

Specifications

OCT Model: YG-250K

OCT optical source	Swept Source
Center wavelength	1060nm

OCT B-scan

Scanning speed	250,000 A-scans per second
Max. Scan Length (posterior)	30mm
Max. Scan Length (anterior)	24mm
Scan depth (posterior)	12mm
Scan depth (anterior)	12mm
Refractive adjustment range	-35D to +45D
Axial optical resolution	≤6μm
Axial best digital resolution	1.9μm
Transverse optical resolution	10μm

Fundus Imaging

Methodology	Scanning Laser Ophthalmoscopy (SLO)
SLO wavelength	850nm
Minimum pupil diameter	2.0mm
Eye tracking speed	128Hz

Software Functions

Anterior segment (AS) quantification	<input checked="" type="checkbox"/>
AS panoramic parameters	<input checked="" type="checkbox"/>
Thickness/volumn measurement (retina)	<input checked="" type="checkbox"/>
Thickness/volumn measurement (choroid)	<input checked="" type="checkbox"/>
Glaucoma analysis (GMA, ONH, etc.)	<input checked="" type="checkbox"/>
Blood flow quantification (retina)	<input checked="" type="checkbox"/>
Blood flow quantification (choroid)	<input checked="" type="checkbox"/>
Blood flow quantification (optic disk)	<input checked="" type="checkbox"/>
Blood flow quantification (AS) (optional)	<input checked="" type="checkbox"/>
Posterior curvature	<input checked="" type="checkbox"/>
3D structure	<input checked="" type="checkbox"/>
3D vessel	<input checked="" type="checkbox"/>



250kHz | YAlkaid

Ultra-WideField Full-Range SS-OCT/OCTA

NEW



YAlkaid

250kHz Ultra-Wide Field Full-range Swept-Source OCT/OCTA



250kHz
30x25mm
Ultra-WideField OCTA

*Proprietary Choroid
OCT Angiography*

10 Billion Voxels
Ultra-High Resolution
1536x1280

*Self-Innovated High-Speed
Acquisition Card*

YAlkaid

**250kHz Ultra-WideField
Full-range Swept-Source OCT**

Self-Innovated
Homemade component parts

Ten Billion Voxels
Ultra- High Resolution

**Proprietary Choroid
OCTA Algorithms**

30mm Anterior & Posterior Length

12mm Anterior & Posterior Depth

All-Slabs and All-Sizes
Quantification Analysis

Multi-Modality Imaging
Joint Diagnosis

Development History of OCT Technology

OCT technology is a paradigm of medicine, engineering integration and continuous innovation. Full-range swept-source OCT technology reveals significant advantages in multiple dimensions such as scanning speed, imaging depth, and visualizing field, etc.

