

Specifications

OCT Model: BM-400K

OCT optical source	Swept Source
Center wavelength	1060nm

OCT B-scan

Scan speed	400,000 A-scans/sec
Max. Length (posterior)	24mm
Max. Length (anterior)	24mm
Scan depth (posterior)	6mm
Scan depth (anterior)	6mm
Refractive adjustment range	-35D to +45D
Axial optical resolution	≤6μm
Transverse optical resolution	10μm

Fundus Imaging

Methodology	Scanning Laser Ophthalmoscopy (SLO)
SLO wavelength	850nm
SLO FOV	60° ×60°
Minimum pupil diameter	2.0mm
Eye tracking speed	128Hz

OCT Angiography

Max. Single scan size (anterior)	18mm×18mm
Max. Single scan size (posterior)	24mm×20mm
Maximum resolution (single scan)	1536×1280
Max. scan size (montage)	42mm×40mm

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)	<input checked="" type="checkbox"/>
Posterior curvature	<input checked="" type="checkbox"/>
3D structure	<input checked="" type="checkbox"/>
3D vessel	<input checked="" type="checkbox"/>



BMizar

400KHz | Full Range SS-OCT/OCTA



TowardPi Medical Technology Ltd.

Website: www.towardpi.com

E-mail: info@towardpi.com



CE Marking under the EU MDR



BMizar

400KHz Full Range Ultra-Wide Field Swept-Source OCT/OCTA



400KHz
24x20mm

*Ultra-Wide Field OCTA
Self-Innovated High-Speed
Acquisition Card*

10 Billion Voxels

Ultra-High Resolution
1536x1280

*Brand-New Choroid
OCT Angiography*

BMizar

The World's First 400KHz
Full Range Ultra-Wide Field Swept-Source OCT

Self-Innovated
Homemade component parts

Ten Billion Voxels
Ultra- High Resolution

New Patent Choroid OCTA Algorithms

7-15 seconds High Speed
Ultra-Wide Field OCTA Acquisition

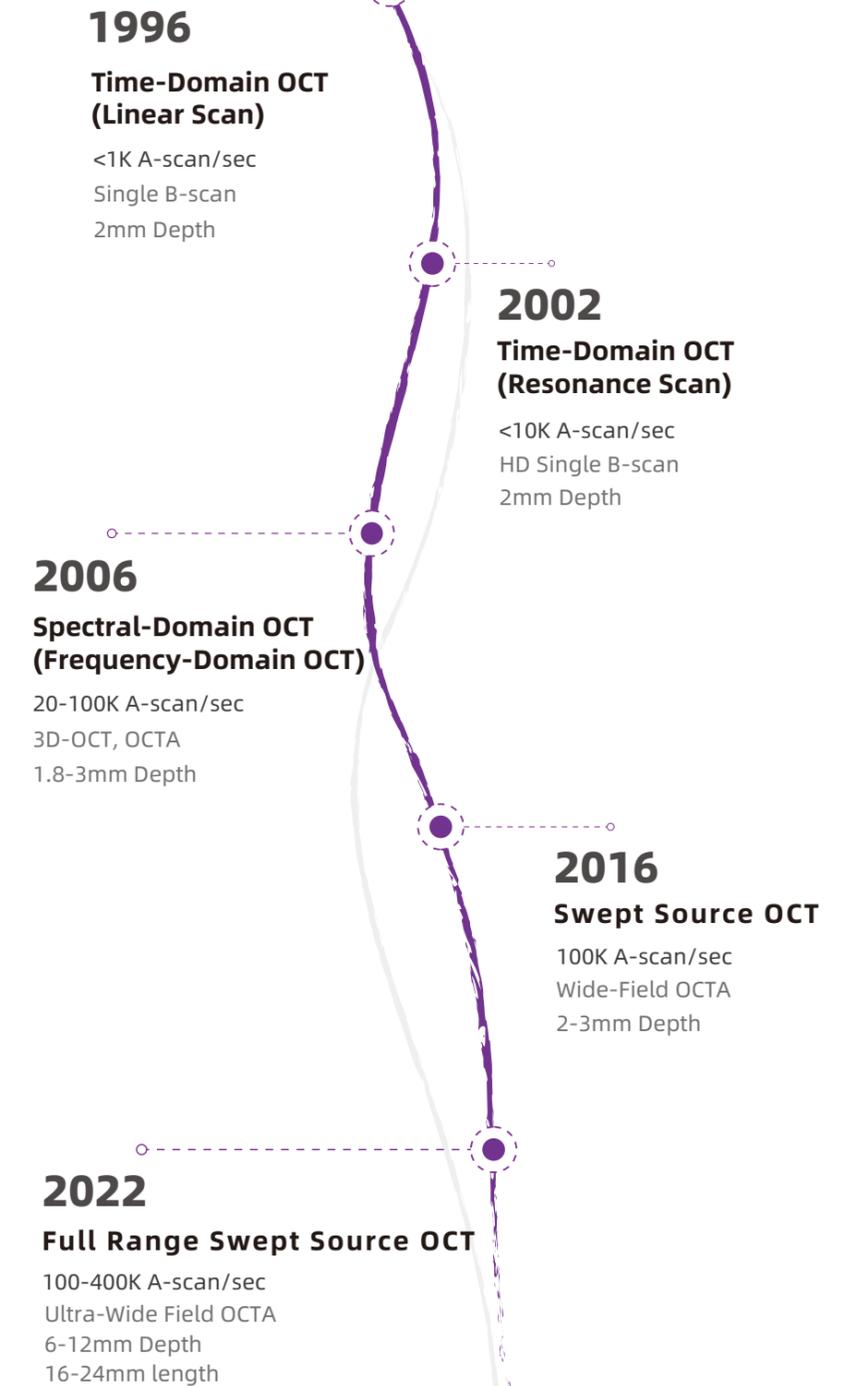
All-Slabs and All-Sizes
Quantification Analysis

No additional lens
Animal scan

Multi Platforms 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.



