

Specifications

OCT Model	YG-100K Ultra	YG-100K Max
OCT optical source	Swept Source	
Center wavelength	1060nm	
OCT B-scan		
Scan speed	100,000 A-scans/sec	
Max. Length (posterior)	26mm	17mm
Max. Length (anterior)	24mm	
Scan depth (posterior)	14mm	12mm
Scan depth (anterior)	15mm	
Refractive adjustment range	-35D to +45D	-20D to +15D
Axial optical resolution	≤6μm	
Axial best digital resolution	1.9μm	
Transverse optical resolution	10μm	
Fundus Imaging		
Methodology	SLO	LSO
LSO wavelength	850nm	
LSO FOV	90°	60°
Minimum pupil diameter	2.0mm	
Eye tracking speed	128Hz	60Hz
OCT Angiography		
Max. Single scan size (anterior)	24mm×24mm	
Max. Single scan size (posterior)	18mm×18mm	16mm×16mm
Maximum resolution (single scan)	1024×1024	
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)	☑	
Posterior curvature	☑	
3D structure	☑	
3D vessel	☑	



YAlkaid

100kHz | Full Range SS-OCT/OCTA



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TPGY01-YG-100k-S-20260420

CE Marking under the EU MDR





18x18 mm
OCT Angiography

100 kHz
Self-Innovated High-Speed
Acquisition Card

Proprietary Choroid
OCT Angiography

YAlkaid

Full-range Swept-Source
OCT Technology

Self-Innovated High-Speed
Acquisition Card

Multi Functions

Proprietary Choroid
OCTA Algorithms

Comprehensive quantifications
for Anterior & Posterior

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.