1996

**Time-Domain OCT
(Linear Scan)**

<1K A-scan/sec
Single B-scan
2mm Depth

2002

**Time-Domain OCT
(Resonance Scan)**

<10K A-scan/sec
HD Single B-scan
2mm Depth

2006

**Spectral-Domain OCT
(Frequency-Domain OCT)**

20-100K A-scan/sec
3D-OCT, OCTA
1.8-3mm Depth

2016

Swept Source OCT

100K A-scan/sec
Wide-Field OCTA
2-3mm Depth

2022

Full-range Swept Source OCT

100-400K A-scan/sec
Ultra-wide-field OCTA
6-12mm Depth
16-24mm length

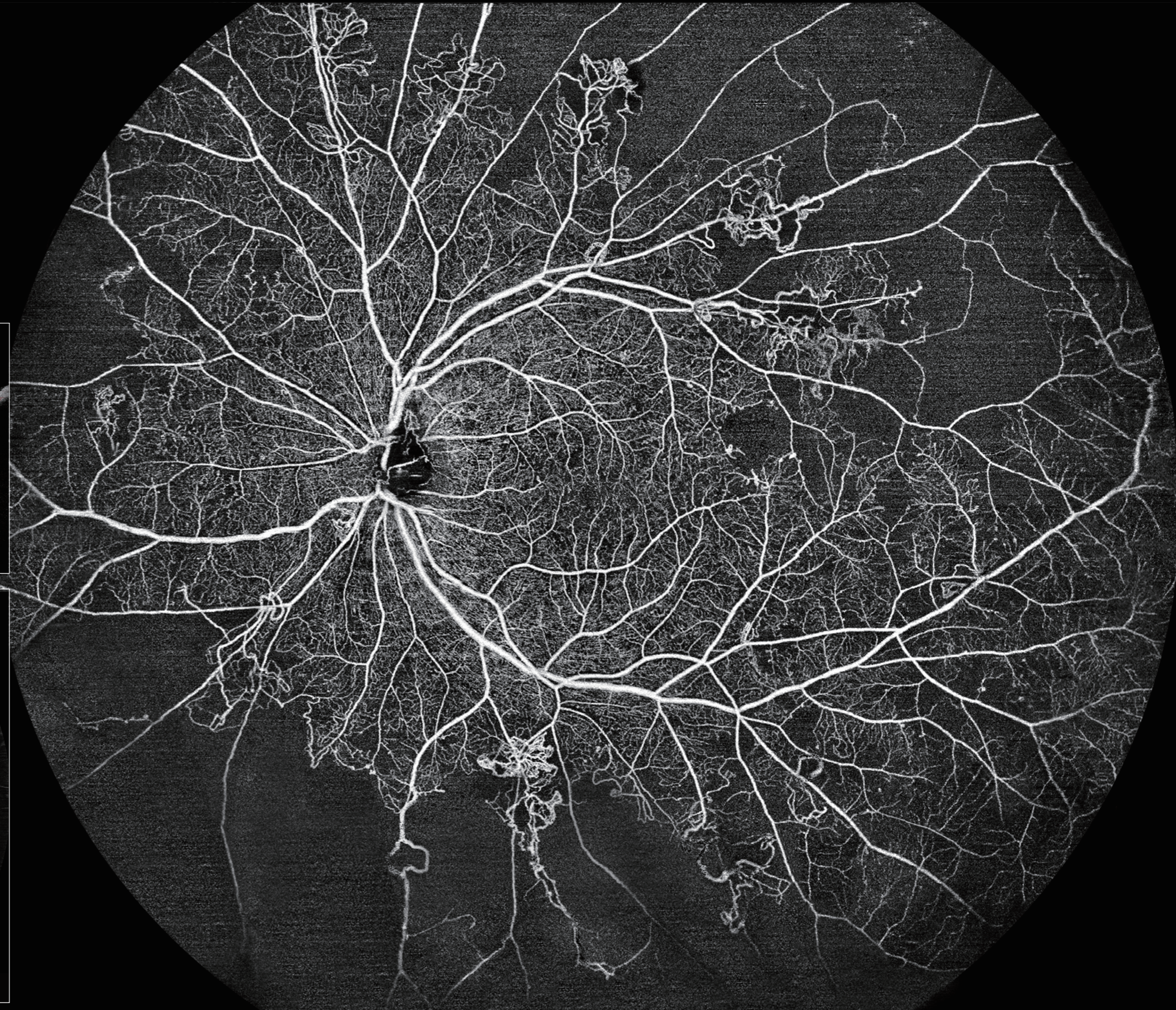
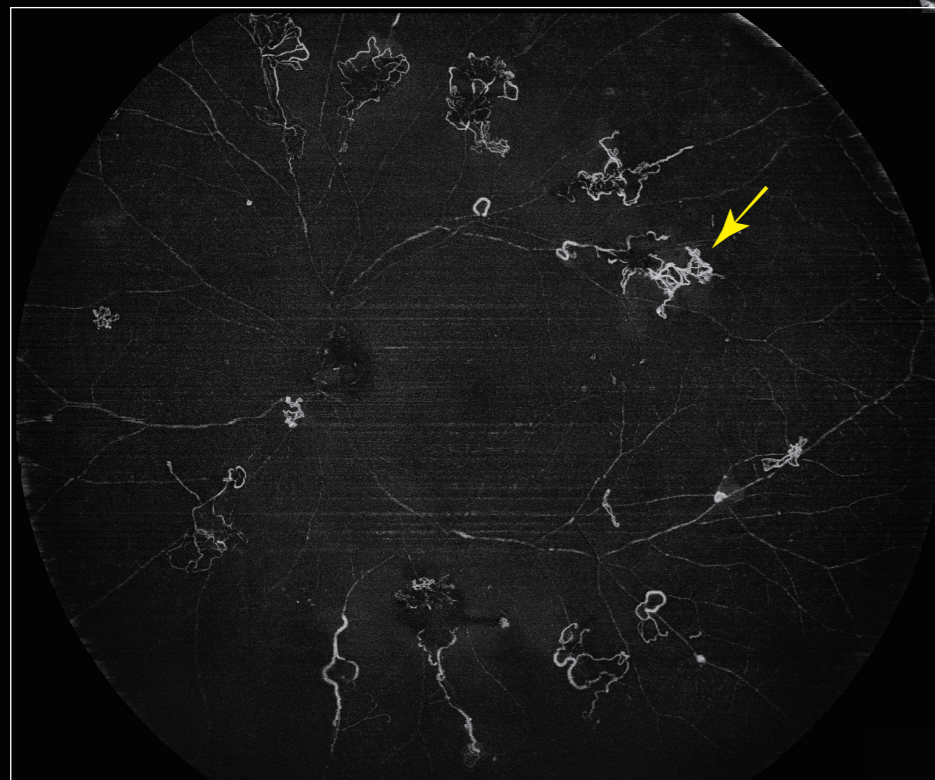
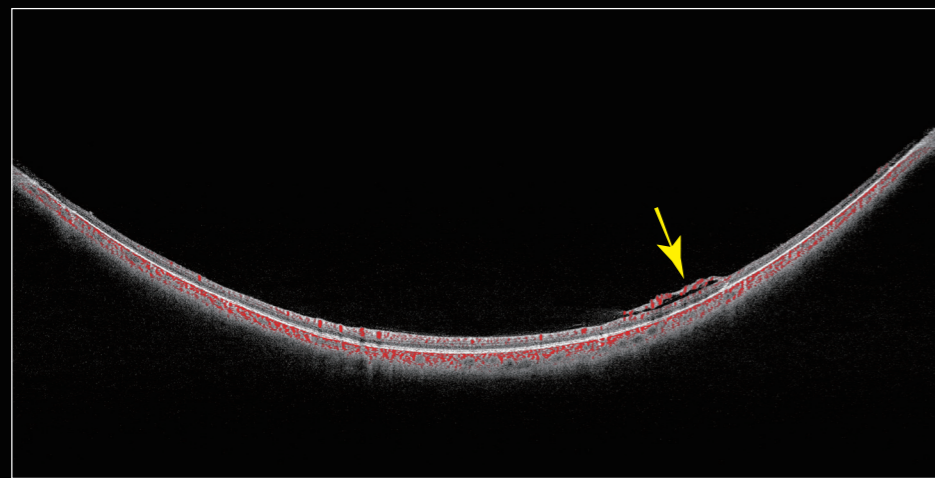
Find More Details with Single Capture

