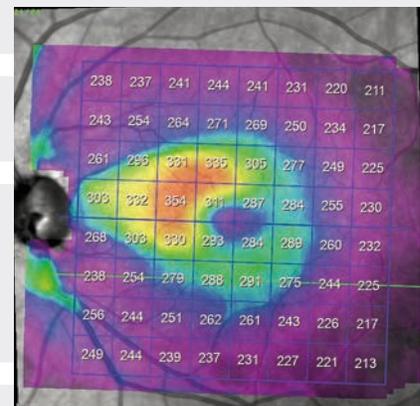
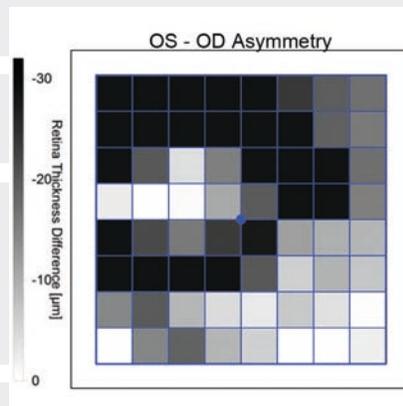
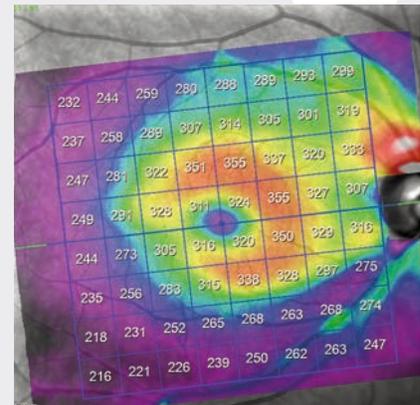
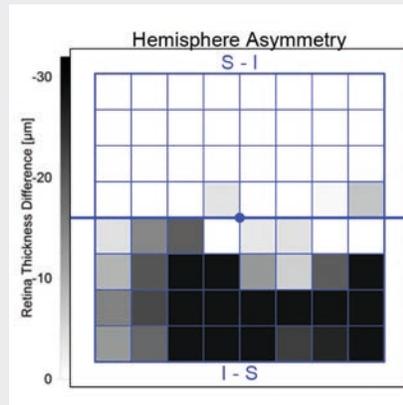
Rely on highly sensitive and specific assessment

Benefit from three high resolution circumpapillary Retinal Nerve Fiber Layer (cpRNFL) scans of increasing size. The 4.1 mm and 4.7 mm scans can offer reliable diagnostic measurements when the traditional 3.5 mm cpRNFL scan is confounded by pathology. The confocal infrared fundus image, which is captured simultaneously, can help you immediately visualize changes in RNFL reflectance characteristic of glaucoma damage. By entering the corneal curvature of the eye, OCT scan results are scaled correctly relative to the fundus image, allowing for compensation of variations in axial length and corneal power of each eye. This compensation allows for the accurate adjustment of optic nerve head size when comparing the RNFL and BMO-MRW parameters against the reference database.