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

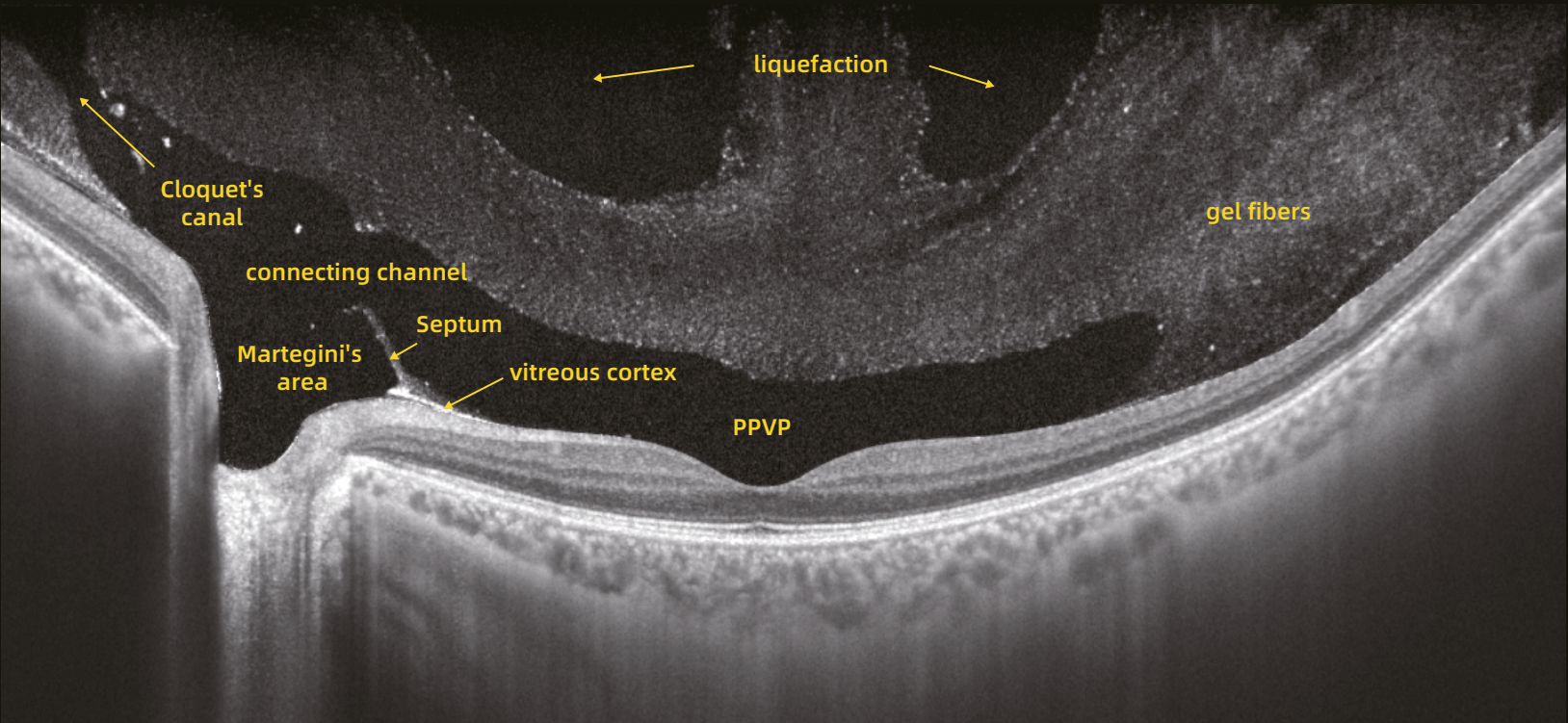
2022

Full-range Swept Source OCT

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

High-resolution Imaging with Full-range Swept Source OCT