■ 10 Billion maximal voxels

■ 30x25mm ultra-wide-field OCTA

■ 1536x1280 ultra-high resolution

■ Fast acquisition speed



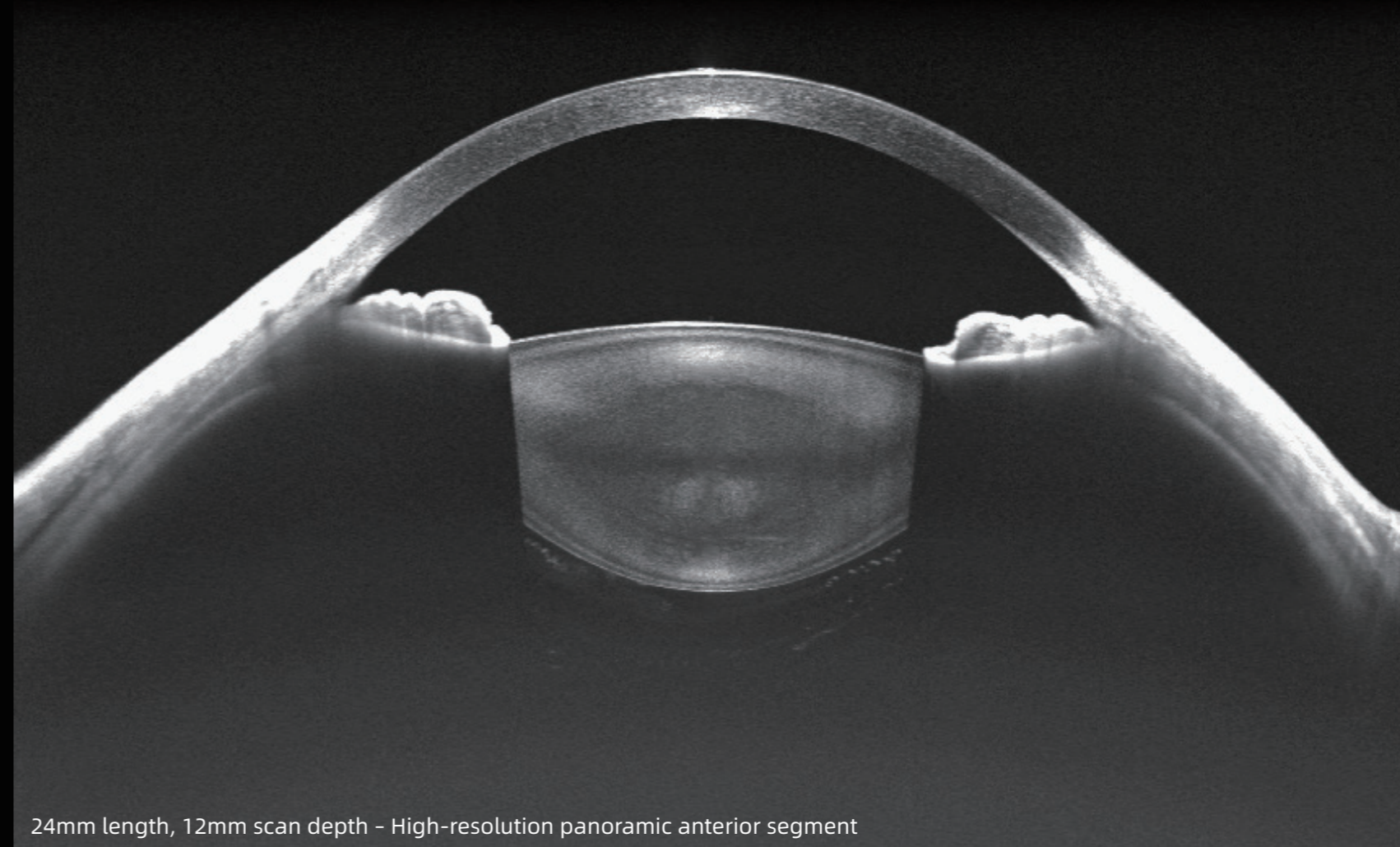
Neovascular membrane (vitreal slab)

Proliferative diabetic retinopathy (PDR)

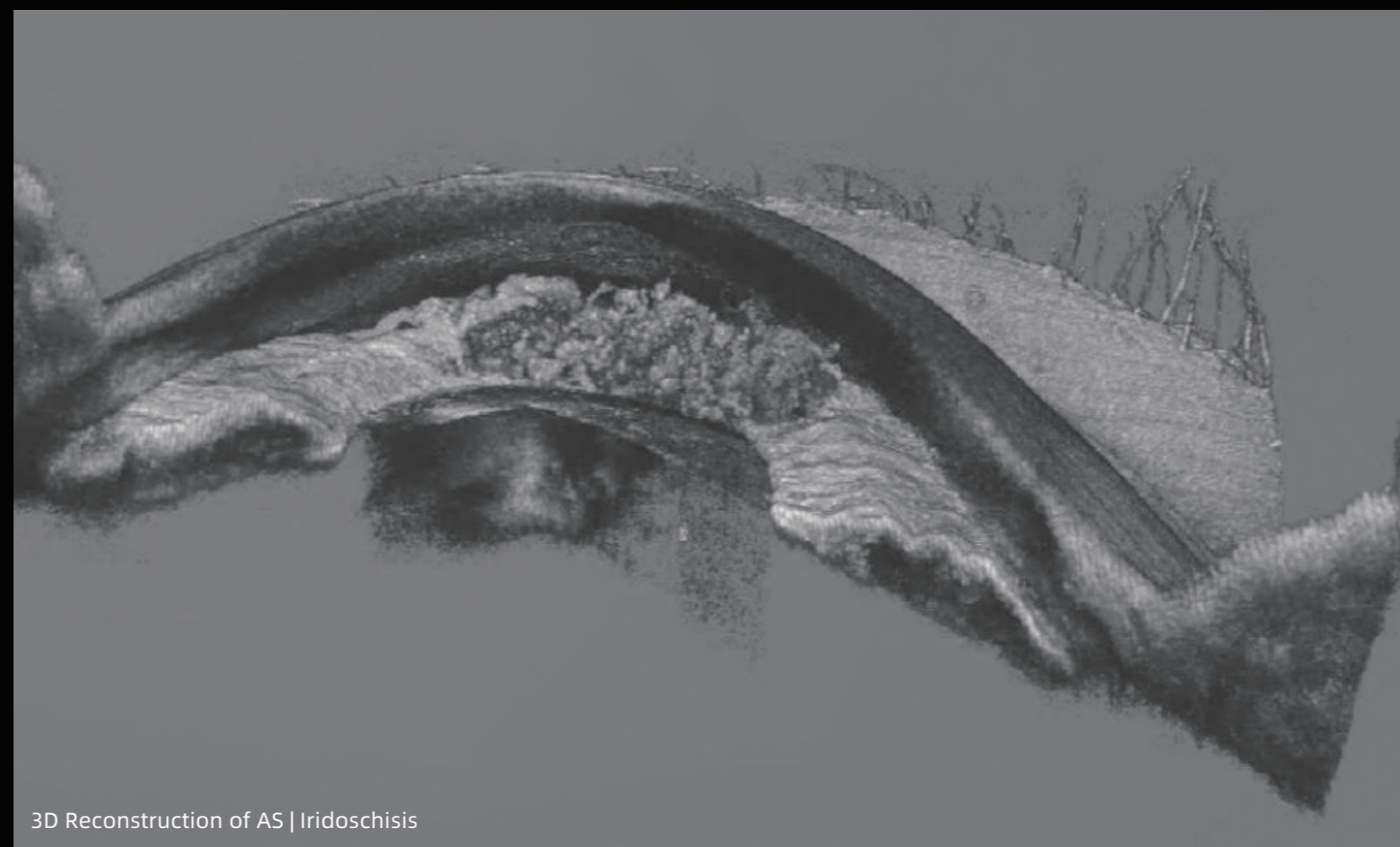
High-resolution Imaging with Ultra-deep Depth