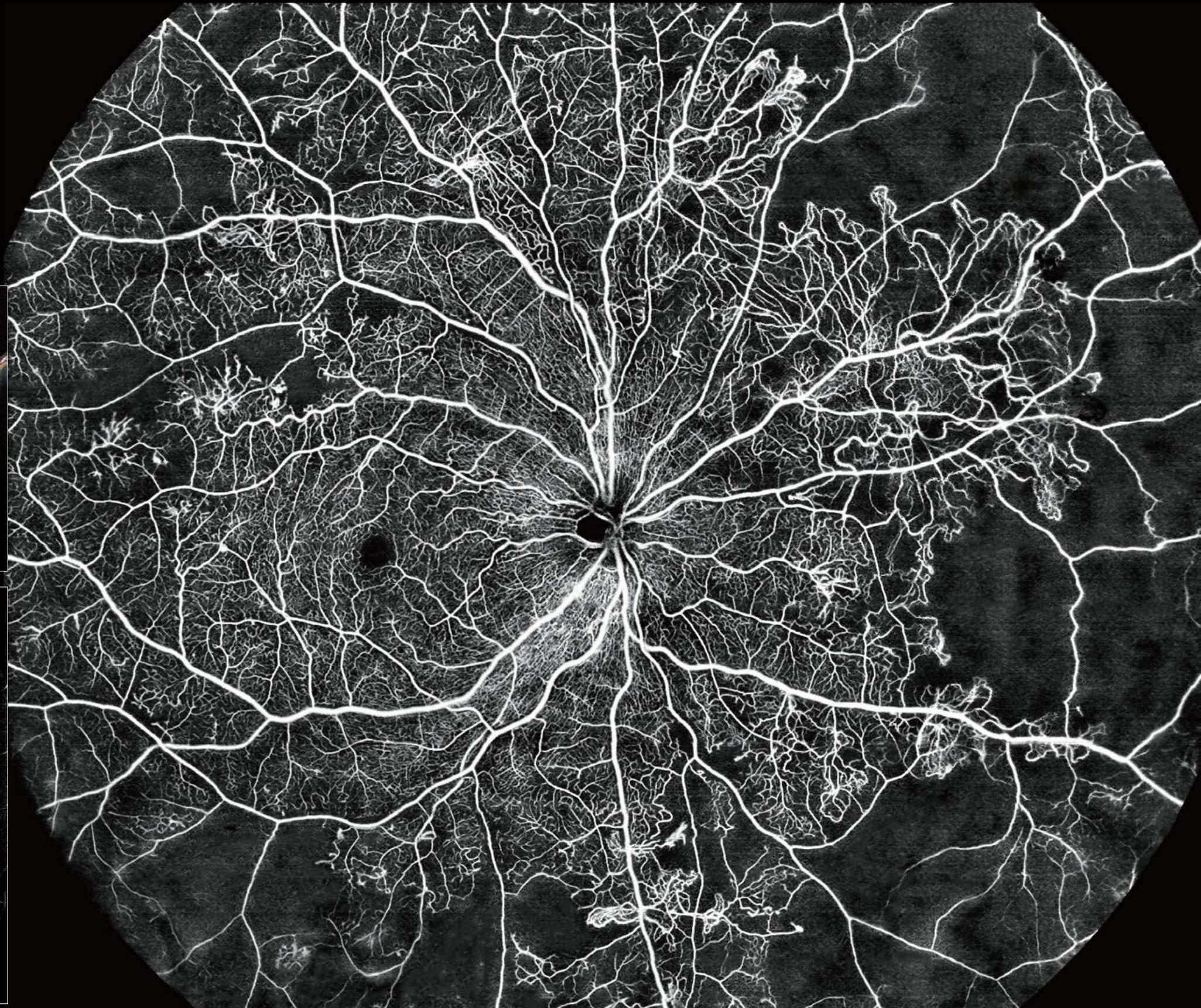
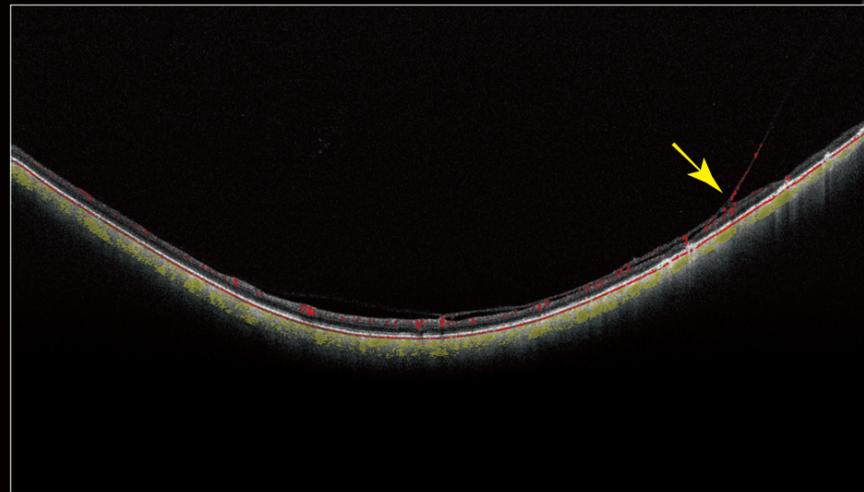
Find More Details with Single Capture