Posterior Pole Asymmetry Analysis

Recognize characteristic patterns

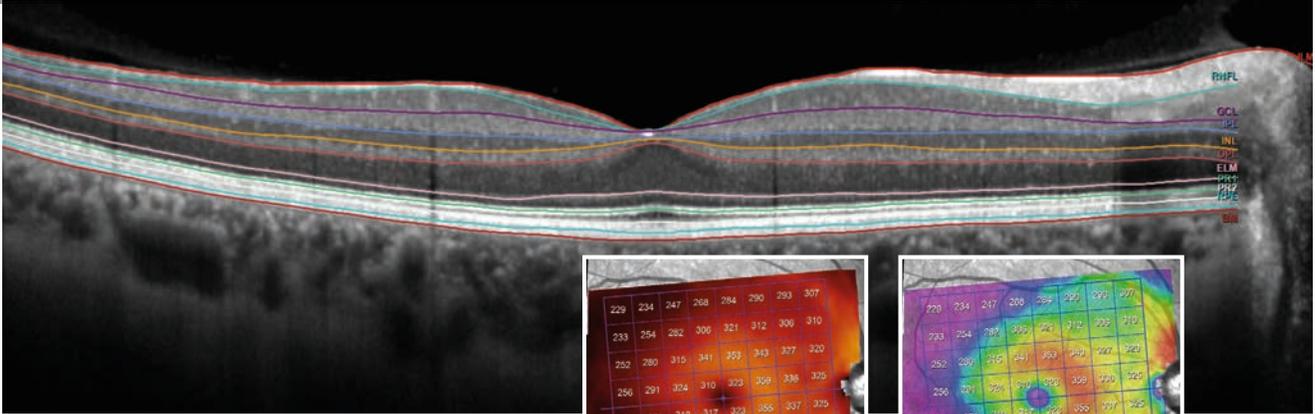
Full retinal thickness maps of the macula reveal characteristic patterns of tissue damage typical in glaucoma. Asymmetry is a hallmark of glaucoma and other optic neuropathies. The full retinal thickness asymmetry analysis quantifies differences in thickness between the inferior and superior macula, as well as between the left and right eyes, to help identify potential glaucomatous damage.



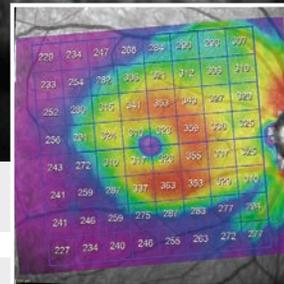
I especially like the SPECTRALIS because it is a multimodality imaging platform, and each modality offers a different piece of the glaucoma puzzle. I love having all the information there on the screen in front of me, checking the segmentation and being able to zoom in on images to really interrogate them if necessary.

Alex Huang, MD, PhD, Glaucoma Specialist,
Doheny Eye Institute, Pasadena, California, USA

Individual Retinal Layer Segmentation

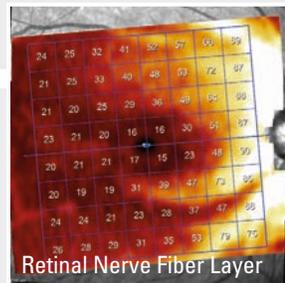


Full Retina

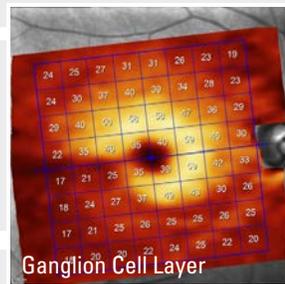
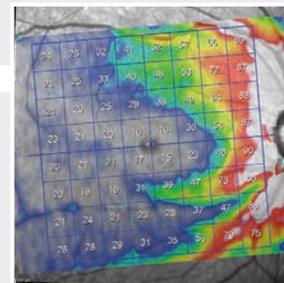


Identify each stage of the disease

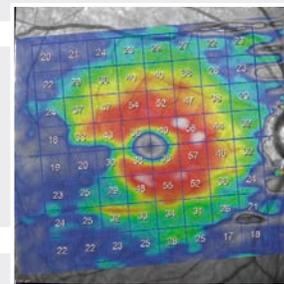
SPECTRALIS segments the ganglion cell layer independent of the inner plexiform and retinal nerve fiber layers so that you can confidently identify loss from each anatomic component of the retinal ganglion cells (axons, somas, and dendrites) at each stage of the disease. The ability to discern each layer provides a precise method for the detection of early glaucomatous damage in the macular region. SPECTRALIS provides direct visualization of the segmentation and the ability to make adjustments when metrics may be confounded by pathological factors such as epiretinal membranes or blood vessels.