30mm length, 12mm depth | Retinal Detachment



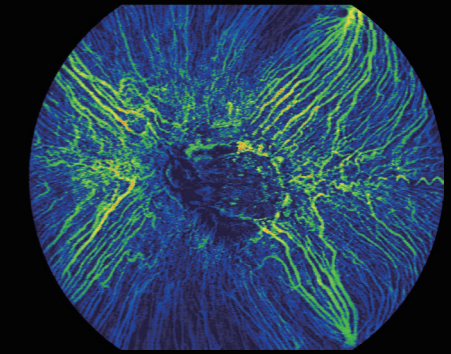
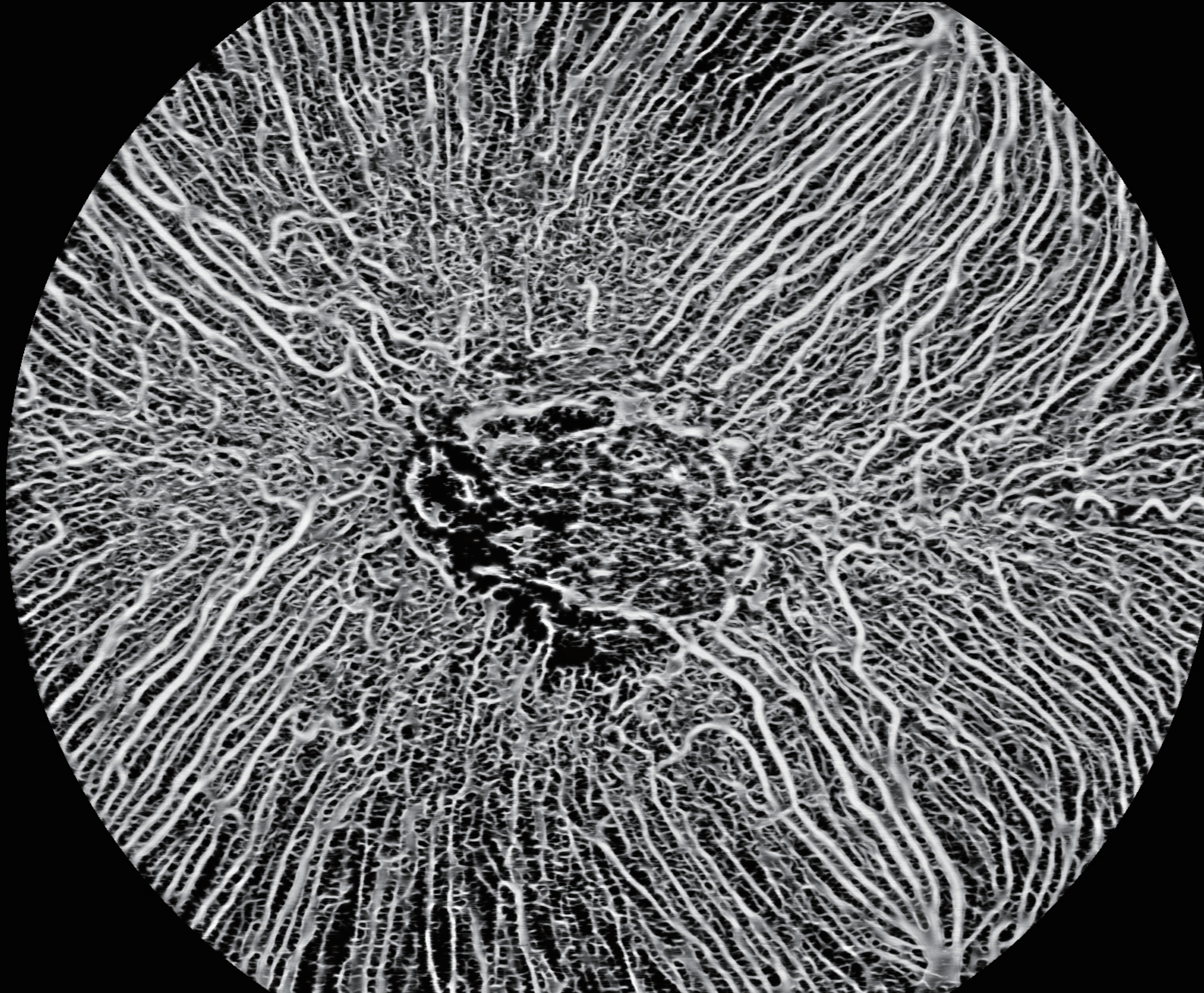
24mm length, 12mm scan depth - High-resolution panoramic anterior segment



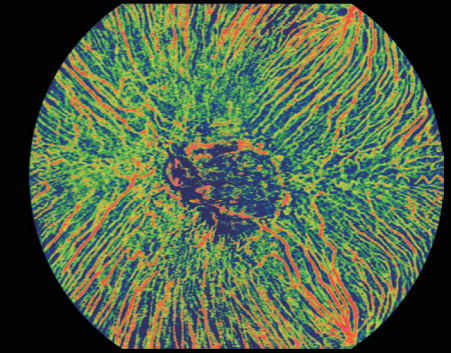
3D Reconstruction of AS | Iridoschisis

Reveal the Undiscovered

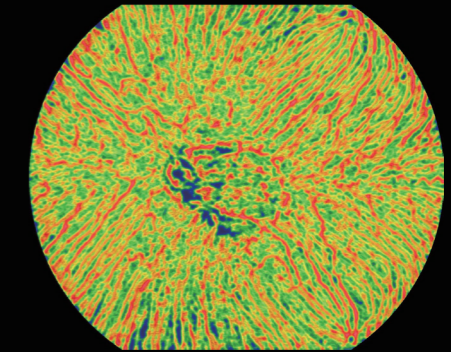
Ultra-widefield OCTA for Choroid with quantification parameters



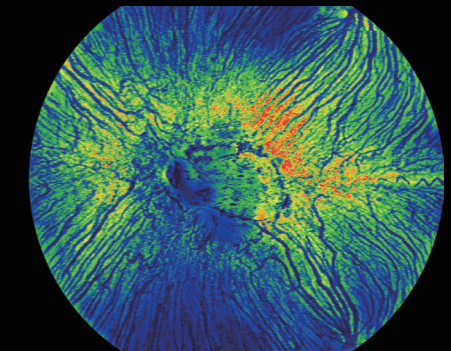
Choroid Vessel Volume ratio (CVV/a)



