



## AngioPlex from ZEISS

The complete OCT Angiography solution

OCTA up  
to 50° FoV



# Making the revolutionary, routine.

ZEISS AngioPlex OCT Angiography



// INNOVATION  
MADE BY ZEISS

AngioPlex® OCT Angiography from ZEISS ushers in a new era in eye care with non-invasive imaging of retinal microvasculature that takes glaucoma and retinal disease management and treatment planning to the next level.

By offering the industry's most comprehensive tools for assessing and analyzing a range of pathologies, ZEISS provides a complete OCT Angiography (OCTA) solution.

- **Get ultra-clear visualization** of retinal and choroidal vascular structures in seconds with non-invasive, dye-free imaging.
- **See a wider field of view**—beyond conventional 6x6 mm OCT scans—increased visibility supporting detection and management of diabetic retinopathy.
- **Visually track vascular changes** between visits.
- **Gain new insights** into monitoring disease process and changes in glaucoma.
- **Build your practice** with the seamless integration of OCT Angiography that's quick and easy to implement.



CIRRUS HD-OCT with  
AngioPlex OCT Angiography



# Empower your practice

## OCT Angiography at your fingertips



From patient prep to viewing images, **OCTA can be 80% faster than fluorescein angiography.**<sup>1,2</sup>

AngioPlex OCT Angiography—powered by eyecare’s leading clinical OCT platform, CIRRUS™ HD-OCT from ZEISS—enables you to do more: gain workflow efficiency, deliver care with ease, visualize vascular change and manage more with confidence.

### **Capture structural and microvascular detail in a single scan**

With ZEISS AngioPlex, all you need is a single scan to capture both 3D structural and microvascular information. Unlike fluorescein angiography, which could take up to 30 minutes for imaging, OCTA takes significantly less time from patient prep to image viewing.<sup>1,2</sup>

### **Manage a range of conditions — from diabetic retinopathy to glaucoma to age-related macular degeneration (AMD)**

OCTA is known to reveal early indicators of many ocular diseases. ZEISS AngioPlex provides a complete set of tools to manage these diseases and your patients.



**Diabetic Retinopathy**



**Glaucoma**



**Age-related Macular Degeneration (AMD)**



**9 out of 10  
AngioPlex  
users have  
incorporated  
OCTA into  
their AMD  
management  
protocol.<sup>3</sup>**

**Manage your patients longer**

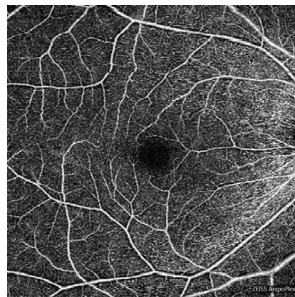
OCTA examination can help you to identify the conversion from dry to wet AMD and support your long-term patient management. With ZEISS AngioPlex you have the imaging you need to determine when to intervene or refer.

**Make the most of every scan**

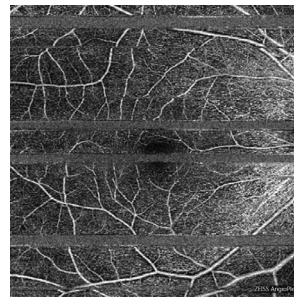
AngioPlex image capture with FastTrac™, the proprietary retinal tracking system from ZEISS, is designed to eliminate artifacts from blinks and other eye movement using real-time, active eye tracking technology. With FastTrac, you can scan at the highest resolution without sacrificing patient throughput.

**Easily and effectively track change over time**

FastTrac's track-to-prior feature precisely tracks follow-up scans, which means reliable disease management from visit-to-visit.



With FastTrac



Without FastTrac

**FastTrac real-time eye tracking**

AngioPlex with FastTrac (shown left) minimizes imaging artifacts caused by eye motion due to blinking or other patient movement.