10 Billion maximal voxels

24X20mm ultra-wide field OCTA

1536x1280 ultra-high resolution

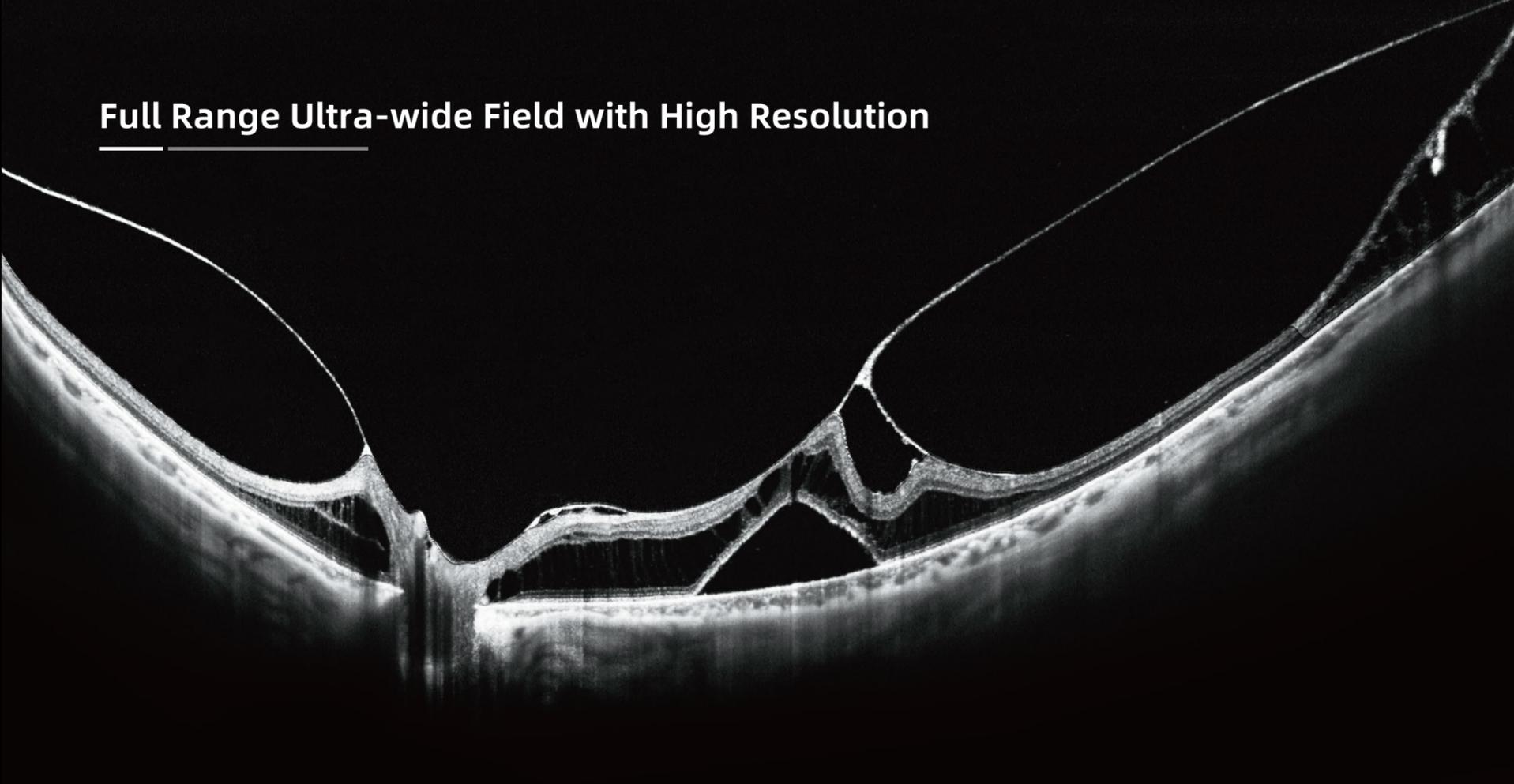
Fast acquisition speed (7-15 seconds)



Neovascular membrane (vitreous slab)

Proliferative diabetic retinopathy (PDR)

Full Range Ultra-wide Field with High Resolution

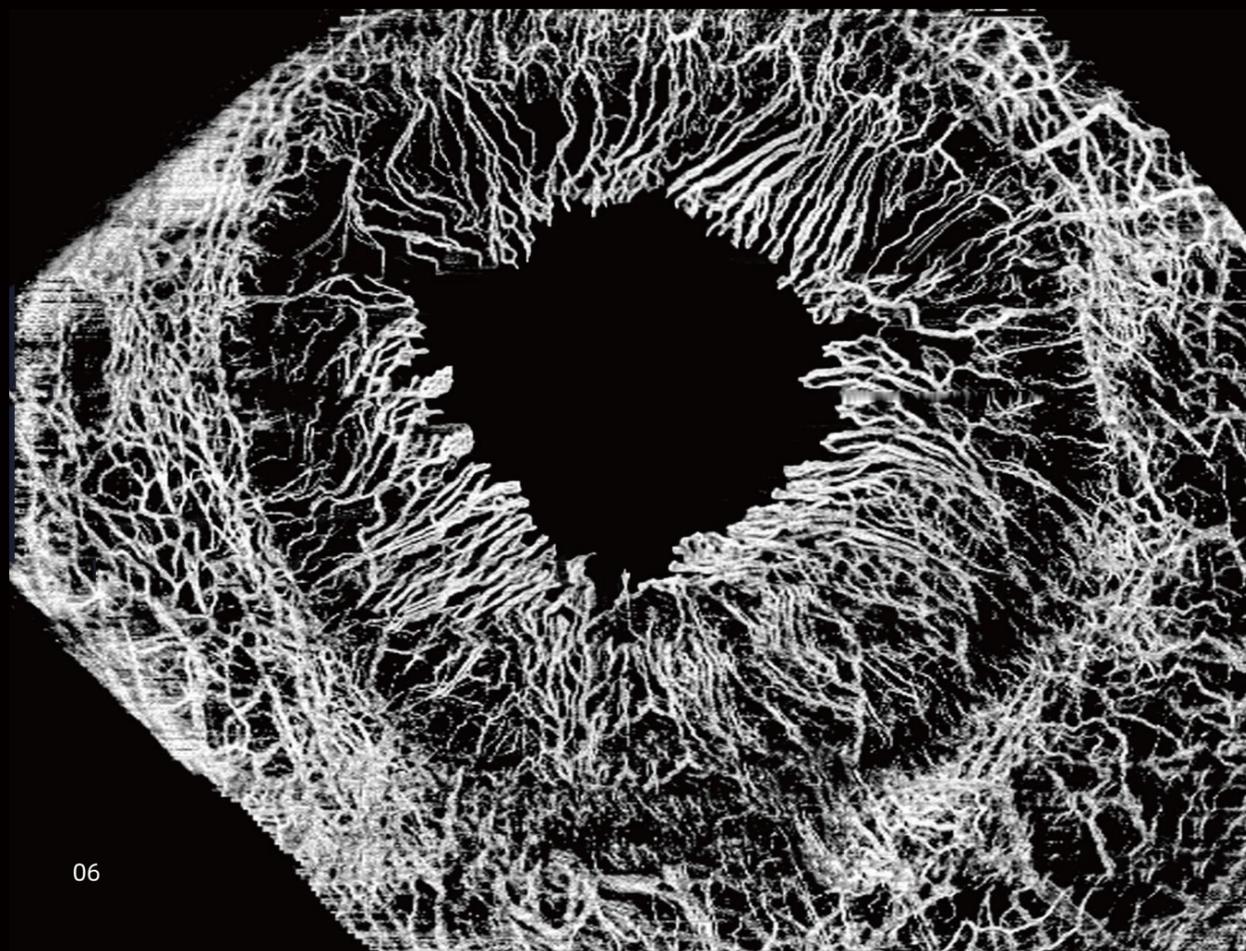


24mm length, 6mm scan depth | Vitreomacular traction (VMT)

