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)	26mm-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	☑
AS panoramic parameters	☑
Thickness/volumn measurement (retina)	☑
Thickness/volumn measurement (choroid)	☑
Glaucoma analysis (GMA, ONH, etc.)	☑
Blood flow quantification (retina)	☑
Blood flow quantification (choroid)	☑
Blood flow quantification (optic disk)	☑
Blood flow quantification (AS) (optional)	☑
Posterior curvature	☑
3D structure	☑
3D vessel	☑

TowardPi Medical Technology Ltd.

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E-mail：info@towardpi.com

TPGY01-YG-250k-S-20260203V1

TowardPi

250kHz | YAlkaid

Ultra-WideField Full-Range SS-OCT/OCTA

YAlkaid

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

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

250kHz
30x25mm
Ultra-WideField OCTA
Proprietary Choroid OCT Angiography
10 Billion Voxels
Ultra-High Resolution
1536x1280
Self-Innovated High-Speed Acquisition Card

YAlkaid

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

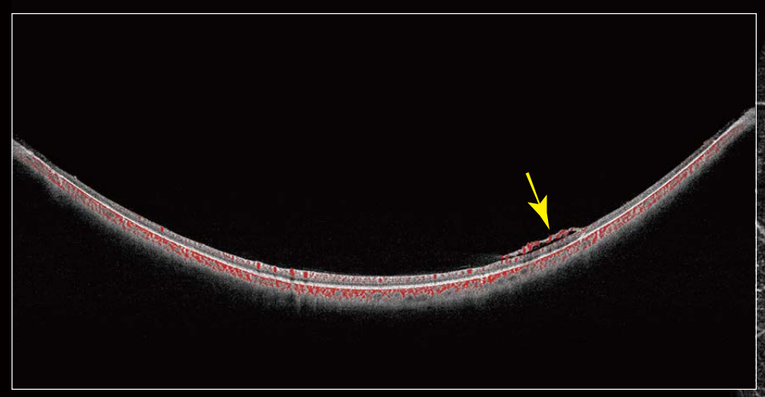
2006
Spectral-Domain OCT (Frequency-Domain OCT)
20-100K A-scan/sec
3D-OCT, OCTA
1.8-3mm Depth

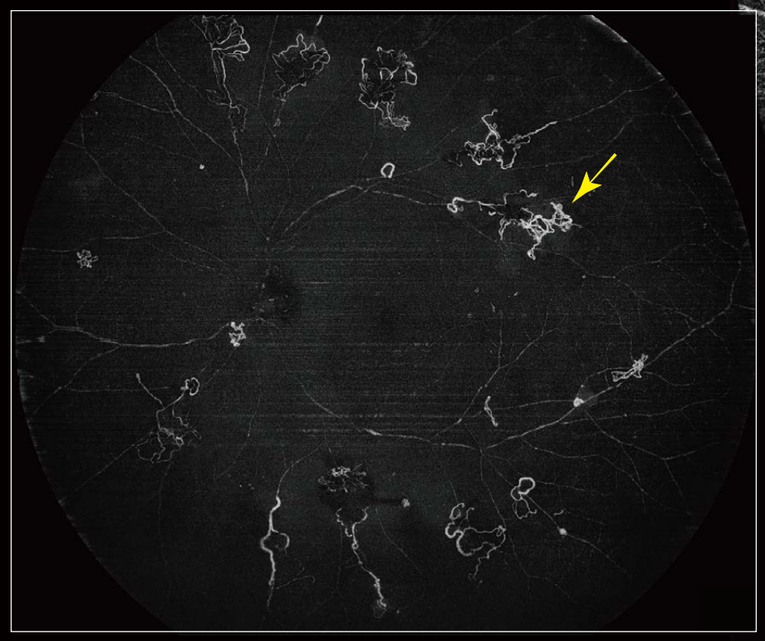
2016
Swept Source OCT
100K A-scan/sec
Wide-Field OCTA
2-3mm Depth