Deep Depth High-resolution

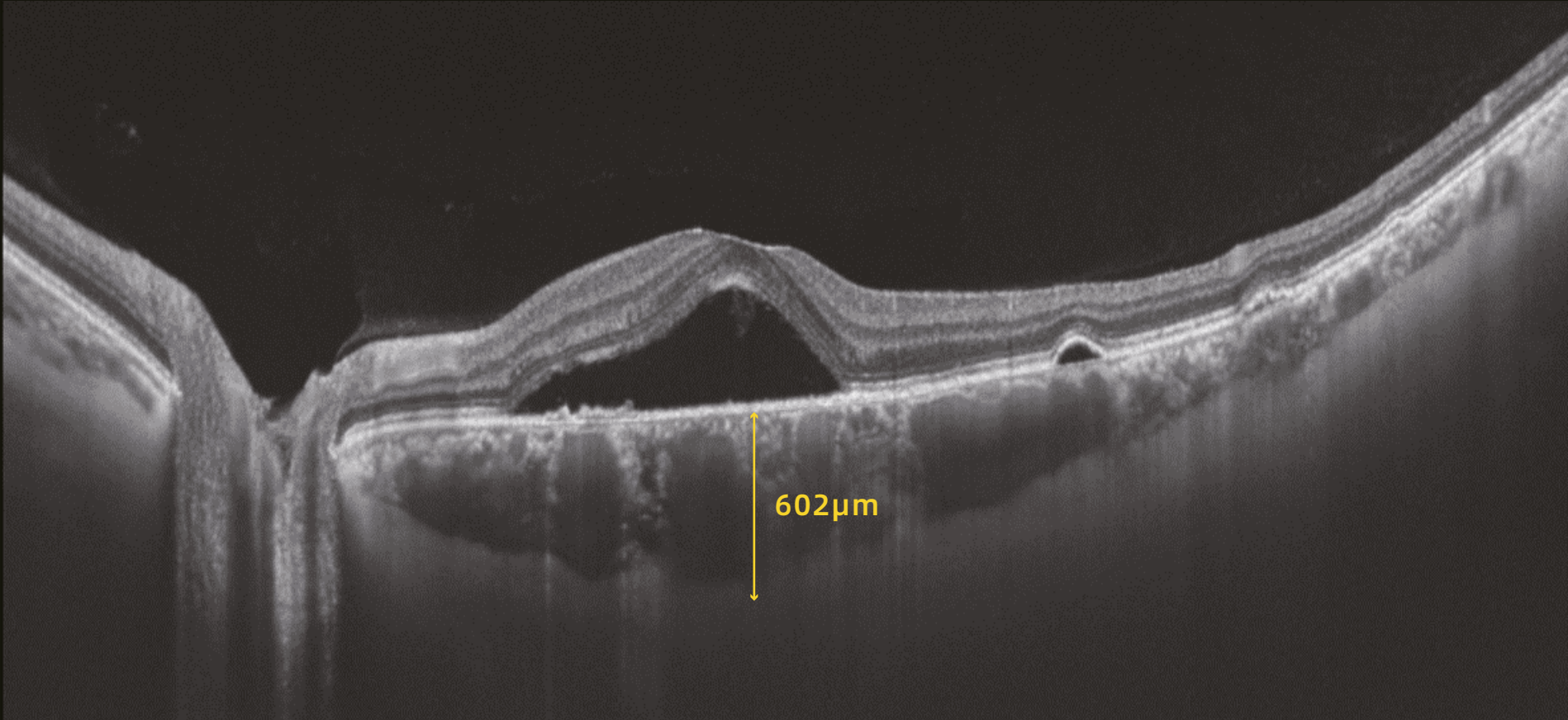


Normal Vireous

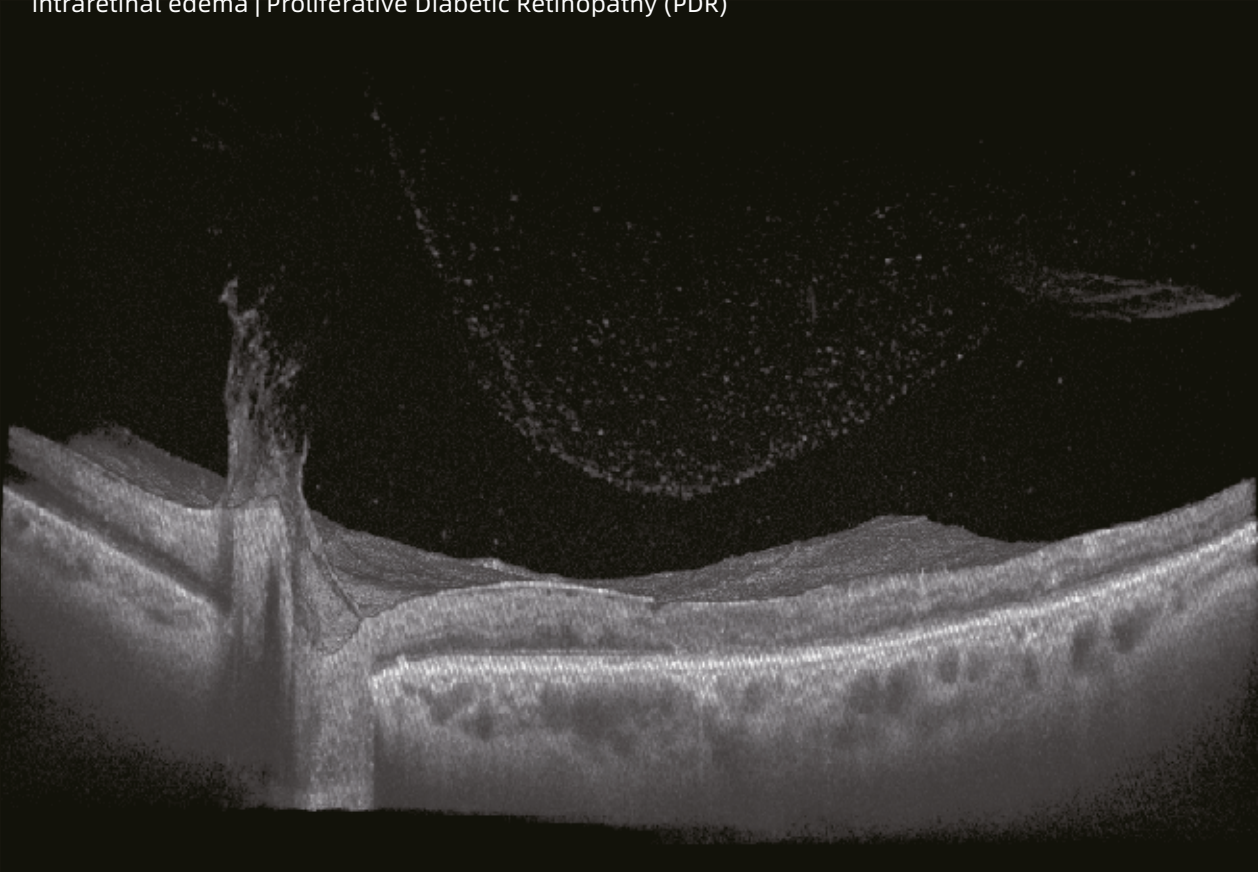


26mm length, 14mm scan depth

Whole Retinal and Choroidal Details | Central Serous Chorioretinopathy (CSC)

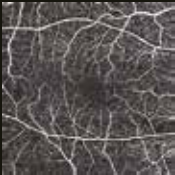


Vitreous opacity, vitreous-disc-traction, epiretinal hyperreflecion at macular and intraretinal edema | Proliferative Diabetic Retinopathy (PDR)