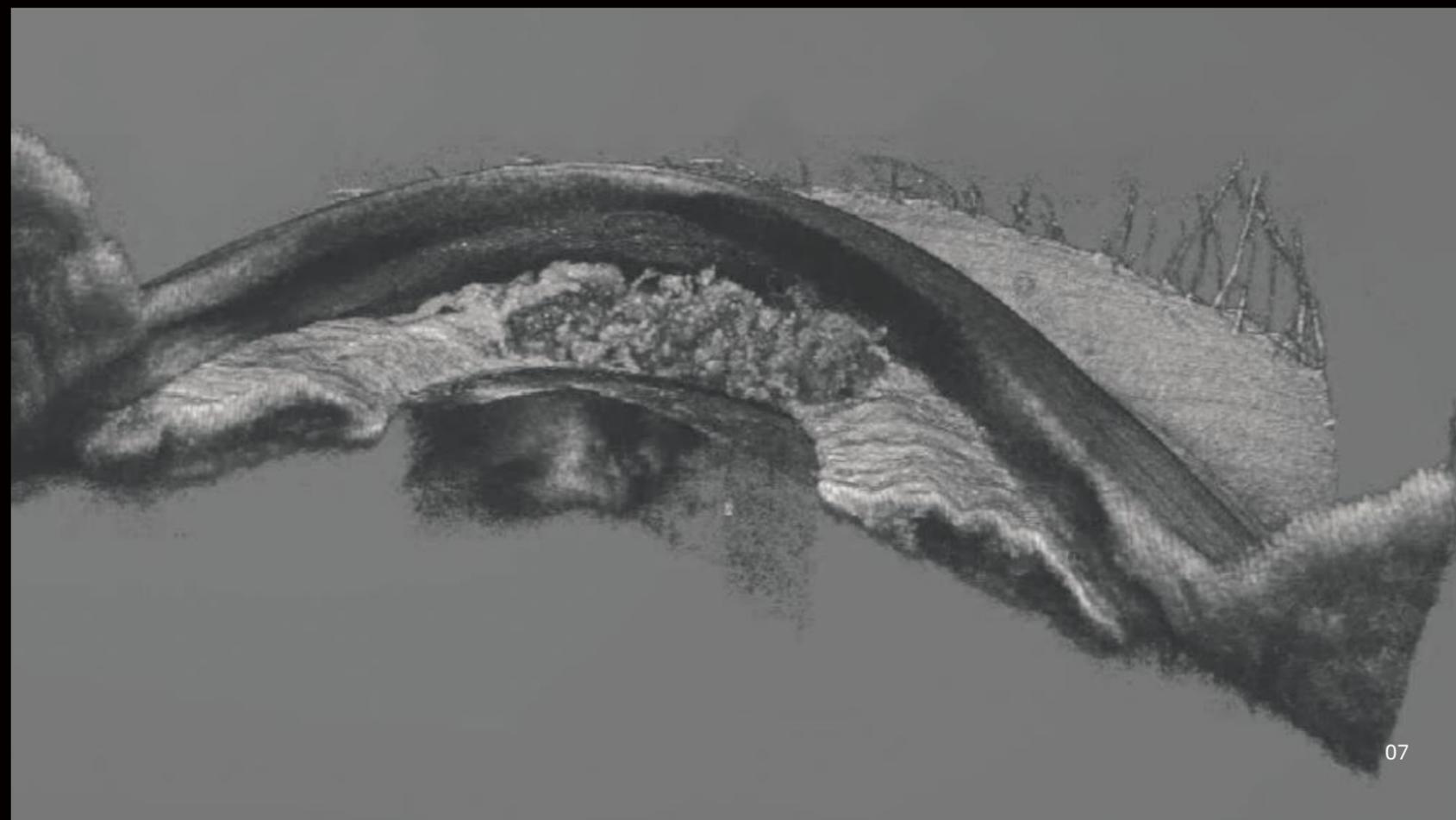


SLO fundus image | Vitreomacular traction (VMT) (same patient with left)

AS OCTA | Corneal neovascularization

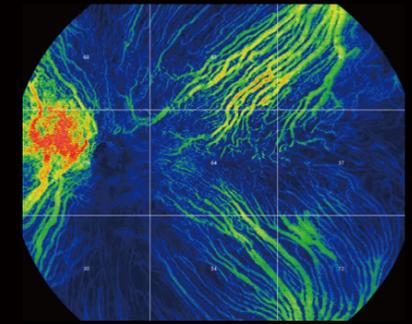
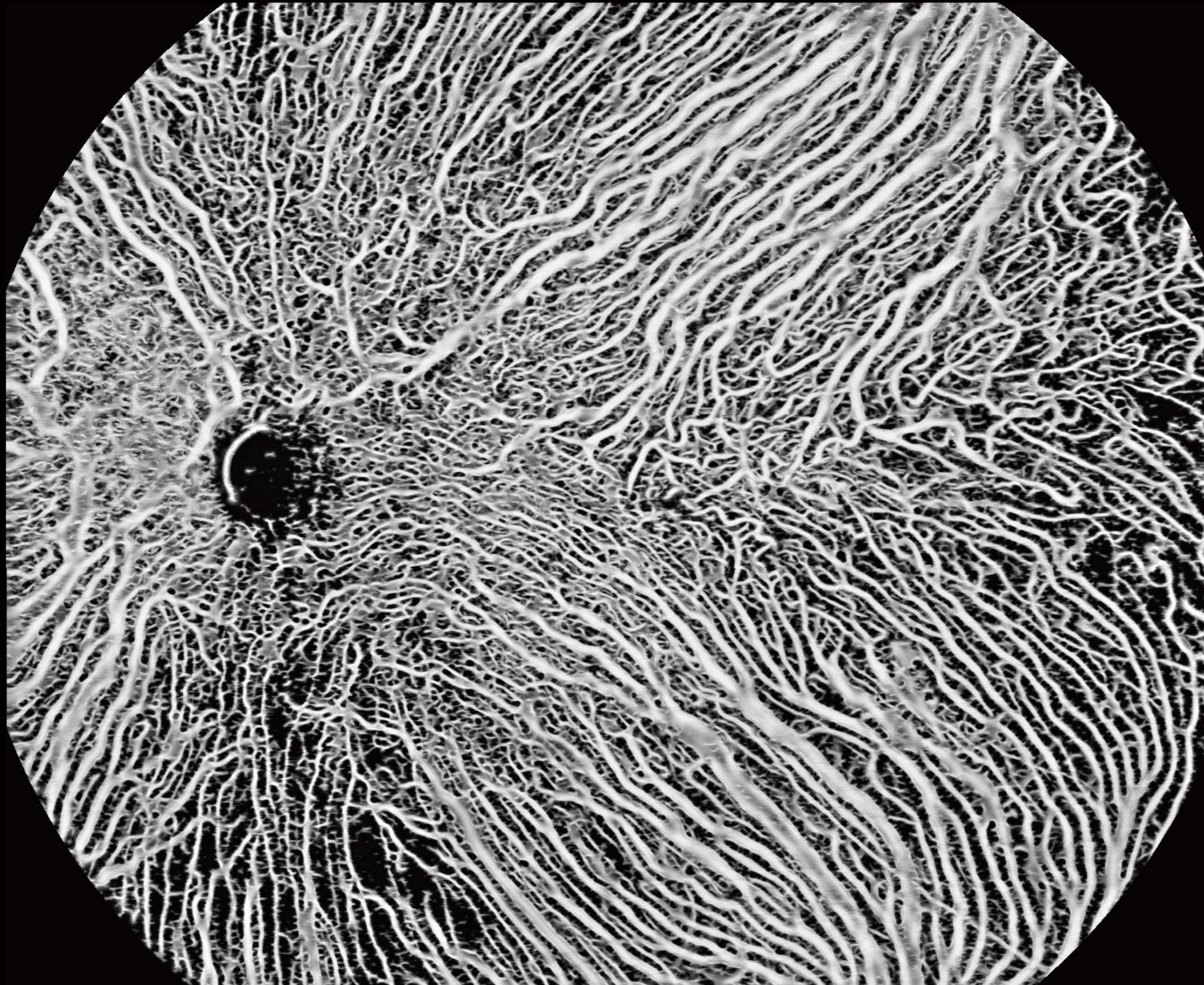