2022
Full-range Swept Source OCT
100-400K A-scan/sec
Ultra-wide-field OCTA
6-12mm Depth
16-24mm length

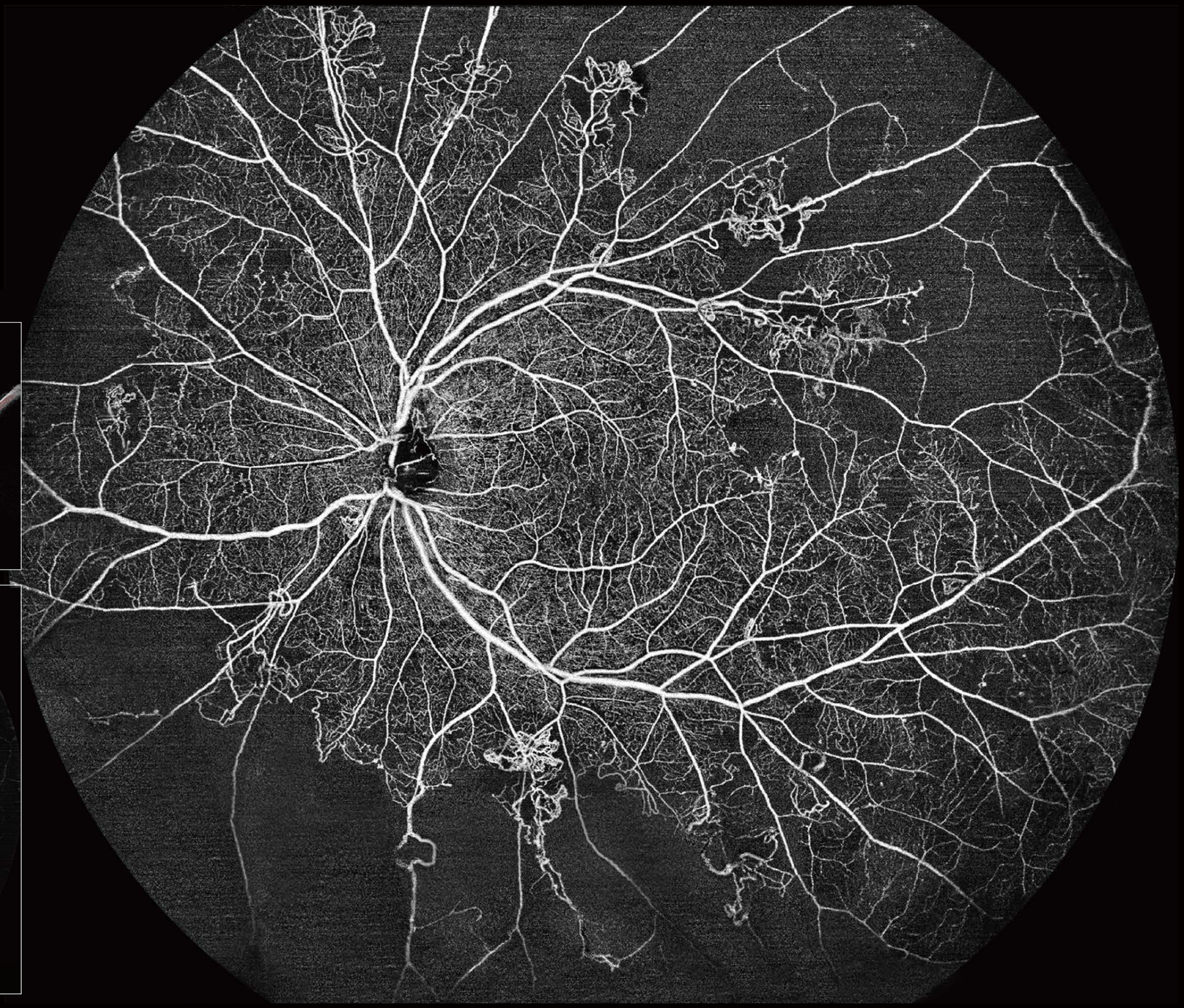
Find More Details with Single Capture

- 10 Billion maximal voxels
- 30x25mm ultra-wide-field OCTA
- 1536x1280 ultra-high resolution
- Fast acquisition speed





Neovascular membrane (vitreous slab)