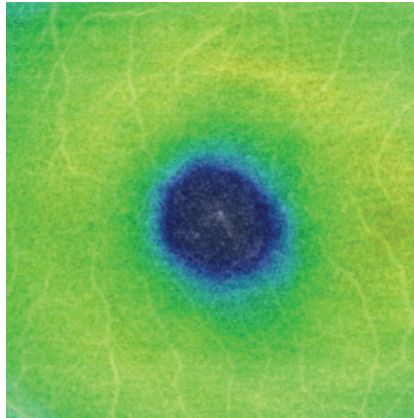
# Reveal more

## Visualize vascular abnormalities with OCTA

### Diabetic Retinopathy (DR)

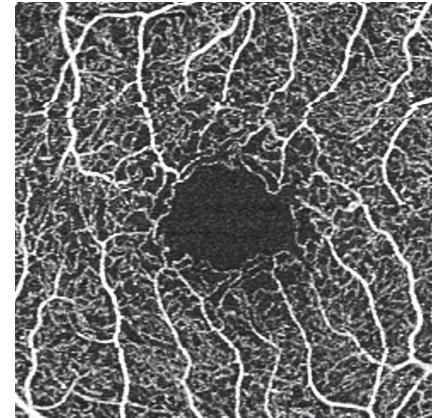
Conventional OCT shows macular thickness to be within the normal range for this known diabetic patient. AngioPlex can help you detect a ragged foveal avascular zone (FAZ), and instances of microaneurysms that cannot be seen clinically, which are early signs of diabetic changes.

#### Conventional OCT



Macular Thickness Map

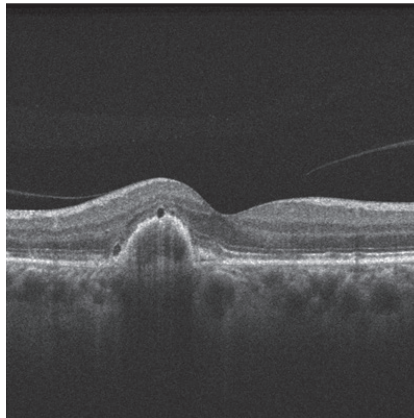
#### OCT Angiography



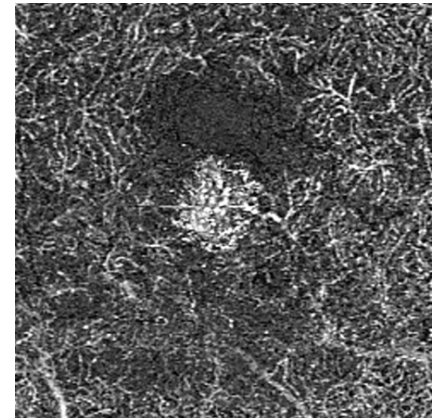
AngioPlex 3x3 — Superficial layer

### Age-related Macular Degeneration (AMD)

Conventional OCT B-scan indicates structural effects of wet AMD. AngioPlex directly reveals the choroidal neovascularization (CNV) lesion, providing improved ability to monitor treatment regimen.



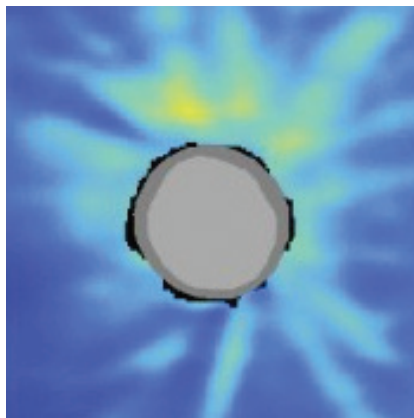
OCT B-scan



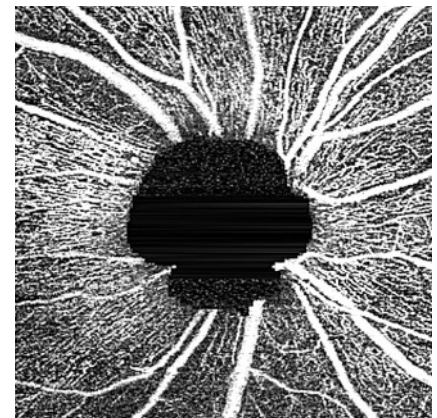
AngioPlex 3x3 — Deep layer

### Glaucoma

RNFL thickness maps identify global thinning in the retinal nerve fiber layer. The new AngioPlex for ONH visualizes peripapillary capillary perfusion, providing important vascular insights into glaucoma.