AS 3D reconstruction | Iridoschisis

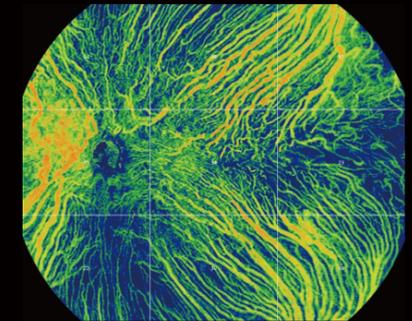


Reveal the Undiscovered

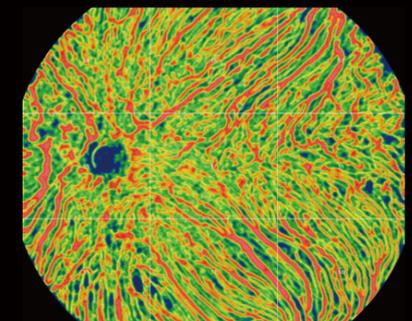
Ultra-wide field OCTA for Choroid with quantification parameters



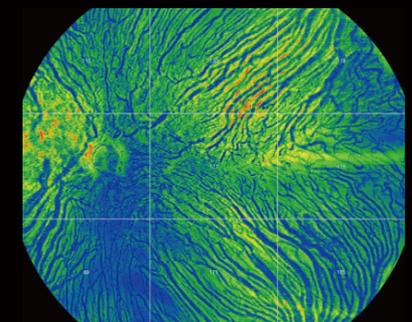
Choroid Vessel Volume ratio (CVV/a)



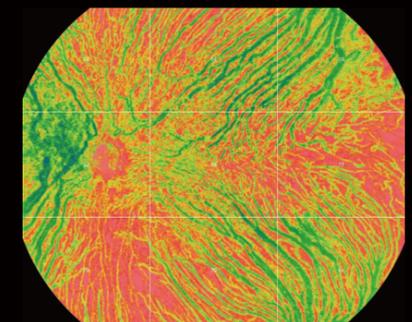
Choroid Vessel Index (3D-CVI)



Choroid Vessel Density (2D)



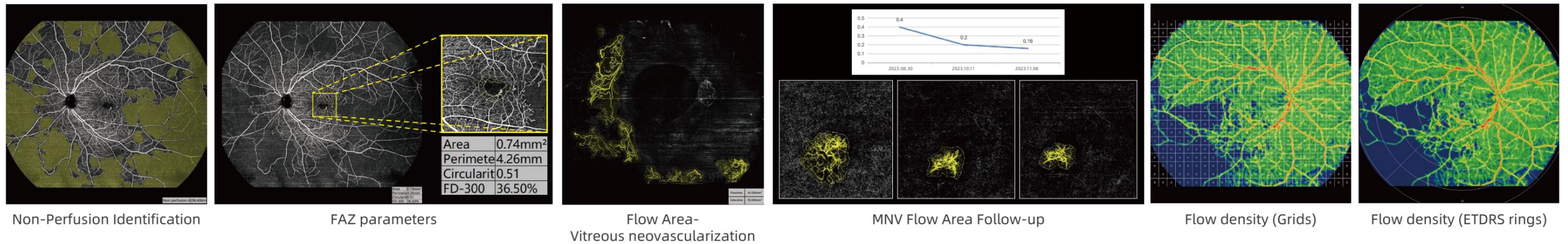
Choroidal Stroma Volume ratio (CSV/a)



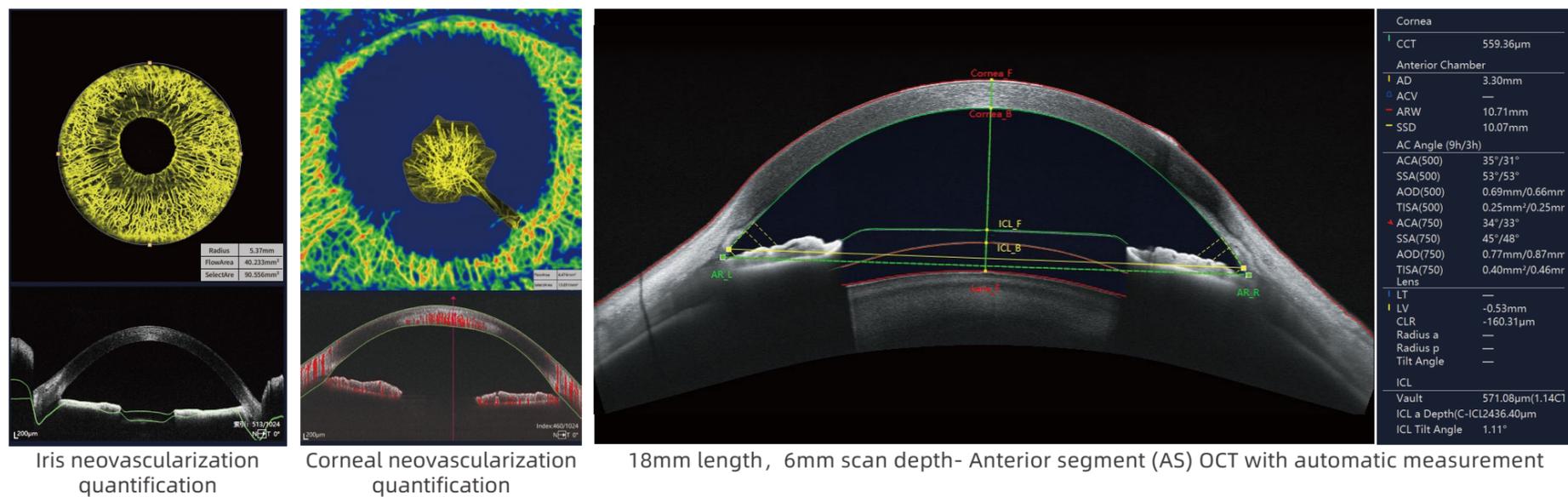
Choroidal Stroma Index (CSI)