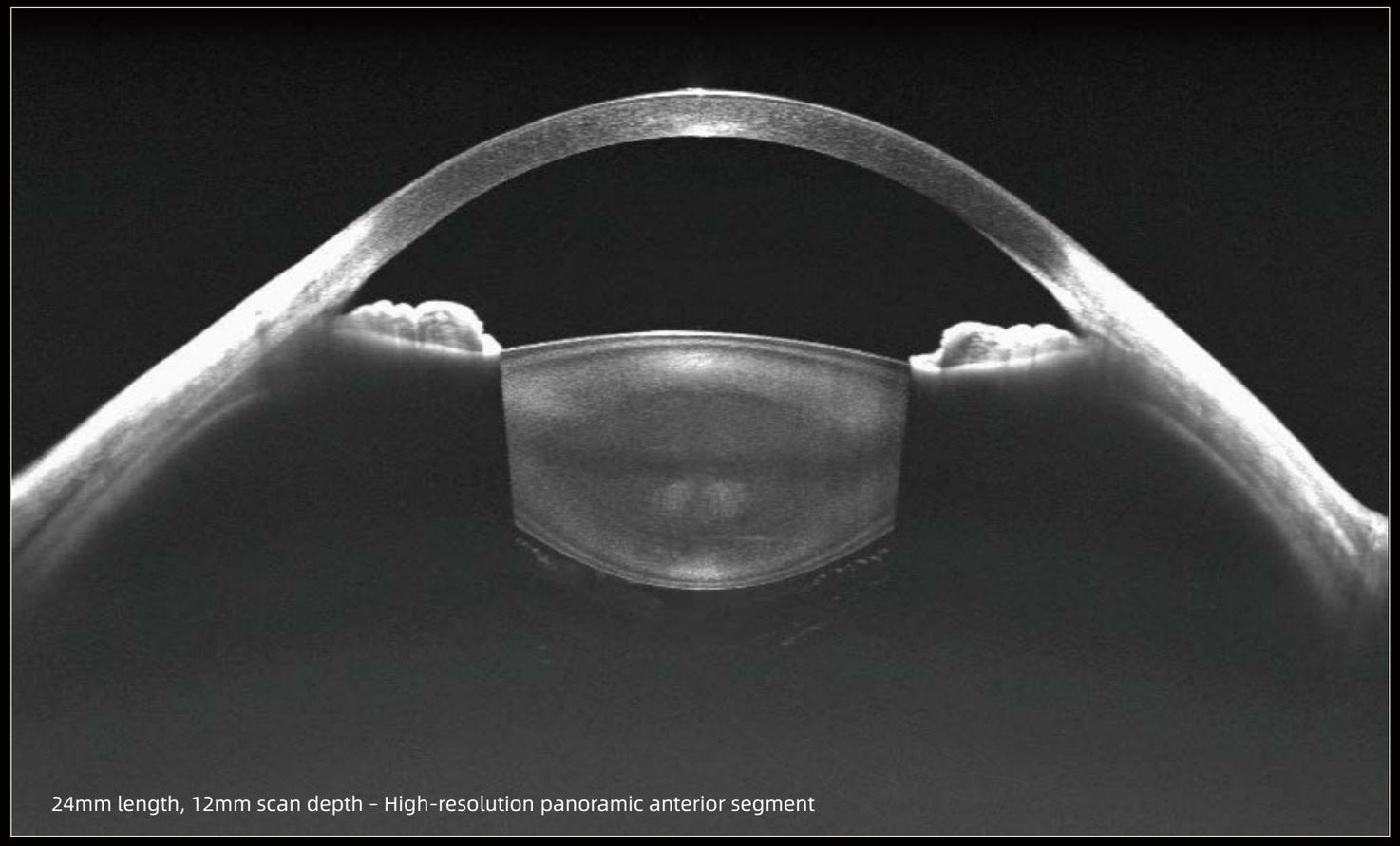


Proliferative diabetic retinopathy (PDR)