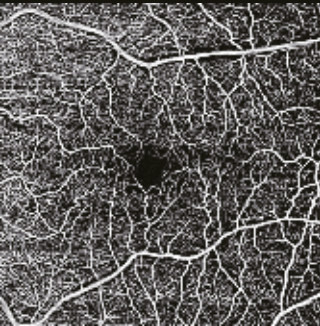


Full-range Swept Source OCT Angiography

Fast Non-invasive Efficient



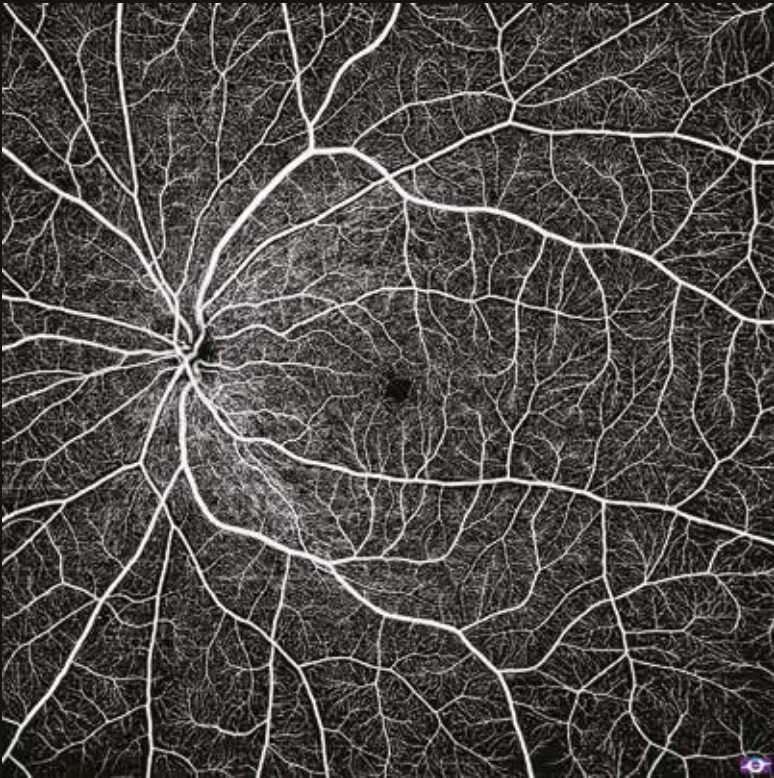
3×3mm OCTA



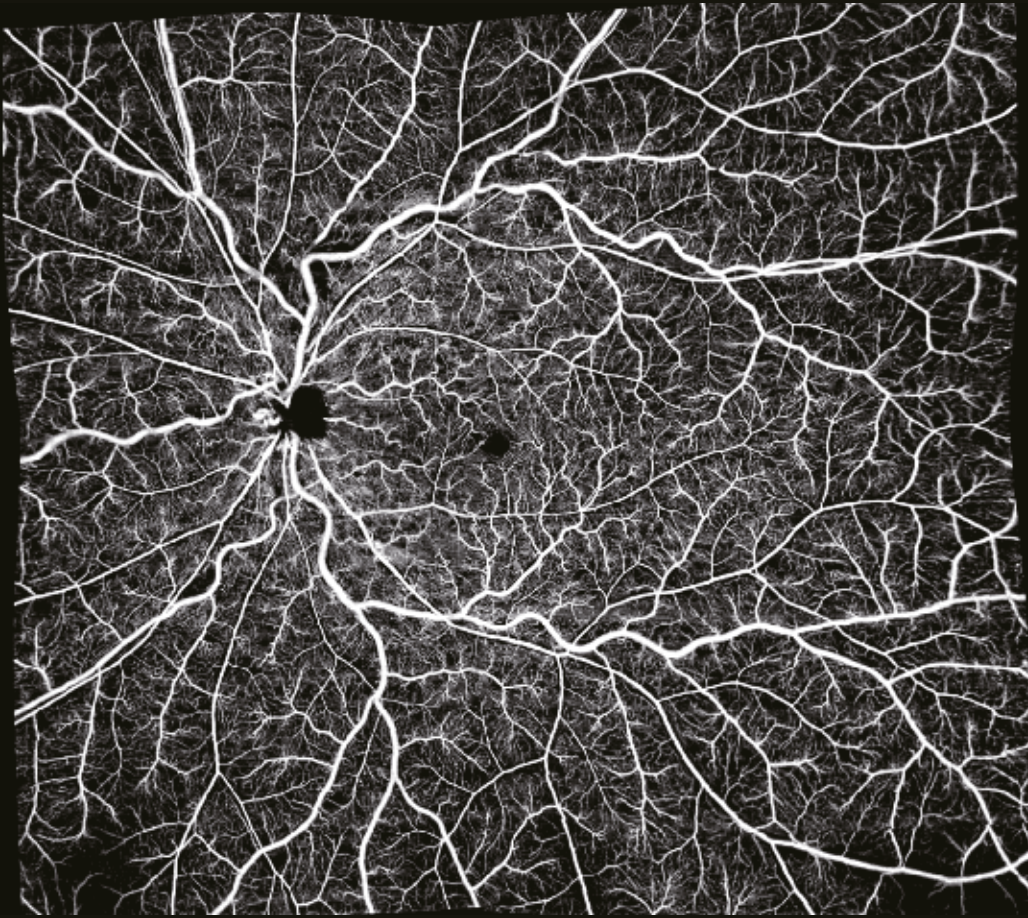
6×6mm OCTA



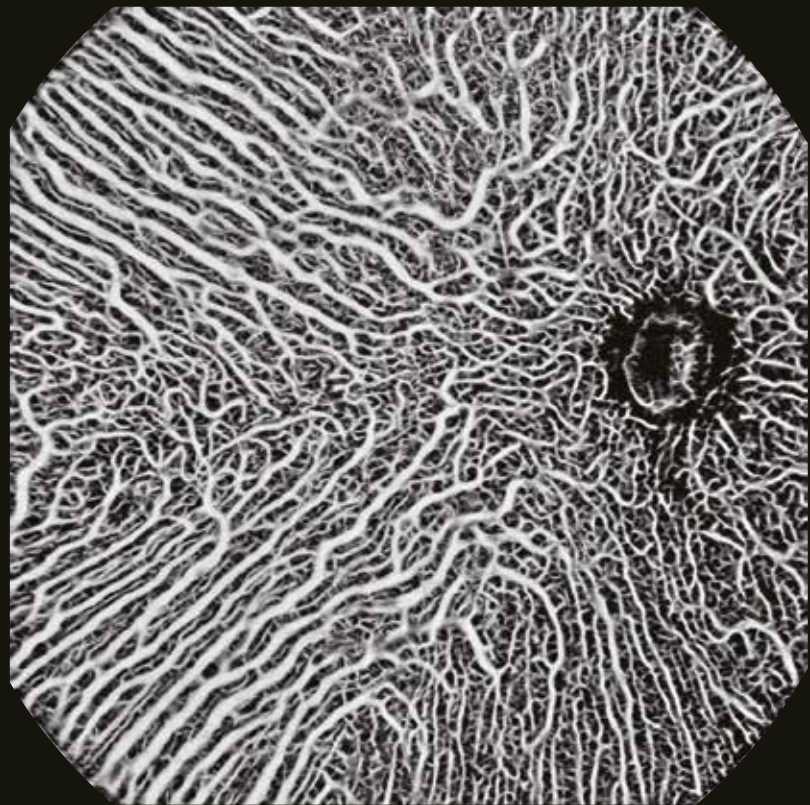
12×12mm OCTA



18×18mm OCTA



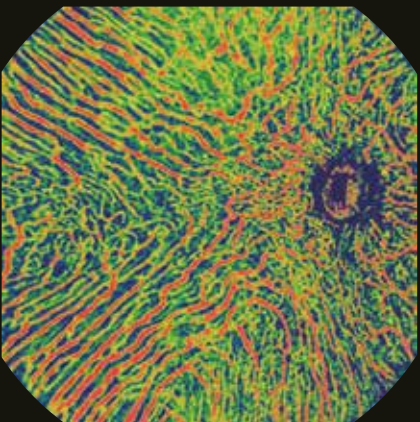
Ultra-wide-field (Flexible Montage)



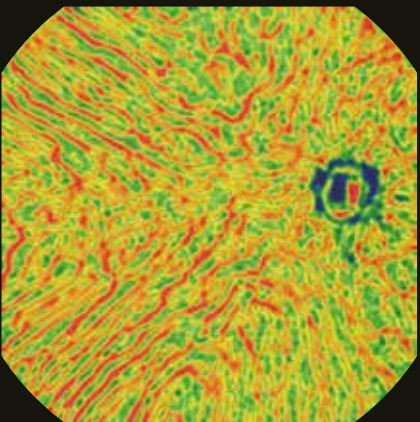