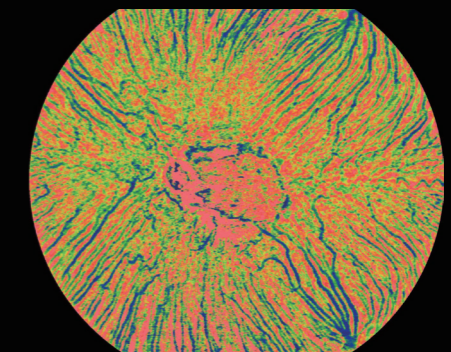
Choroid Vessel Index (3D-CVI)



Choroid Vessel Density (2D)



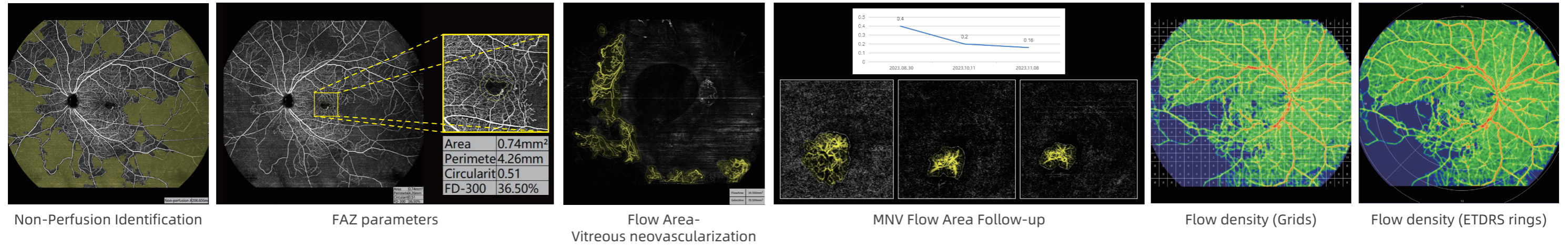
Choroidal Stroma Volume ratio (CSV/a)



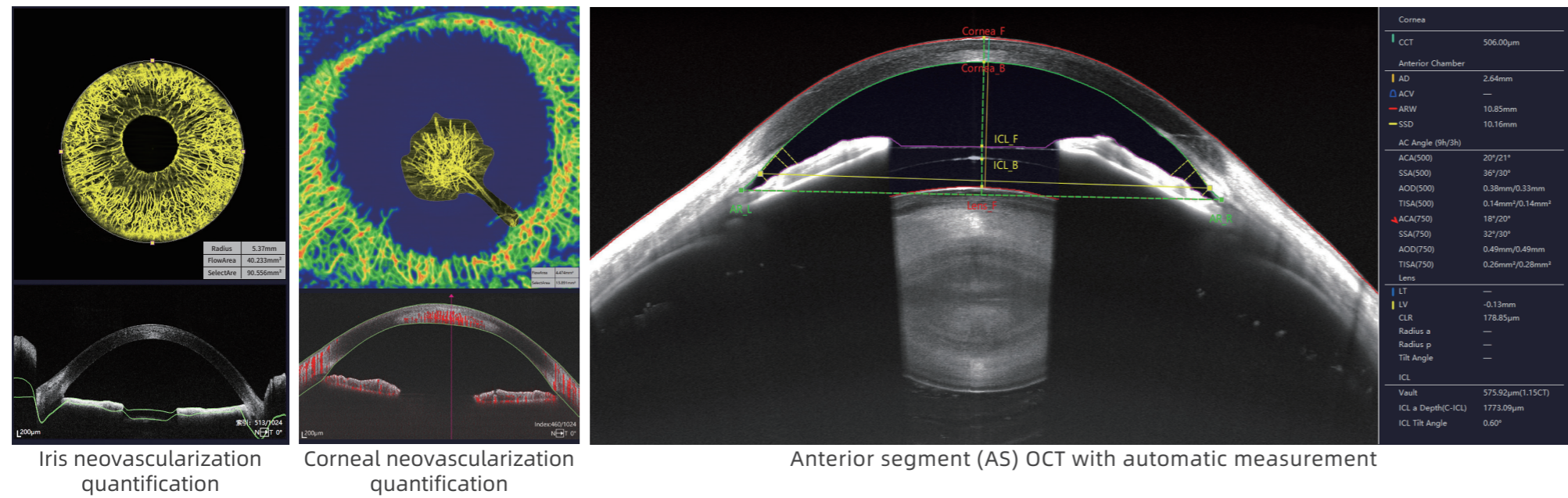
Choroidal Stroma Index (CSI)

Comprehensive Quantitative Analysis

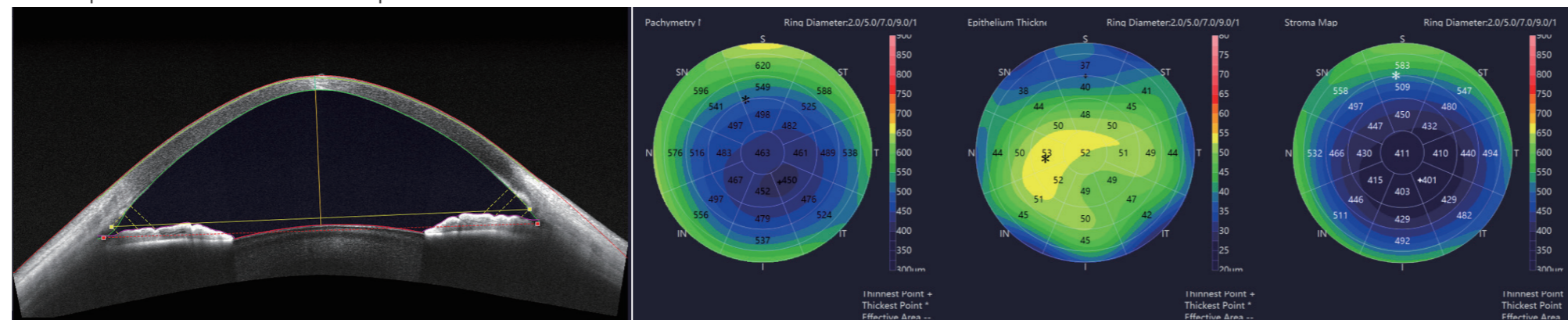
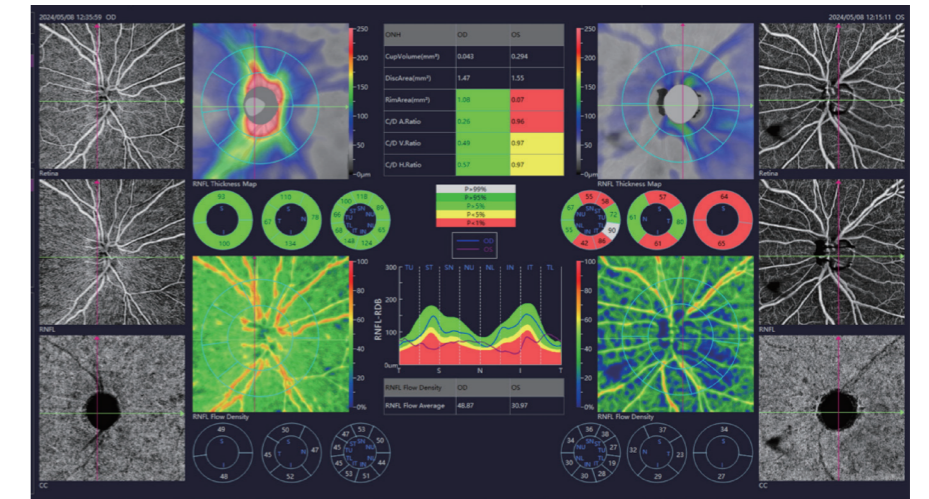
Retinal blood flow with quantification