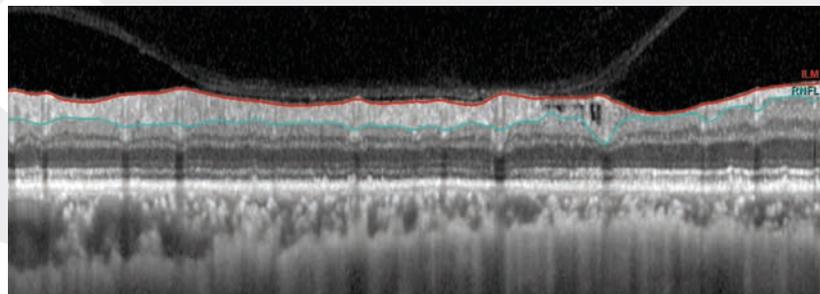
Retinal Nerve Fiber Layer



Ganglion Cell Layer

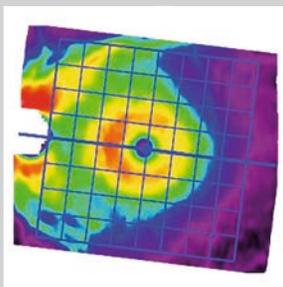
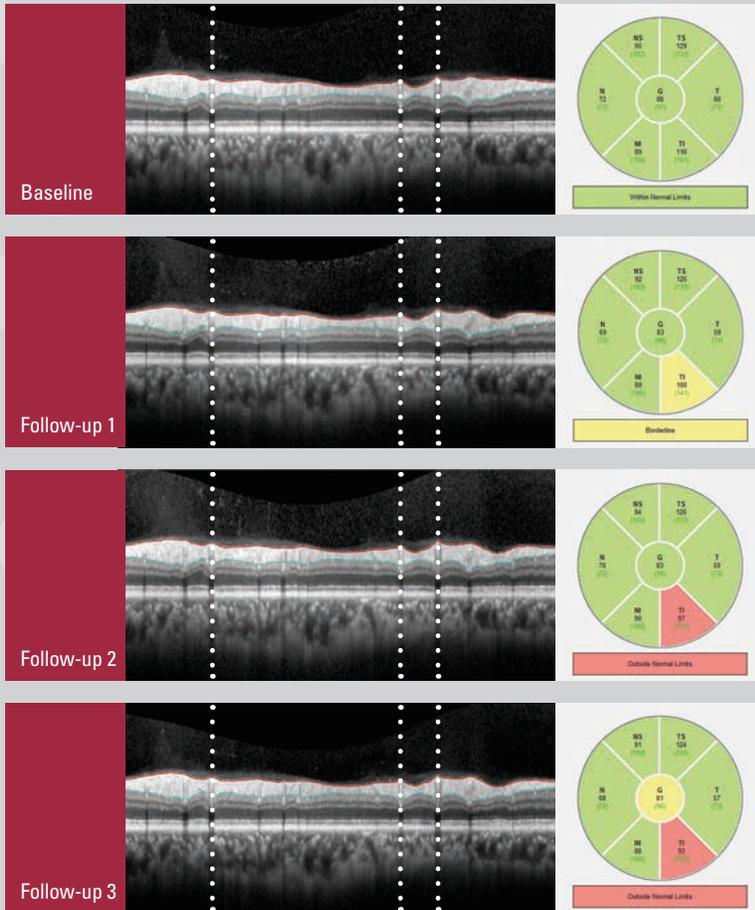


Choose the glow scale or traditional color scale for enhanced visualization of subtle changes.

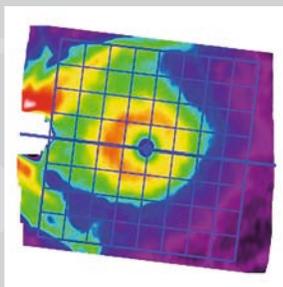


A partial posterior vitreous detachment confounds the RNFL thickness. Image credit: Brian Samuels, MD, PhD, and Christopher Girkin, MD, MSPH.