RNFL Thickness Map

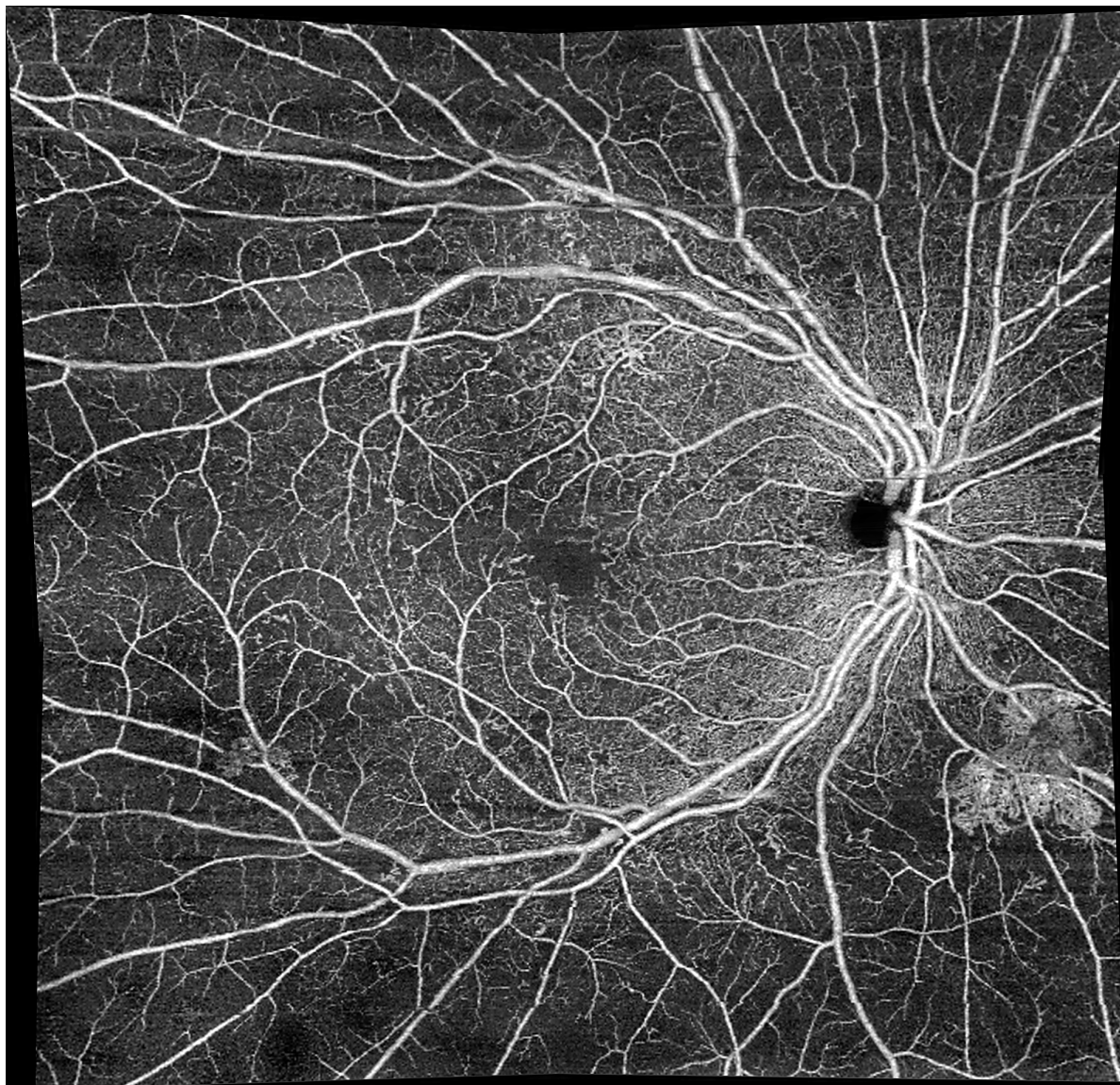


AngioPlex for ONH



*"AngioPlex Montage is very useful in quickly identifying the presence of neovascularization (both NVD and NVE) in proliferative diabetic retinopathy without the use of fluorescein dye."*

Scott S Lee,<sup>4</sup> MD, East Bay Retina Consultants, USA



AngioPlex Montage 14x14 mm wide view encompasses the entire posterior pole, revealing macular ischemia, extensive areas of capillary nonperfusion outside the central 8x8 mm area and additional areas of neovascularization.

Image courtesy of Scott Lee, MD, East Bay Retina Consultants, USA

#### **See wider for a quick vascular assessment**

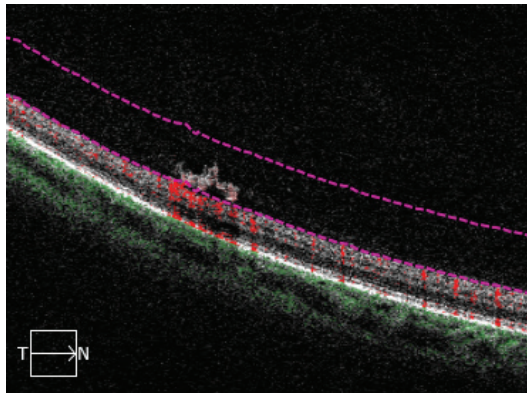
ZEISS AngioPlex Montage delivers widefield OCTA with up to a 50° field of view (FoV) in a single imaging sequence, providing visualization of vasculature and clinical signs of diseases that affect the macula and peripheral retina. The detail-rich images enable quick and comprehensive vascular assessment and can be an excellent tool for patient education.