AS OCTA with quantization and parameters



Comprehensive glaucoma analysis

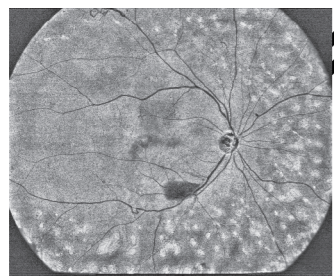
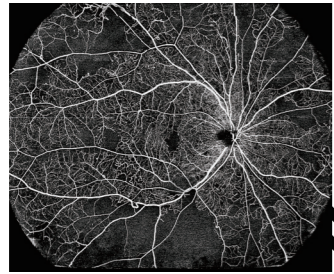


Innovation.

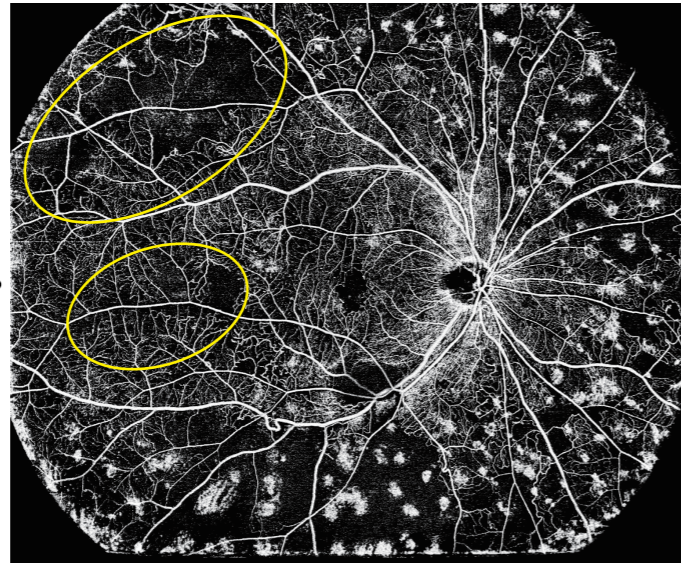
iSpot

Precision and convenient OCTA-guided photocoagulation.

Superficial retina OCTA image detects NPA



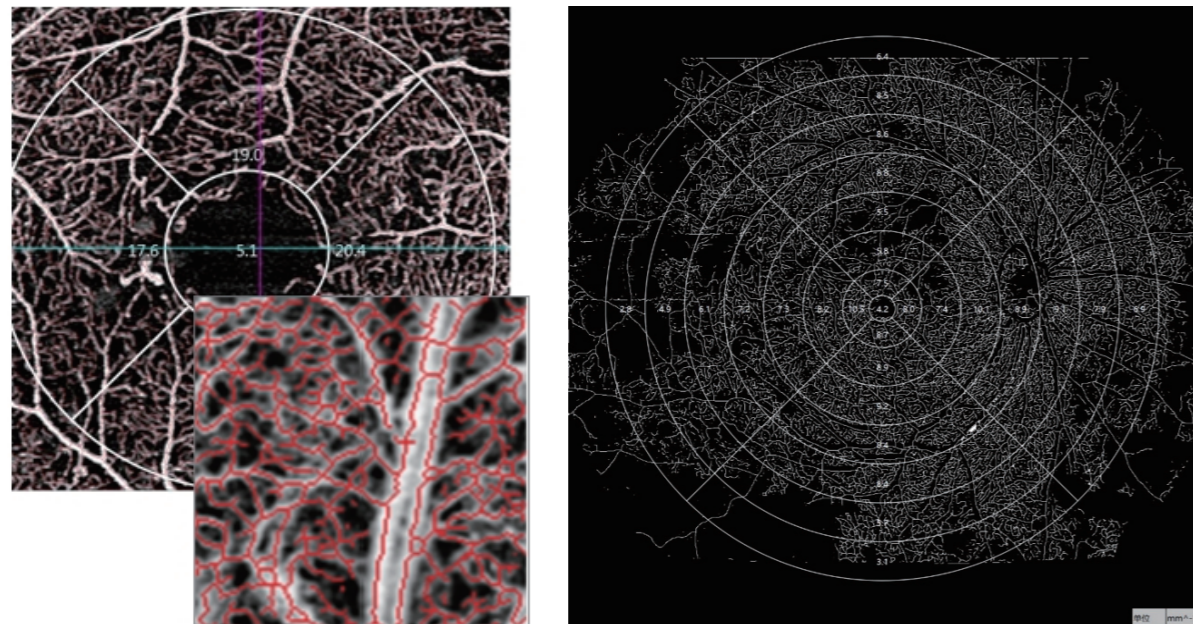
En face image of outer retina shows laser spots