High-resolution Imaging with Ultra-deep Depth

06

24mm length, 12mm scan depth - Pan retinal Imaging



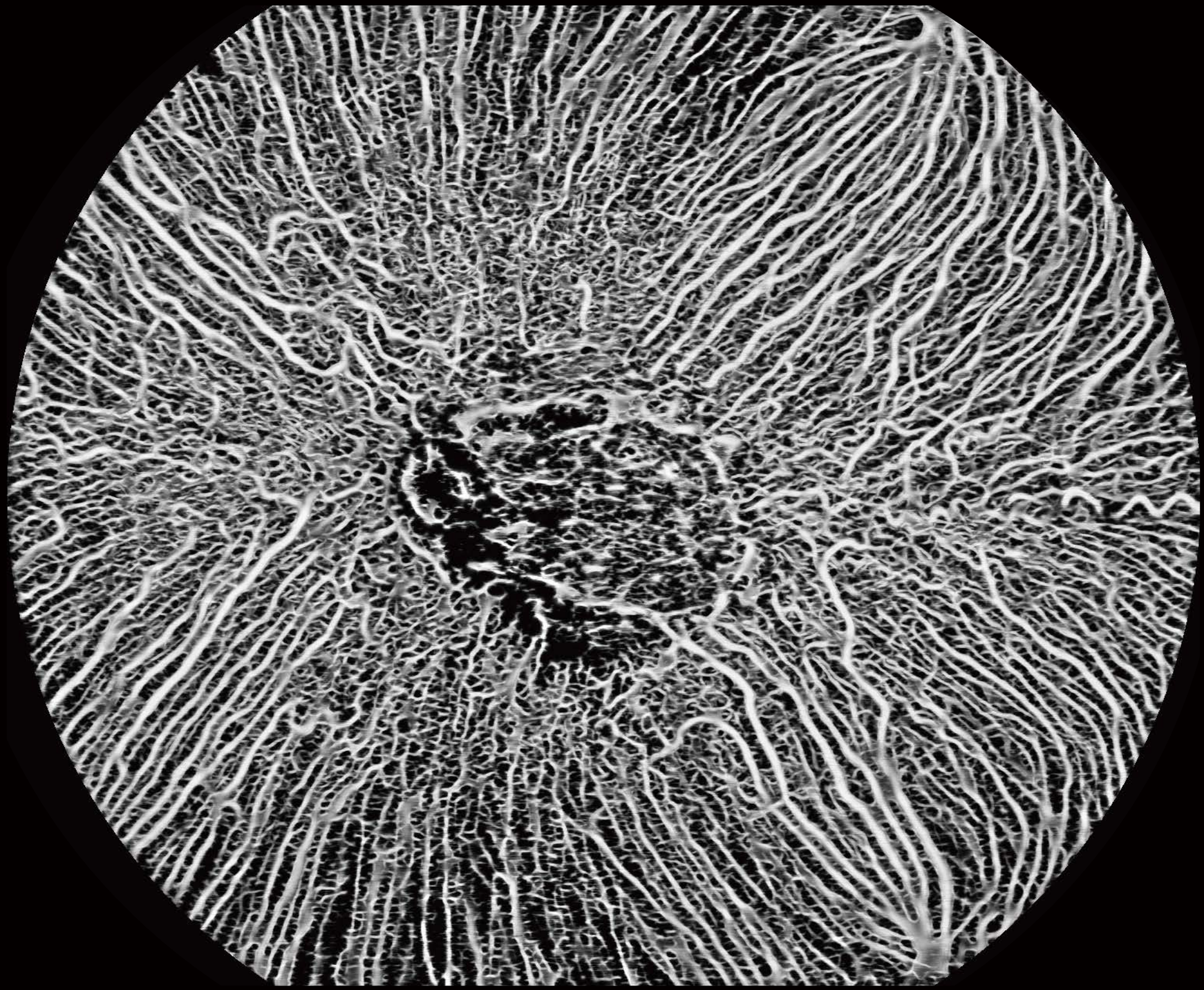
24mm length, 12mm scan depth - High-resolution panoramic anterior segment

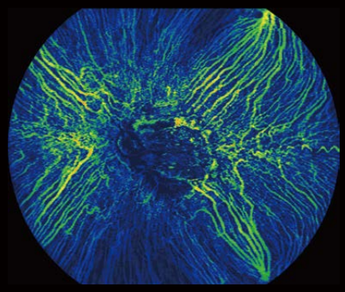
3D Reconstruction of AS | Iridoschisis

07

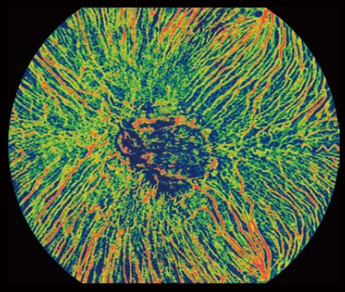
Reveal the Undiscovered

Ultra-widefield OCTA for Choroid with quantification parameters

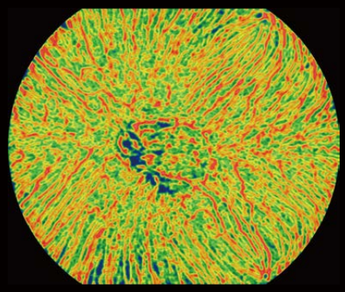




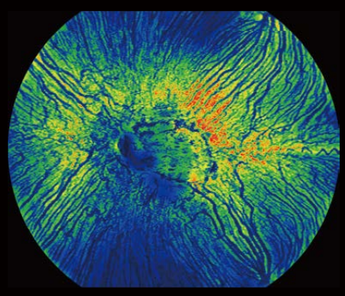
Choroid Vessel Volume ratio (CVV/a)



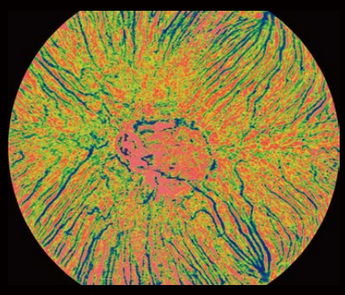
Choroid Vessel Index (3D-CVI)



Choroid Vessel Density（2D）



Choroidal Stroma Volume ratio (CSV/a)

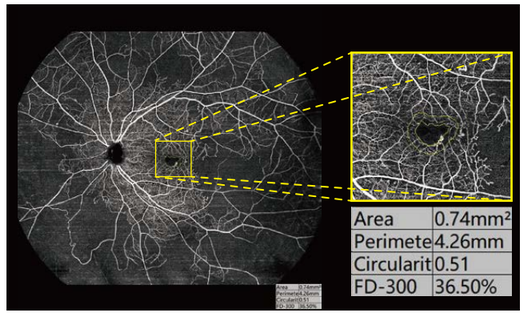


Choroidal Stroma Index (CSI)