Comprehensive Quantitative Analysis

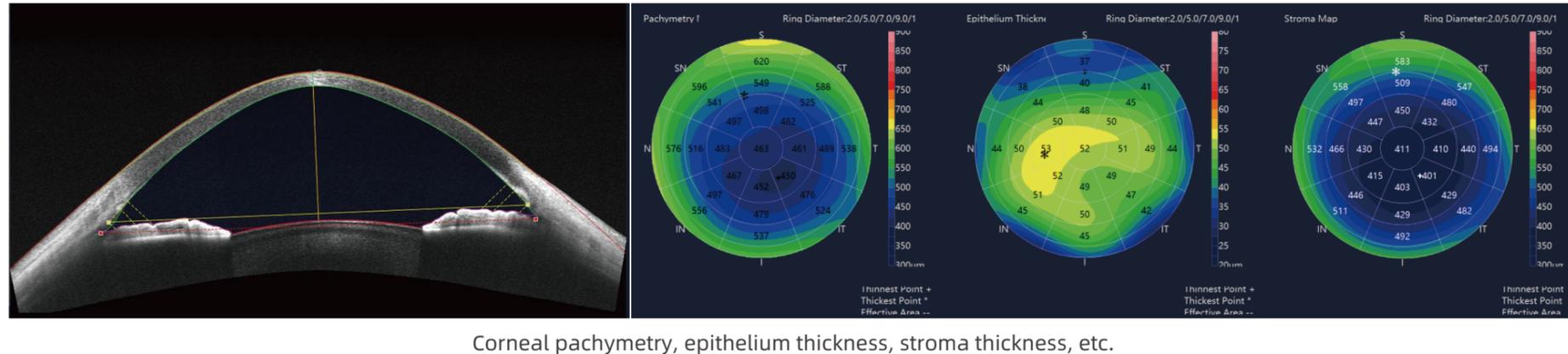
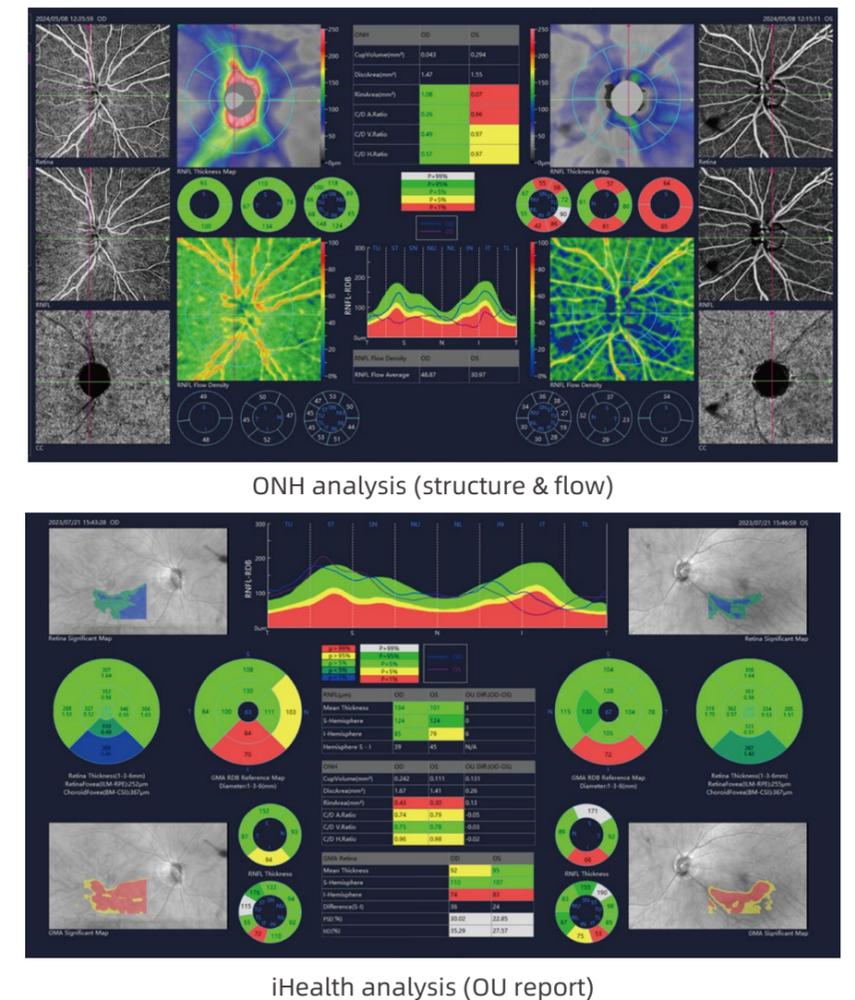
Retinal blood flow with quantification



AS OCT with quantization and parameters



Comprehensive glaucoma analysis

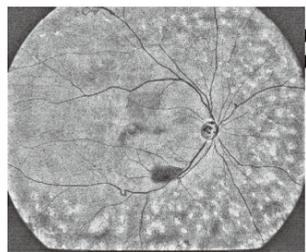


Innovation.

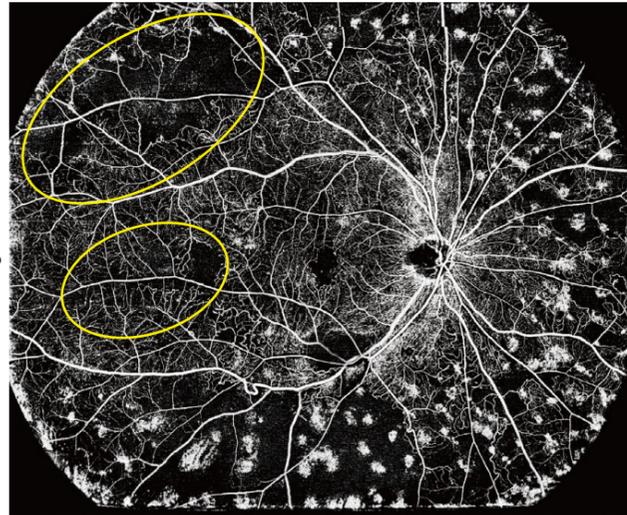
iSpot

Precision and convenient OCTA-guided photocoagulation.