Non-perfusion areas with insufficient laser are clearly identified

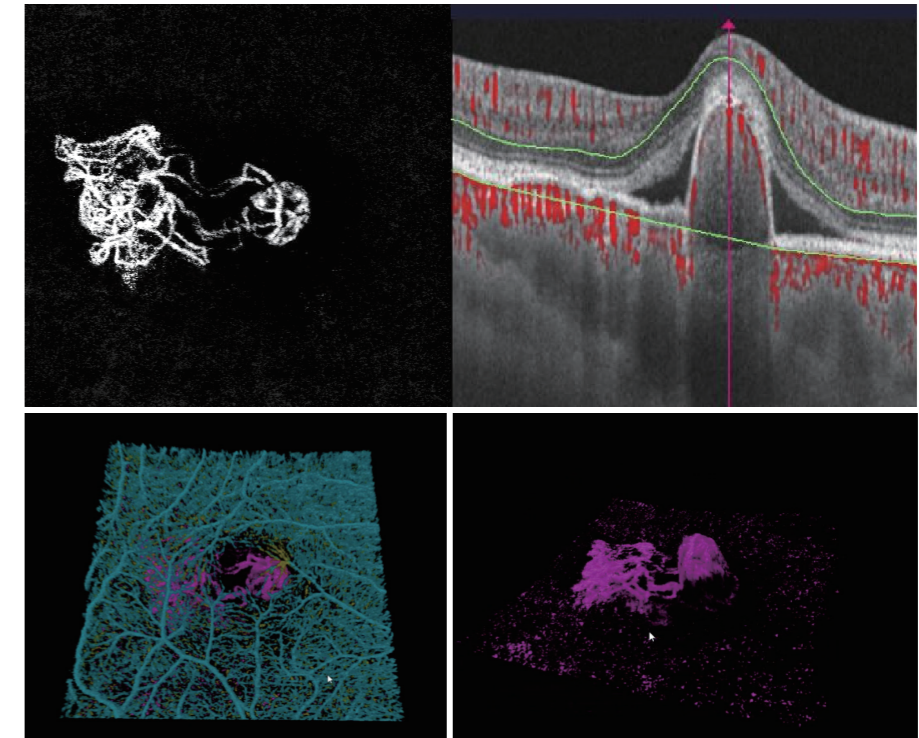
Vessel Skeleton Density (VSD)

The ratio of the linear length in the region to the area of the region (mm^{-1}) after the vessels are skeletonized. More sensitive to changes in the vessels number and less affected by vessel diameter.



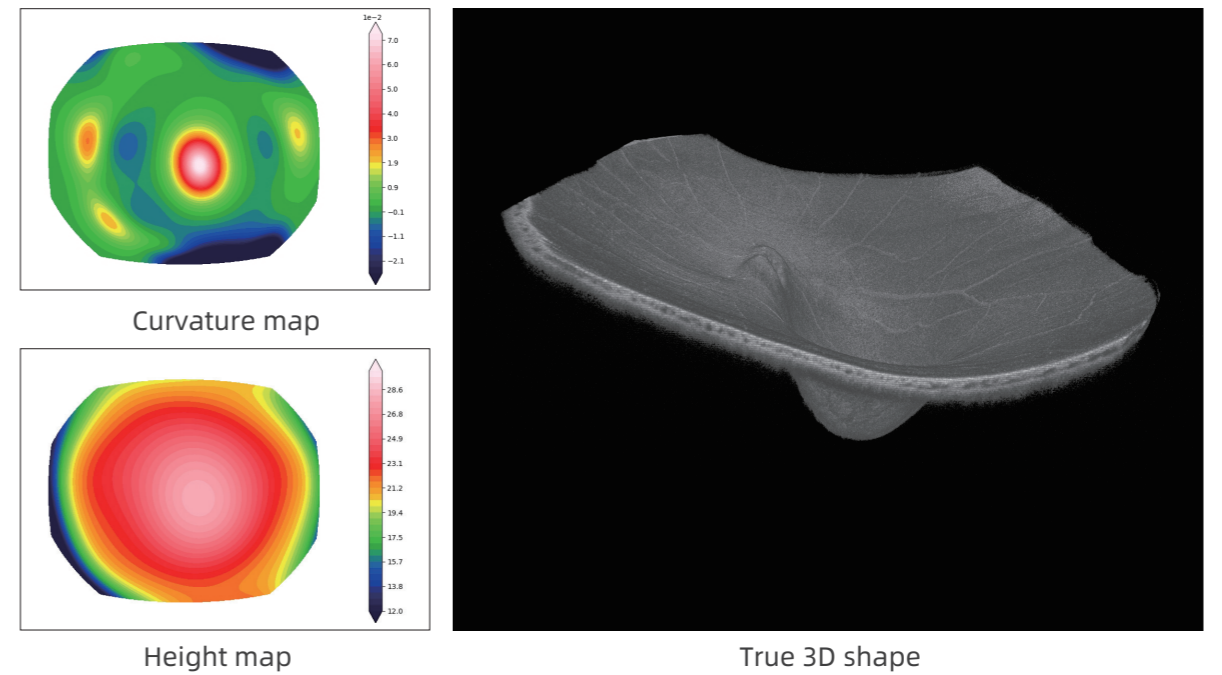
3D OCTA

visualization vessels in 3D reconstruction for customized layers.



Retinal Morphology Trio

Restore the true shape of retina with built-in advanced algorithm based on 3D structure.