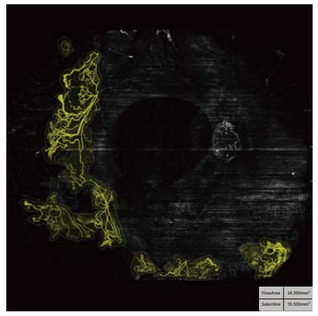
Comprehensive Quantitative Analysis

Retinal blood flow with quantification

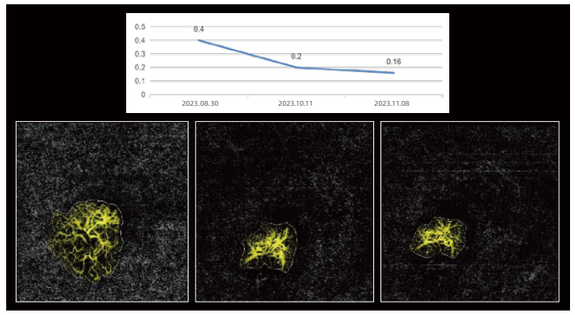
Non-Perfusion Identification



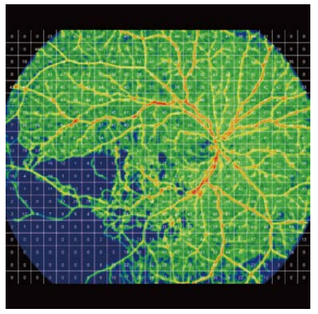
FAZ parameters



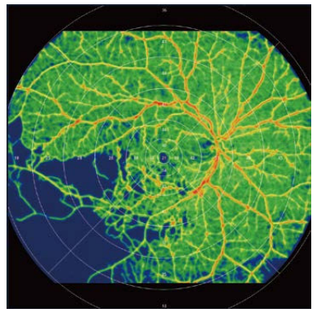
Flow Area-
Vitreous neovascularization



MNV Flow Area Follow-up

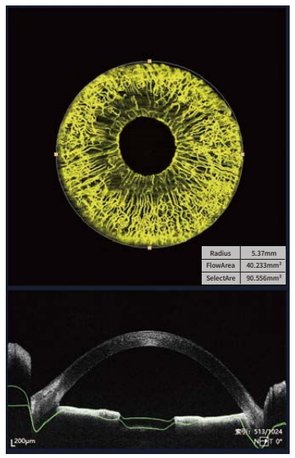


Flow density (Grids)

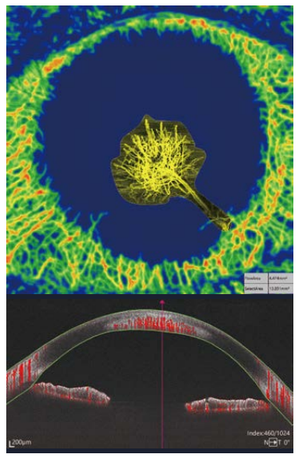


Flow density (ETDRS rings)

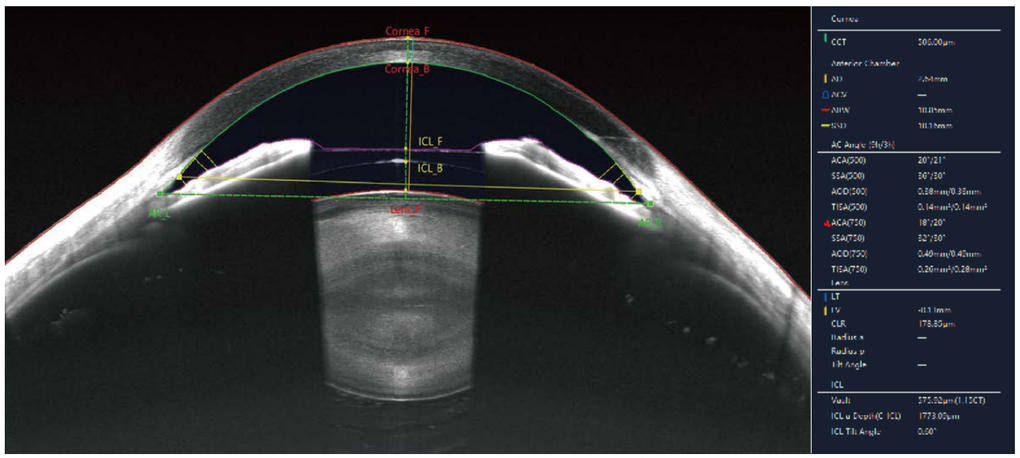
AS OCTA with quantization and parameters