# Isolate more retinal layers of interest

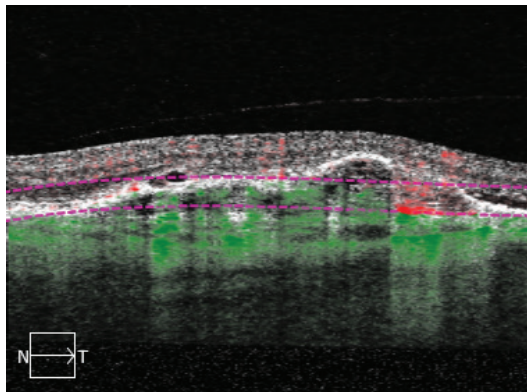
## Automated segmentation

The preset layer segmentation capabilities of ZEISS AngioPlex help isolate retinal layers of interest—from the vitreoretinal interface deep into the choroid—with a single click. This is especially useful for a comprehensive evaluation of age-related macular degeneration (AMD) and changes that may indicate the conversion from dry to wet AMD.



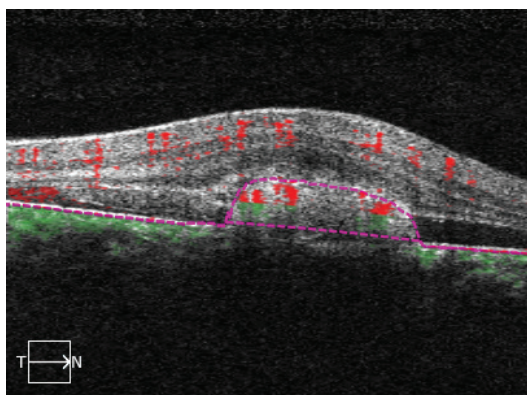
### VRI (Vitreoretinal Interface)

Observe neovascularization elsewhere (NVE) associated with proliferative diabetic retinopathy (PDR).



### ORCC (Outer Retina to Choriocapillaris)

More easily visualize classic or occult CNV.



### RPE to RPE fit

Highlights disruptions to the RPE layer, and can provide improved visualization of CNV.

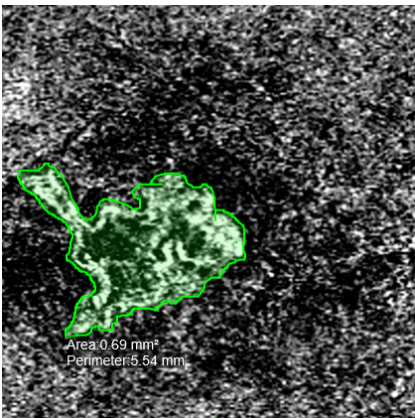


# Manually track changes over time

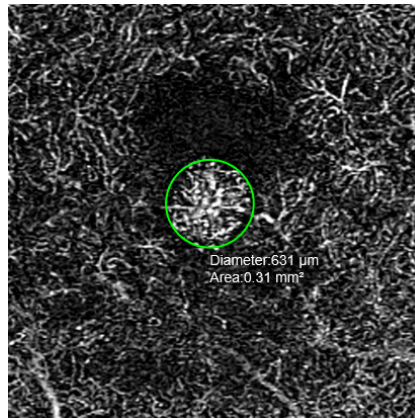
## AngioPlex measurement tools

Manually measure regions of interest and compare them over time using:

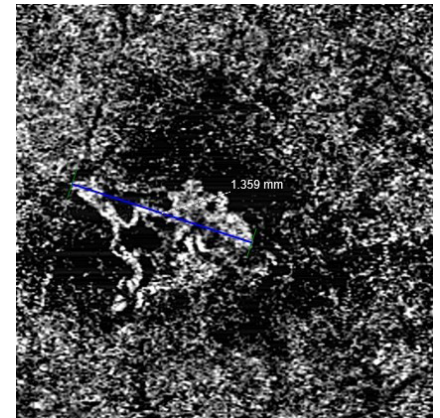
- The freeform tool, which measures area and perimeter.
- The circle tool, which measures diameter and area.
- The caliper tool, which measures distance in millimeters.



