

ZEISS Retina Workflow in a Real-World Patient

Using ZEISS Retina Workflow for DR and DME Management



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Diabetic retinopathy (DR) and diabetic macular edema (DME) continue to threaten the vision of patients across the globe. Patients with DR and DME are often working-age adults whose lives are significantly disrupted by reduced quality of vision, and our role as retina specialists is to help get them back on their feet.

ZEISS Retina Workflow solutions allow providers to closely track patients with DR and DME over the course of treatment and reveal trends and patterns that may allow providers to personalize care and maximize the therapeutic options at their disposal.

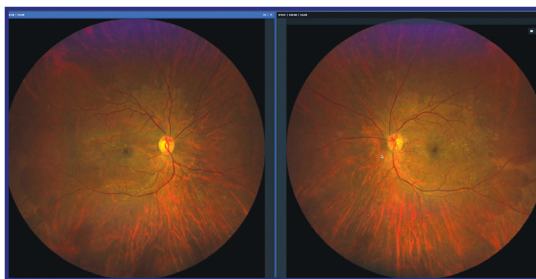
Scan the QR code below to see how I use ZEISS Retina Workflow solutions in my clinic to provide world-class care to patients with DR and DME.



ZEISS Retina Workflow solutions allow me to conduct a thorough examination of new patients and give me certainty that I can track a patient's progress over time. By beginning a patient's journey with **ZEISS Retina Workflow** solutions, I complement my clinical diligence with a cutting-edge technology that empowers me to practice at my best.



**Interact with
ZEISS Retina
Workflow on
Retina Today**



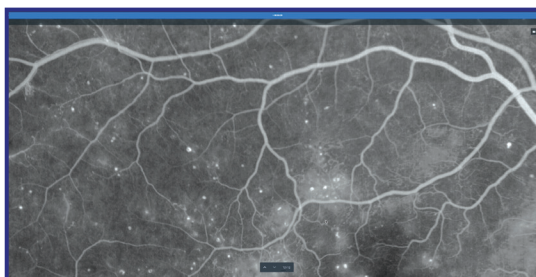
A 49-year-old man with diabetes who had never undergone a retinal evaluation presented to my clinic with reports of vision issues.

I captured True Color images with the ZEISS CLARUS 700, which allowed analysis of color fundus images to classify the severity of DR. **The separation of color channels** is a particularly useful feature when assessing a patient's baseline characteristics.



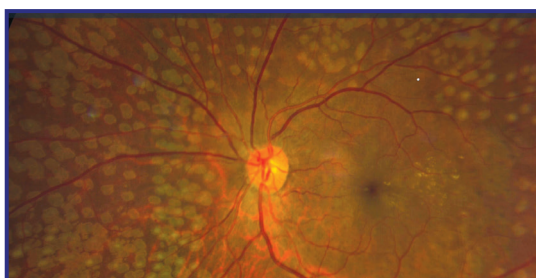
Fluorescein angiography revealed multiple

abnormalities, including microaneurysms, intraretinal microvascular abnormalities, and areas of capillary nonperfusion.



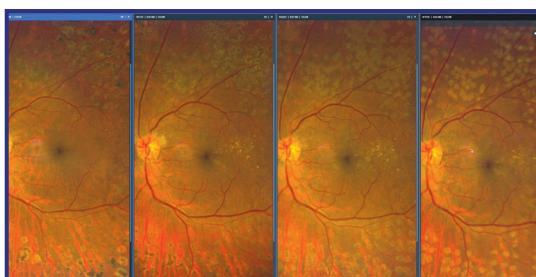
In the **late phase of fluorescein angiography**, neovascularization

and increased vascular permeability could be seen in both eyes. **The interface of ZEISS Retina Workplace** allowed me to zoom in and out of areas of detail effortlessly, empowering me to conduct a thorough examination.



The patient was diagnosed with proliferative DR.

Panretinal photocoagulation was performed using the multisport pattern on the ZEISS VISULAS green laser, enabling comprehensive treatment in a single session. Treatment for the fellow eye was performed 1 week later.



The progress of laser scars can be monitored over time by comparing multiple sequential images within ZEISS Retina Workplace. For this patient, improvement in the appearance of macular exudates is observed 7 months post-treatment. This highlights the effectiveness of laser treatment in modulating macular permeability.