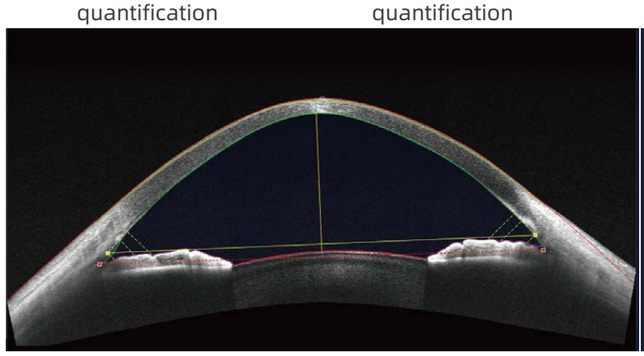
Iris neovascularization
quantification

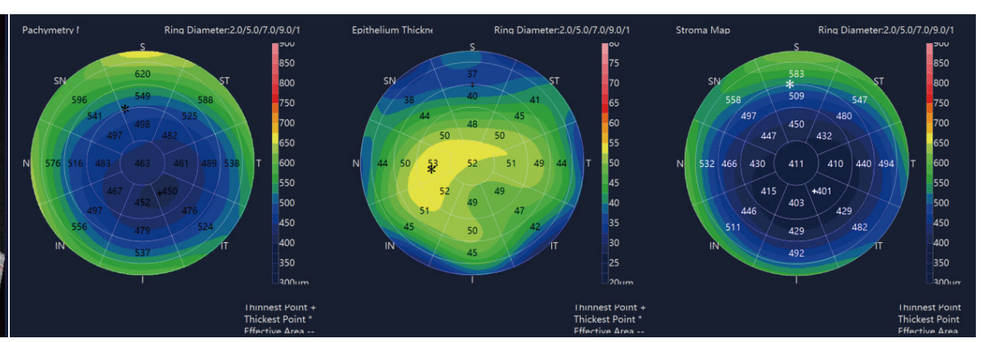


Corneal neovascularization
quantification



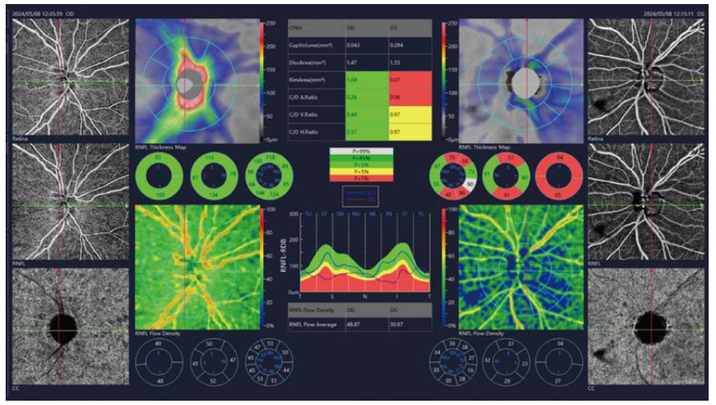
Anterior segment (AS) OCT with automatic measurement





Corneal pachymetry, epithelium thickness, stroma thickness, etc.

Comprehensive glaucoma analysis



ONH analysis (structure & flow)

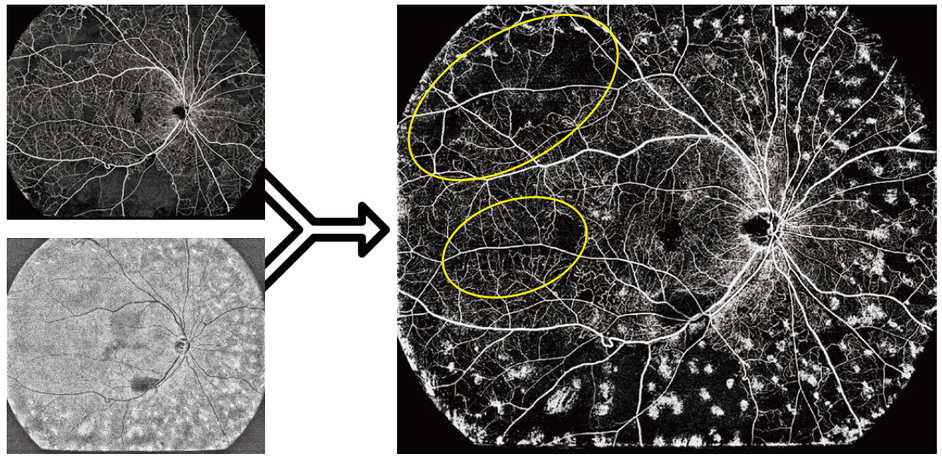
iHealth analysis (OU report)

Innovation.

iSpot

Precision and convenient OCTA-guided photocoagulation.