Freeform tool



Circle tool



Caliper tool

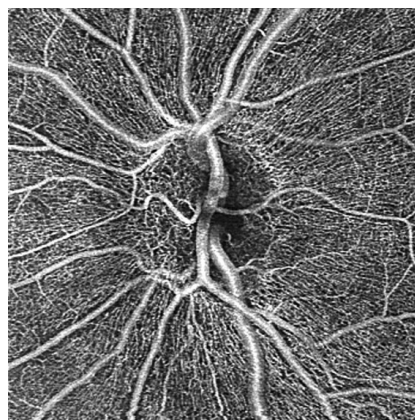
## Gain greater insights into glaucoma

### Visualization for ONH

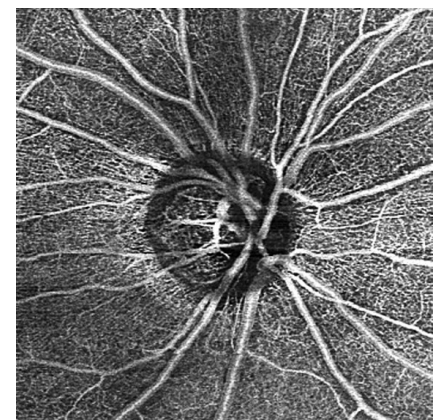
*"AngioPlex allows us to view the radial peripapillary capillaries of the RNFL where we can detect focal glaucomatous perfusion defects."*

Grace Richter,<sup>5</sup> MD, MPH, USC Roski Eye Institute, USA

Designed for the optic nerve head (ONH), ZEISS AngioPlex for ONH offers new insights into glaucoma. This new OCTA scan type enables visualization of the radial peripapillary capillary (RPC) network that cannot be seen using traditional fluorescein angiography.<sup>6</sup>



AngioPlex for ONH of a normal eye showing the blood vessels at the lamina cribrosa level.



AngioPlex for ONH of an eye with advanced glaucoma highlighting late stage cupping and blood vessels at the lamina cribrosa level.

- <sup>1</sup> de Carlo T, Bauman C. Will OCT Angiography Replace FA? *Retina Specialist*, Sep 2016. [www.retina-specialist.com/article/will-OCTAngiography-replace-fa](http://www.retina-specialist.com/article/will-OCTAngiography-replace-fa).
- <sup>2</sup> de Carlo TE, Romano A, Waheed NK, Duker JS. A review of optical coherence tomography angiography. *Int J Retin Vitro*. 2015;1:5.
- <sup>3</sup> Pekelis M, Durbin M, Ge B. Clinical usage patterns of OCT Angiography. Poster presentation, Sonoma Eye 2018, Sonoma, CA, USA.
- <sup>4,5</sup> The statements of the healthcare professionals reflect only their personal opinions and experiences and do not necessarily reflect the opinions of any institution with whom they are affiliated. The healthcare professionals have no contractual or other financial relationship with Carl Zeiss Meditec AG or Carl Zeiss Meditec, Inc., and received no financial support for these statements.
- <sup>6</sup> Spaide RF, Klancnik JM, Cooney MJ. Retinal Vascular Layers Imaged by Fluorescein Angiography and Optical Coherence Tomography Angiography. *JAMA Ophthalmol* 2015;133:45-50.



CIRRUS HD-OCT



**Carl Zeiss Meditec, Inc.**  
5160 Hacienda Drive  
Dublin, CA 94568  
USA  
[www.zeiss.com/us/med](http://www.zeiss.com/us/med)



**Carl Zeiss Meditec AG**  
Goeschwitzer Strasse 51–52  
07745 Jena  
Germany  
[www.zeiss.com/med/contacts](http://www.zeiss.com/med/contacts)

**CIR-11269** Printed in United States. CZ-VI/2019 United States edition: Only for sale in selected countries. The contents of the brochure may differ from the current status of approval of the product or service offering in your country. Please contact our regional representatives for more information. Subject to change in design and scope of delivery and due to ongoing technical development. AngioPlex, CIRRUS and FastTrac are either trademarks or registered trademarks of Carl Zeiss Meditec AG or other companies of the ZEISS Group in Germany and/or other countries.  
© Carl Zeiss Meditec, Inc., 2019. All rights reserved.