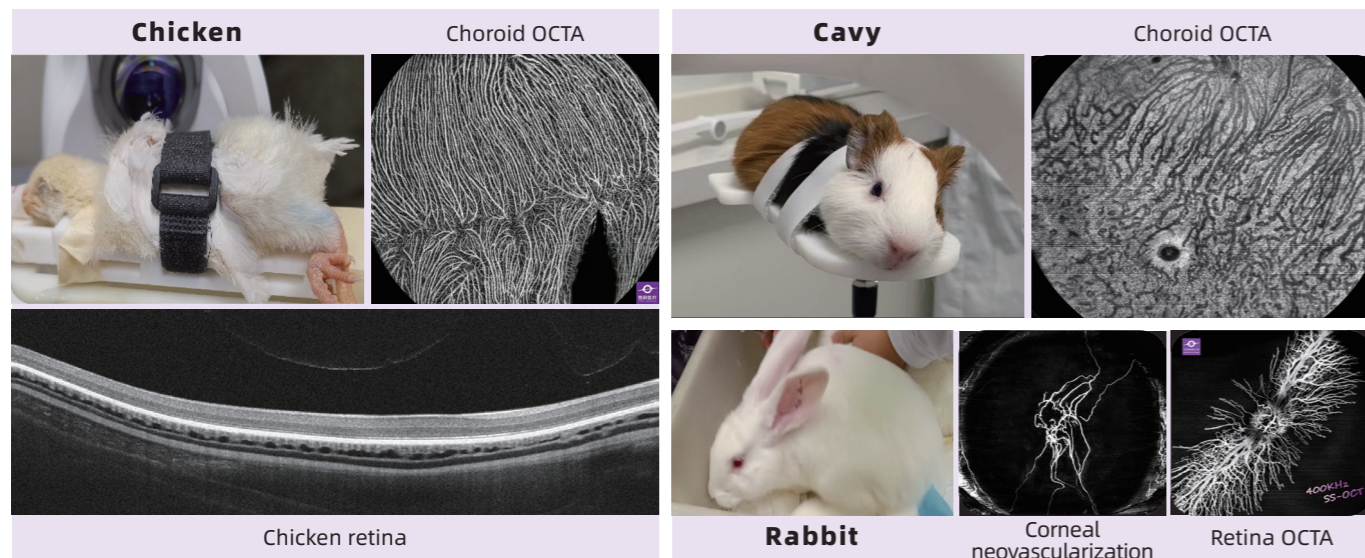
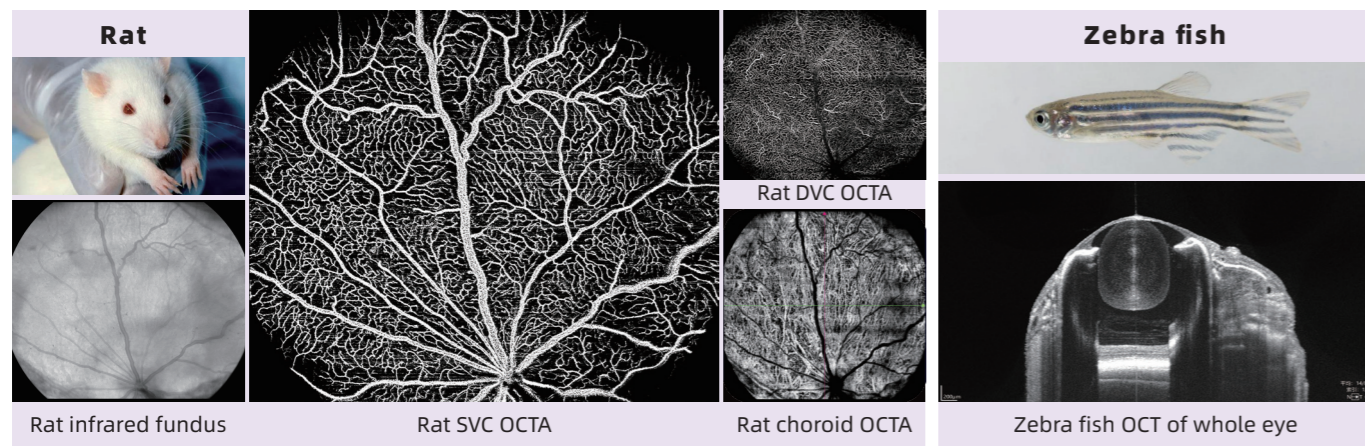
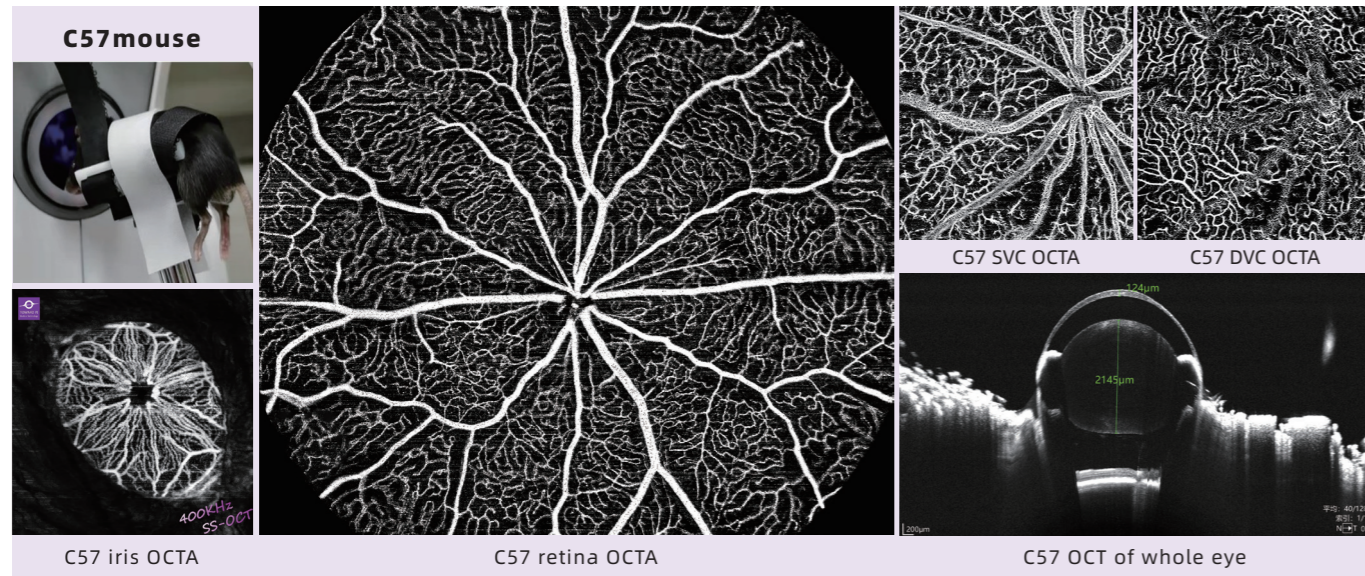


Exploration.

Animal Study

No extra lens needed
Fast acquisition
with comprehensive quantifications

Non-contact, non-invasive to animal
with automatic retinal segmentation
with custom measurement and data export



Multi-Platforms Imaging Management

- Multi-Platforms Imaging:** OCT, OCTA, color fundus (CF), fundus fluorescein angiography (FFA), indocyanine green (ICG), fundus autofluorescence (FAF), optical coherence biometer (OCB), surgical microscope, and other imaging platforms' combinations.
- Big Data Fusion:** Accurate image matching, precise quantification, support electronic medical record (EMR) systems and medical image formats (DICOM etc.).
- Joint Accurate Diagnosis:** Improve the sensitivity and specificity of diagnosis, evaluate eye diseases more comprehensively and precisely, improve efficiency and accuracy, and provide patients with better diagnosis and treatment experience.