Superficial retina OCTA image detects NPA



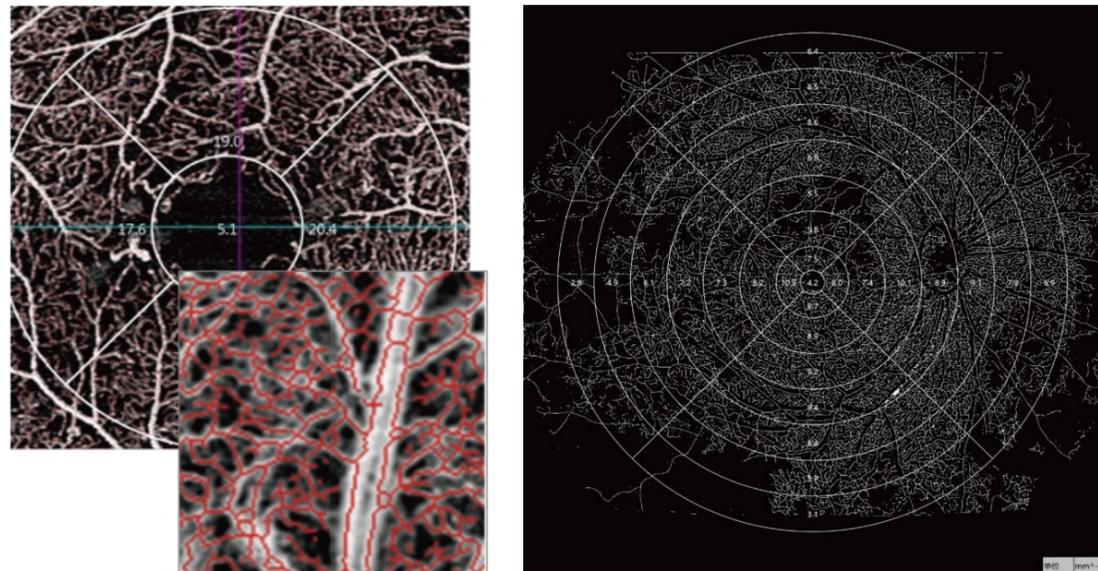
En face image of outer retina shows laser spots



Non-perfusion areas with insufficient laser are clearly identified

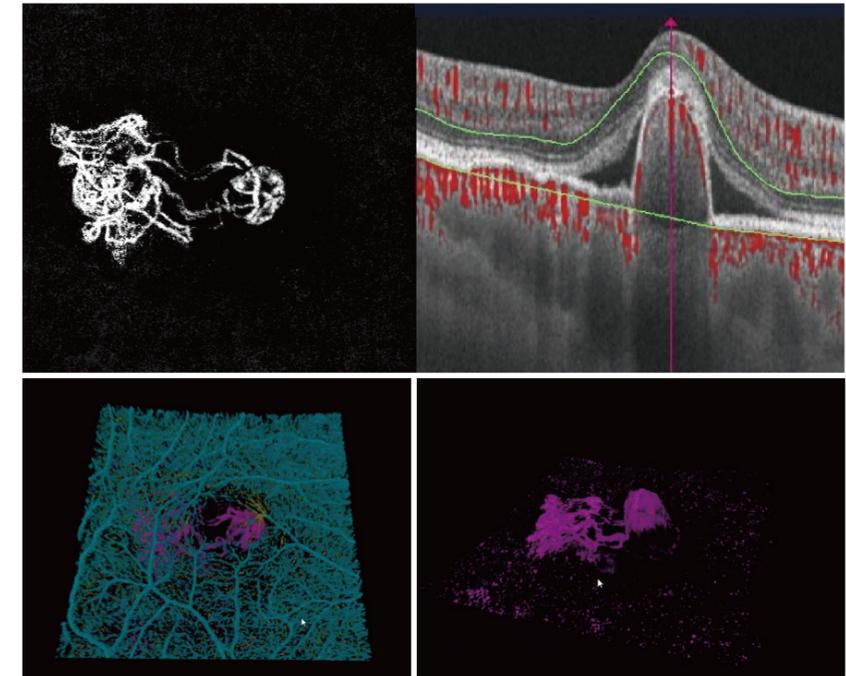
Vessel Skeleton Density (VSD)

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.



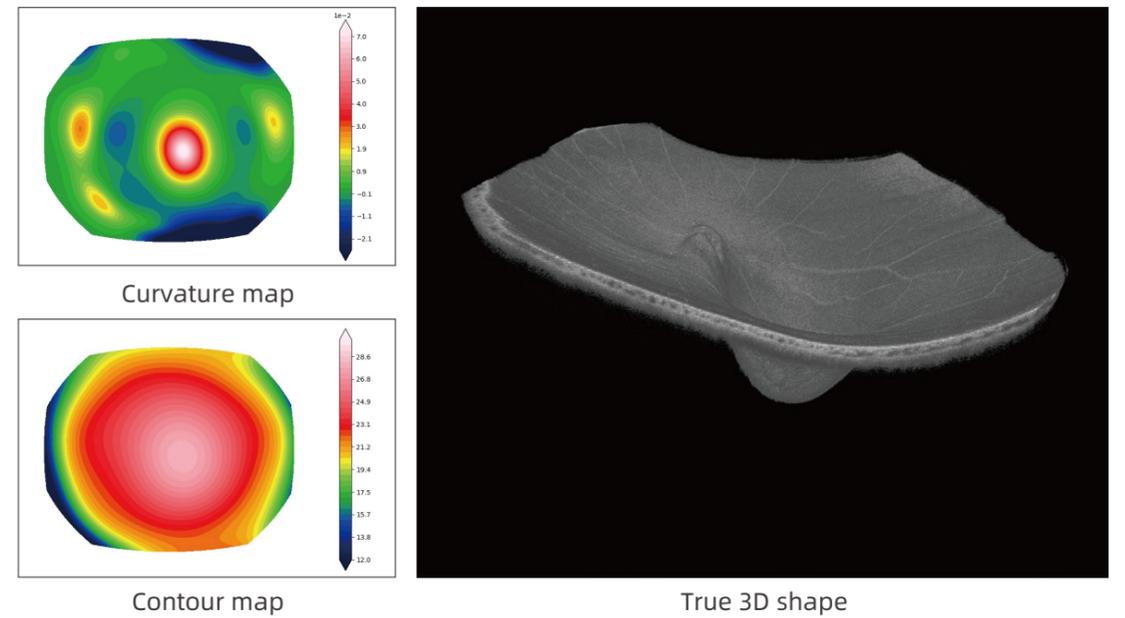
3D OCTA

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.