Superficial retina OCTA image detects NPA

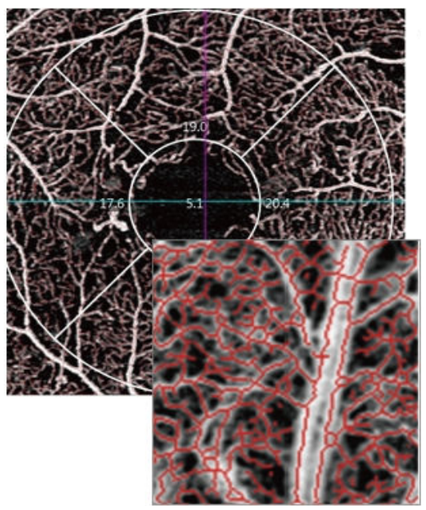


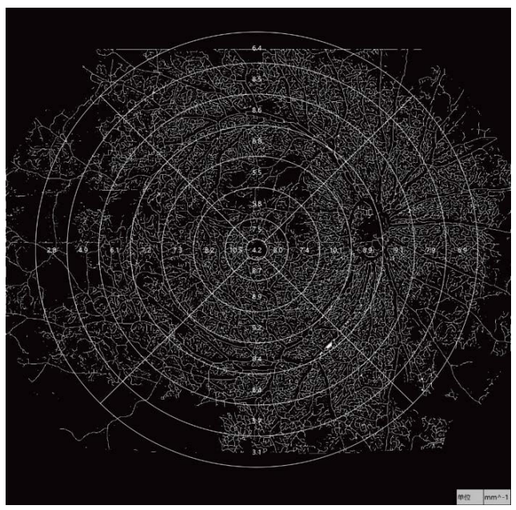
En face image of outer retina shows laser spots

Non-perfusion areas with insufficient laser are clearly identified

Vessel Skeleton Density（VSD）

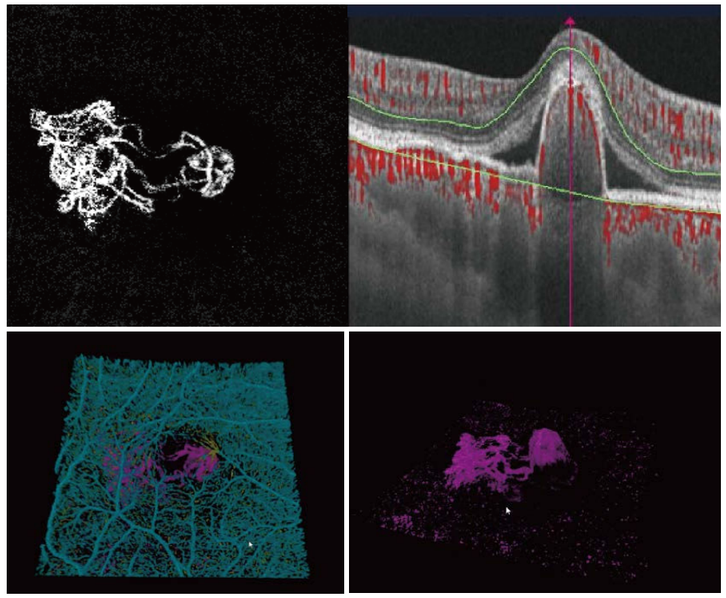
The ratio of the linear length in the region to the area of the region(mm-1) after the vessels are skeletalized. More sensitive to changes in the vessels number and less affected by vessel diameter.





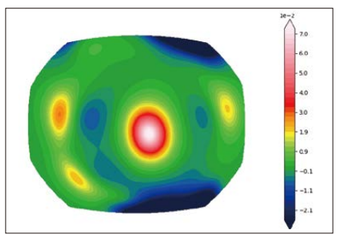
3D OCTA

visualization vessels in 3D reconstruction for customized layers.

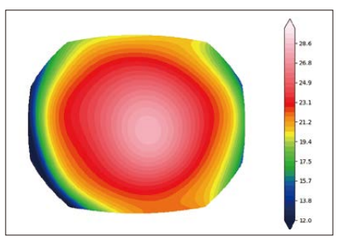


Retinal Morphology Trio

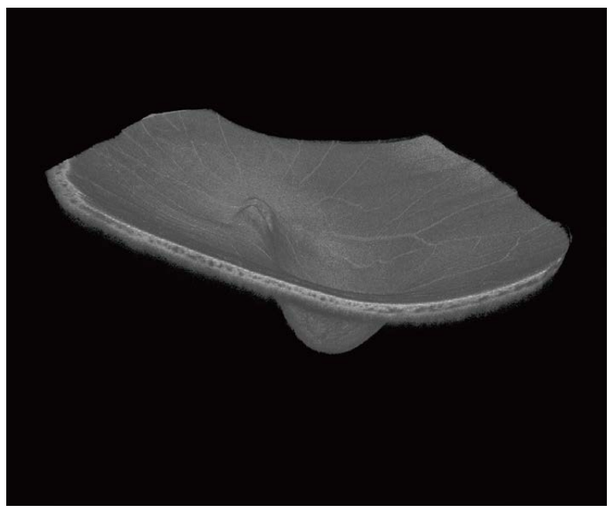
Restore the true shape of retina with built-in advanced algorithm based on 3D structure.