AutoRescan



Baseline



Follow-up 3



The SPECTRALIS is a very important tool for following-up glaucoma as the measurements are so precise. TruTrack Active Eye Tracking is an absolutely essential feature for high quality and accurate follow-up OCT measurements. Without this feature we would be less confident about our diagnosis.

Prof. Dr. med. Christian Mardin,
Senior Consultant Ophthalmologist,
Friedrich-Alexander University,
Erlangen-Nuremberg, Germany

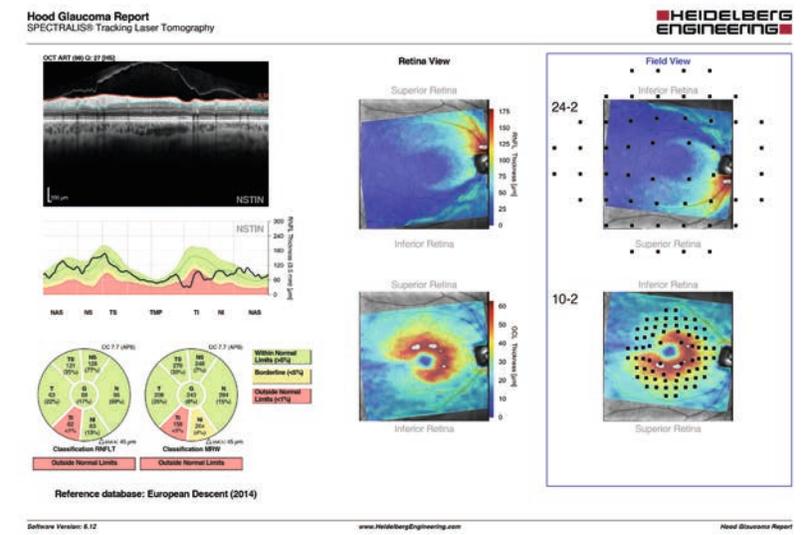
Detect real change
as small as 1 micron

When you need evidence of progression to confirm a glaucoma diagnosis, SPECTRALIS is in a class of its own. Unique TruTrack Active Eye Tracking enables retinal recognition technology (AutoRescan), which automatically repositions each OCT scan at follow-ups in the same anatomic location with incredible accuracy and precision, enabling you to see changes as small as 1 micron for confident measurement of disease progression.

Complementary Reports

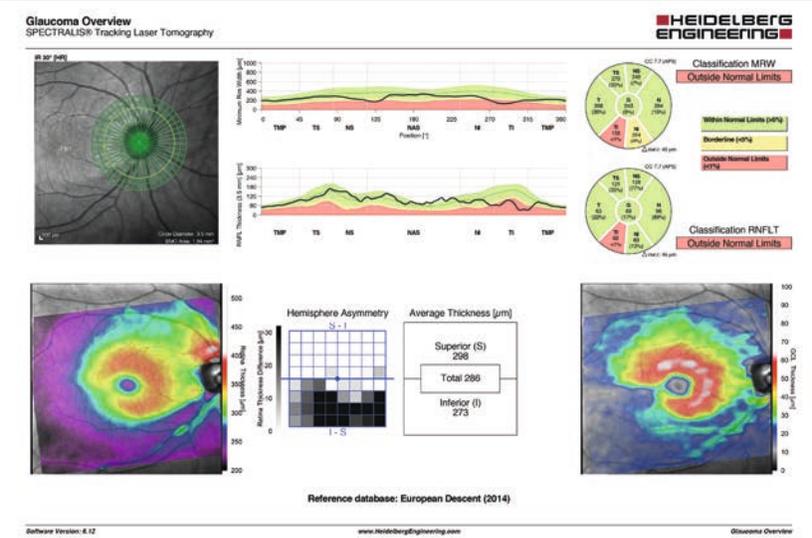
View multiple diagnostic parameters at a glance

Heidelberg Eye Explorer (HEYEX) provides a comprehensive reports package that complements the images and gives you a host of formats to match your individual preferences.