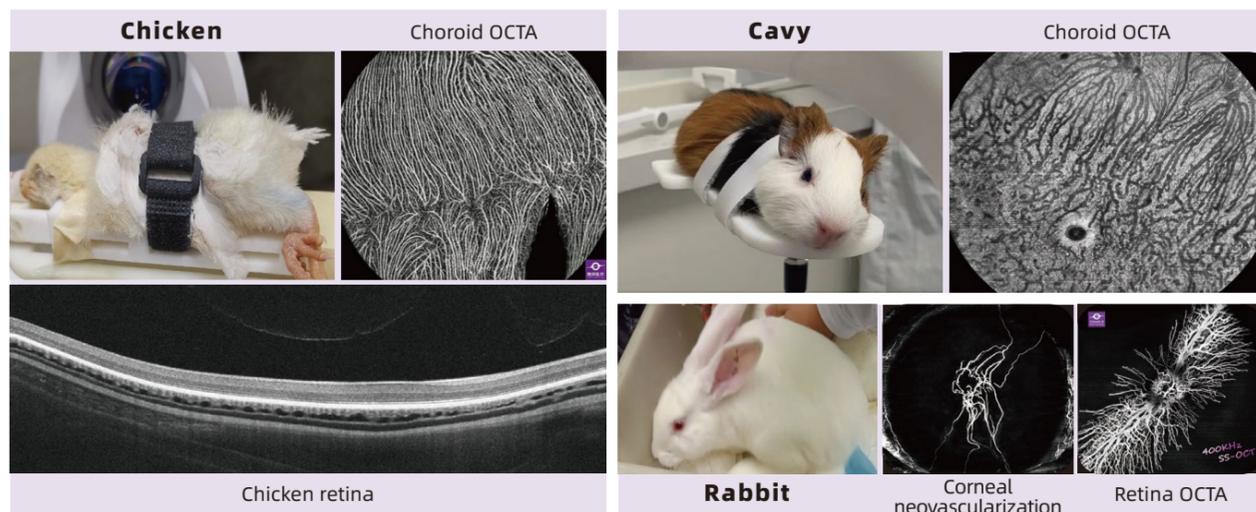
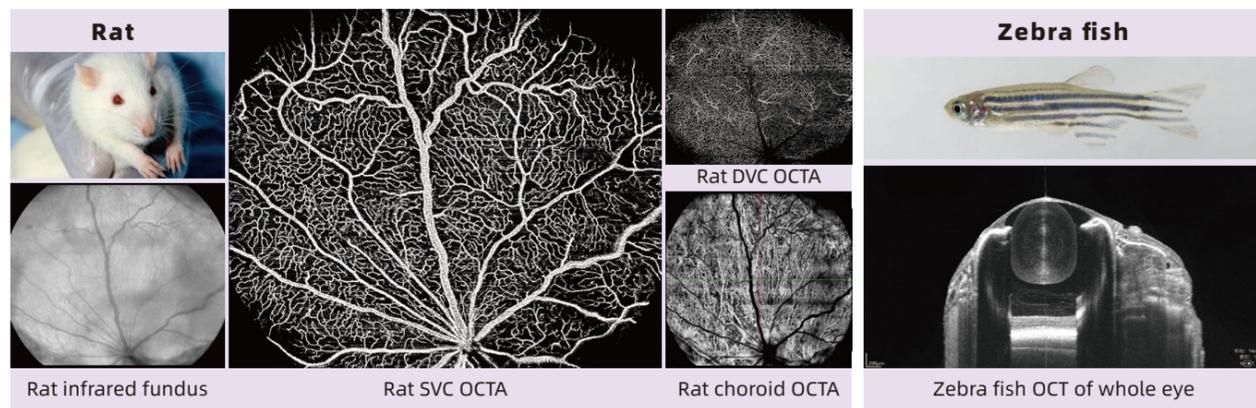
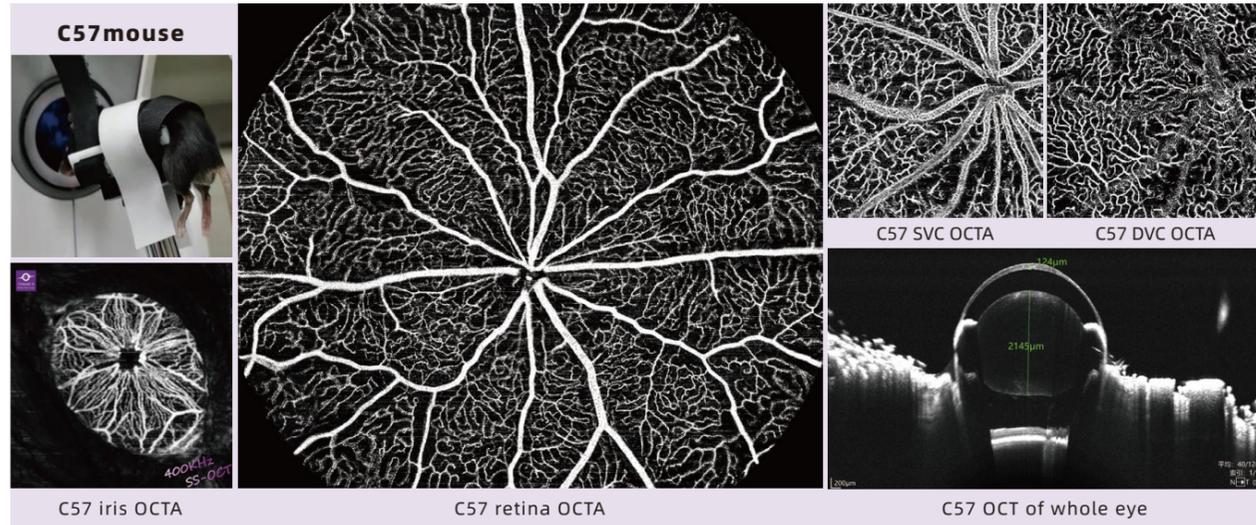


Exploration.

Animal Study

No extra lens needed Aquisition time **less than 12s** 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.