Curvature map



Height map



True 3D shape

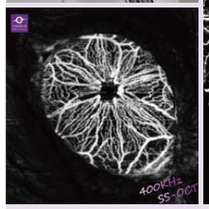
Exploration.

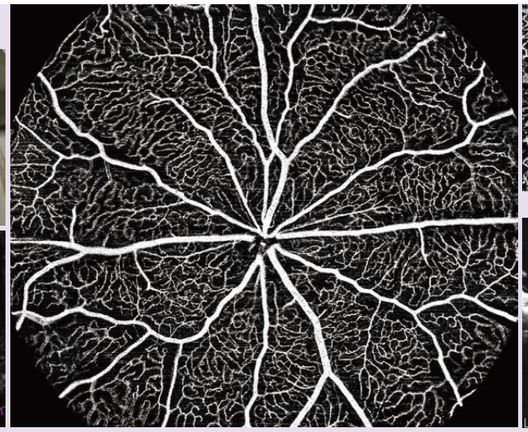
Animal Study

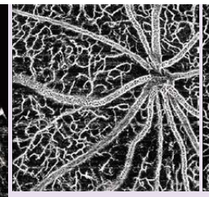
No extra lens needed — **Fast acquisition** — with comprehensive **quantifications**

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

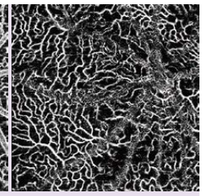
C57mouse



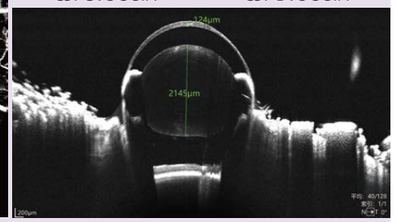




C57 SVC OCTA

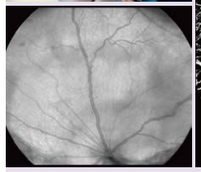


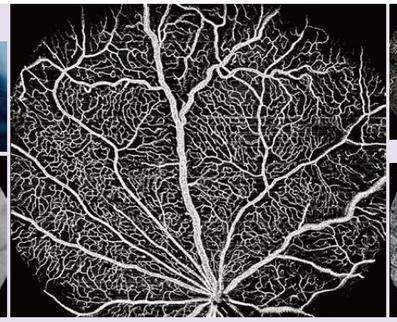
C57 DVC OCTA

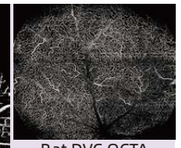


C57 iris OCTA — C57 retina OCTA — C57 OCT of whole eye

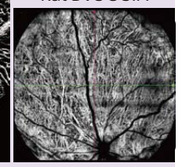
Rat



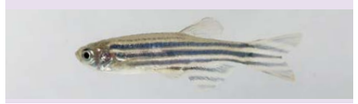


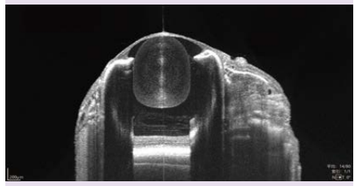


Rat DVC OCTA



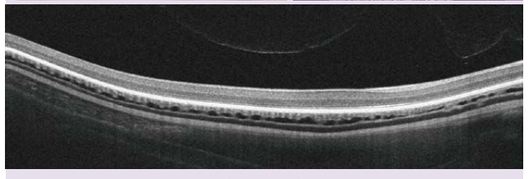
Zebra fish





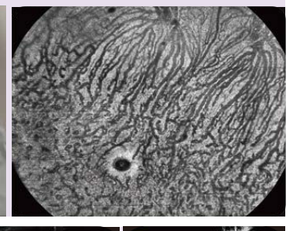
Rat infrared fundus — Rat SVC OCTA — Rat choroid OCTA — Zebra fish OCT of whole eye

Chicken — Choroid OCTA

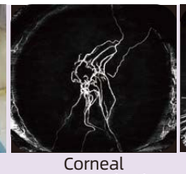


Chicken retina

Cavy — Choroid OCTA



Rabbit



Corneal neovascularization

Retina OCTA

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.