GMPE Hood Glaucoma Report

Correlate structural defects with functional loss using the visual field stimulus points overlay and examine areas of macular vulnerability using the MRW, NSTIN RNFL profile and macular RNFL and GCL maps.



Glaucoma Overview Report

View the results for minimum rim width, retinal nerve fiber layer thickness, retinal thickness and ganglion cell layer thickness all on one page.

Image credit: Donald Hood, PhD, and Robert Ritch, MD.

Optional Modules for

Enhanced Glaucoma Diagnostics

Discover the power and flexibility of multimodal imaging with SPECTRALIS.

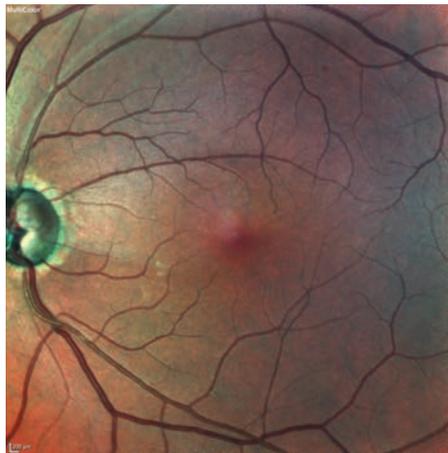
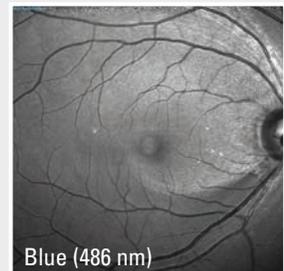
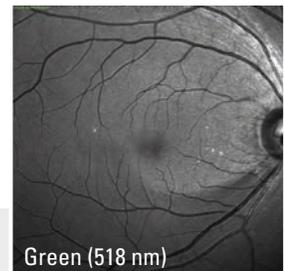
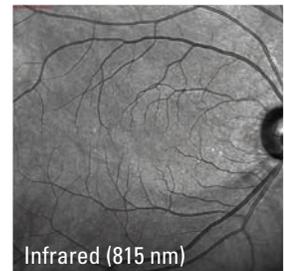


Image credit: Donald Hood, PhD, and Robert Ritch, MD.



View the color channels (infrared, green, and blue) individually.