ZEISS Retina Workflow in a Real-World Patient

DR and DME in a Long-Standing 52-Year-Old Patient



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A 52-year-old woman with long-standing diabetes presented initially with severe non-proliferative diabetic retinopathy (NPDR) and paracentral diabetic macular edema (DME). Given the extent of the DME, a course of monthly anti-VEGF therapy was initiated and continued for several years. **ZEISS Retina Workplace was particularly useful in this case due to its ability to present longitudinal side-by-side imaging reports** (Figure 1). Viewed in this manner, Retina Workplace allows the provider to intuitively understand the patient's response to treatment via a quick review of her first visit, an intermediate visit, and her most recent visit. As you can see, the longitudinal multimodal visit synopses, which include fundus imaging with a cube overlay and corresponding cross-sectional OCT imaging, show prominent paracentral DME that resolved over time. This was evidence that this patient's VEGF-mediated disease responds well to aggressive anti-VEGF therapy.

But what about the patient's comorbid NPDR? By removing the cube overlay and zooming in on the fundus images—both of which **I can easily toggle within ZEISS Retina Workplace's user-friendly interface using only a few clicks**—I can better appreciate changes to the patient's DR at those same three timepoints (Figure 2). The extensive lipid, hemorrhage, and numerous microvascular changes depicted in the patient's initial visit resolved modestly **in the intermediate term and more significantly in the longer term, a trend best appreciated when the images are aligned chronologically in ZEISS Retina Workplace.**

But providers aren't the only beneficiaries of intuitive image comparison. **I use ZEISS Retina Workplace to educate patients about the disease and their response to treatment.** This patient had very little subjective visual disruption upon presentation, due in large part to the paracentral nature of her DME. She therefore noted little subjective benefit to treatment. However, when I showed the patient the impressive anatomical improvement from her first visit, she understood the value of treatment and was therefore less likely to be lost to follow-up. In that sense, I credit ZEISS Retina Workflow solutions for helping me keep a patient within my orbit of care.

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Armed with **ZEISS Retina Workflow** solutions, I track treatment response and anatomic changes in patients with diabetic eye disease. Further, I use the **Retina Workplace** application to educate patients so they can become more invested in their treatment and more compliant with recommended treatment. An example is presented in this specific case.

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Imaging patients quickly and easily with cutting-edge ZEISS technology improves clinical throughput, and using the **ZEISS Retina Workflow** solutions to efficiently assess and educate patients allows us to maximize our clinical potential while improving the quality of care we deliver. The return on investment is clear.

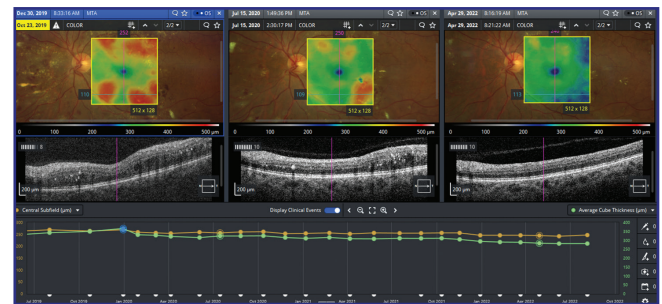


Figure 1. Using ZEISS Retina Workplace, I aligned three timepoints from the patient, all of which included OCT cross-sectional imaging with fundus photography and OCT cube overlay. These timepoints were her first visit (left column), a visit after several initial anti-VEGF injections (center column), and her most recent visit (right column). Prominent paracentral DME can be seen at the initial visit with subsequent resolution depicted at her most recent visit.

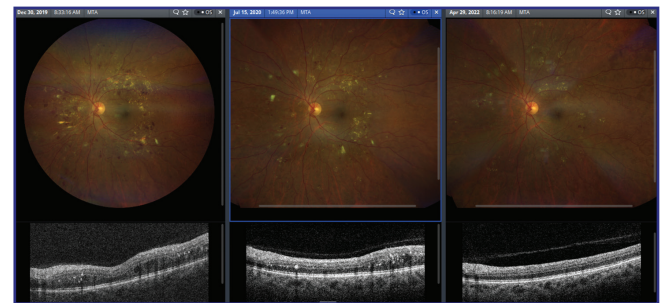


Figure 2. Removal of the cube overlay and zooming in on the patient's fundus photographs allows me to better observe the resolution of lipid and hemorrhages associated with this patient's improving DR.



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on Retina Today**

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