MultiColor Module

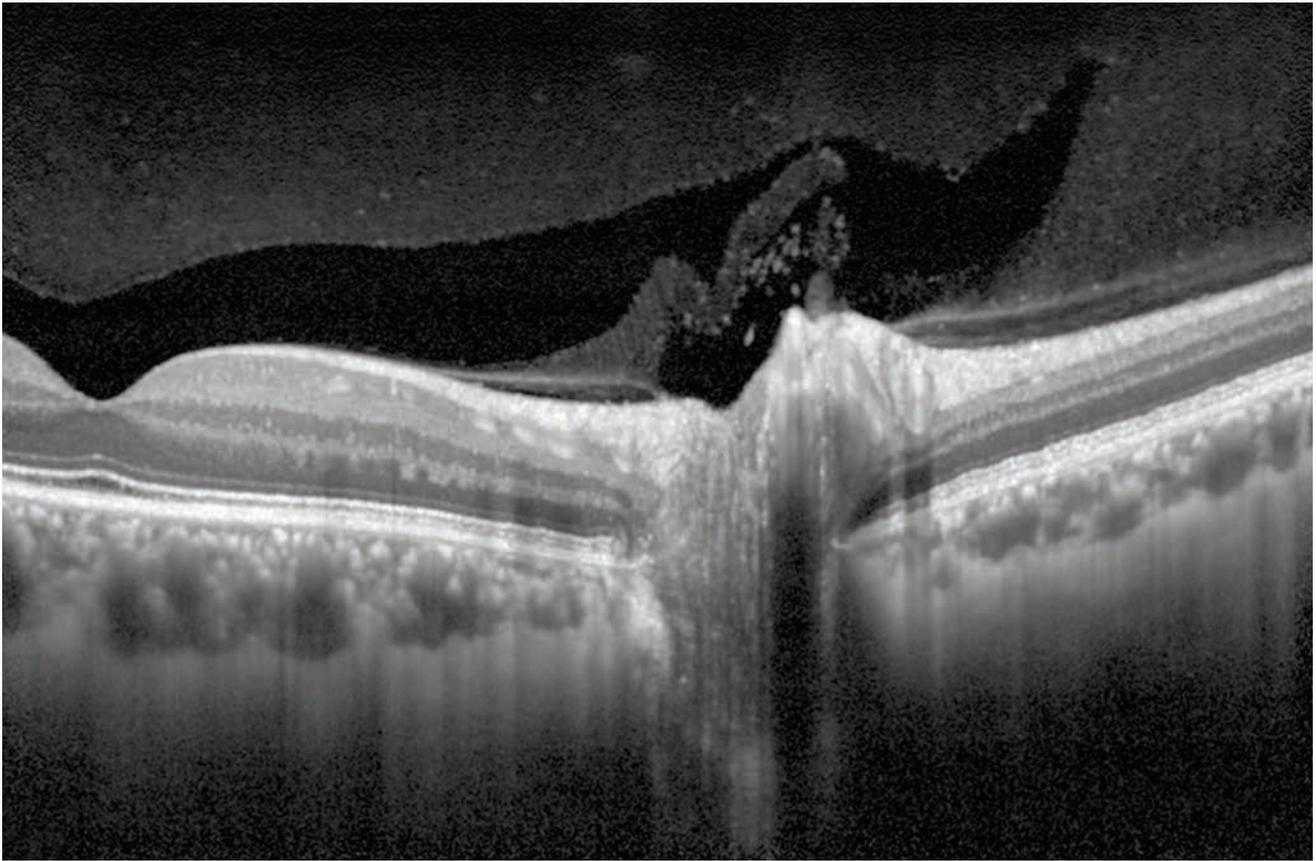
The interface between retina and glaucoma

Acquire images using three simultaneous laser wavelengths for enhanced visualization of RNFL defects typically not visible on traditional color fundus photography. Identify co-existing pathologies in a single image and confirm your clinical impression with OCT findings. Use the MultiColor Module to demonstrate and educate your patients about the disease process with an added “wow” factor.



We had the MultiColor Module on loan for three months, and I realized I couldn't do without it. Glaucoma diagnosis is made a lot easier with MultiColor confirmation of OCT and clinical findings. This technology is invaluable in helping me differentiate co-existing conditions, or other conditions that can masquerade as glaucoma.

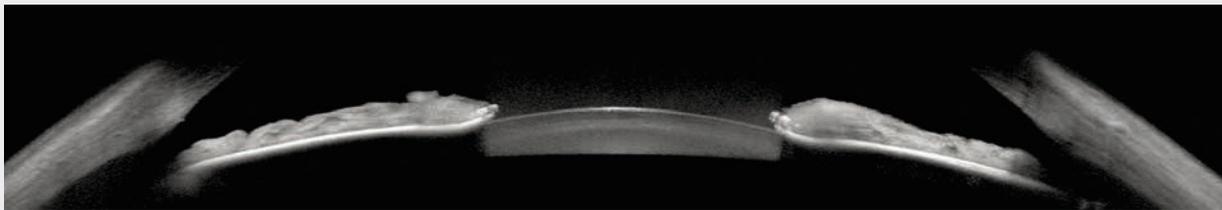
Prof. Sanjay Asrani, MD, Professor of Ophthalmology,
Duke Eye Center, Cary, North Carolina, USA



OCT2 Module

Transform workflow

More than double the scan speed in comparison to the standard SPECTRALIS power supply, with the benefit of enhanced image quality from vitreous to choroid and shorter examination times for improved clinic workflow and efficiency.



Anterior Segment Module

Visualize both angles

Acquire high-resolution images of the anterior chamber angle as well as corneal and scleral structures. Capture both angles simultaneously for precise visualization of angle geometry.



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