Choroid OCTA

Proprietary Choroid OCTA with Quantification Parameters

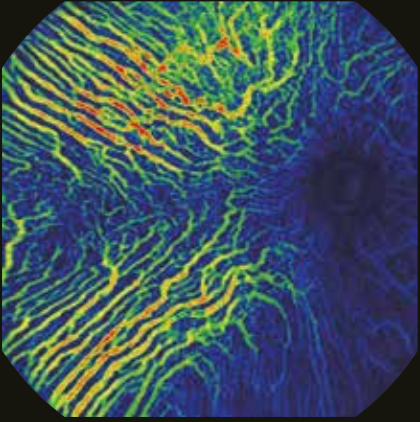
Exclusive algorithm in the world, reveal the truth of choroid



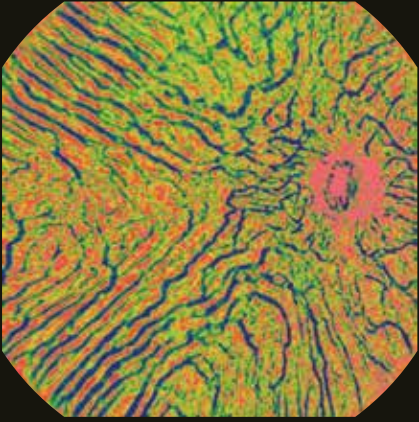
Choroid Vessel Index (3D-CVI)



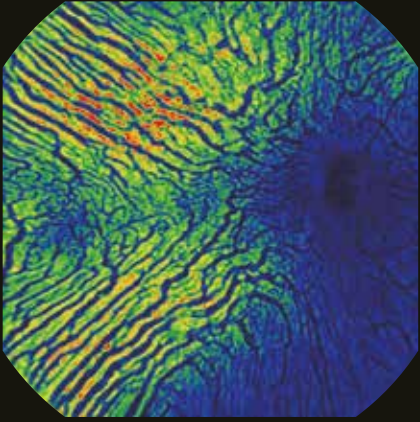
Choroid Vessel Density (2D)



Choroid Vessel Volume ratio (CVV/a)



Choroidal Stroma Index (CSI)



Choroidal Stroma Volume ratio (CSV/a)

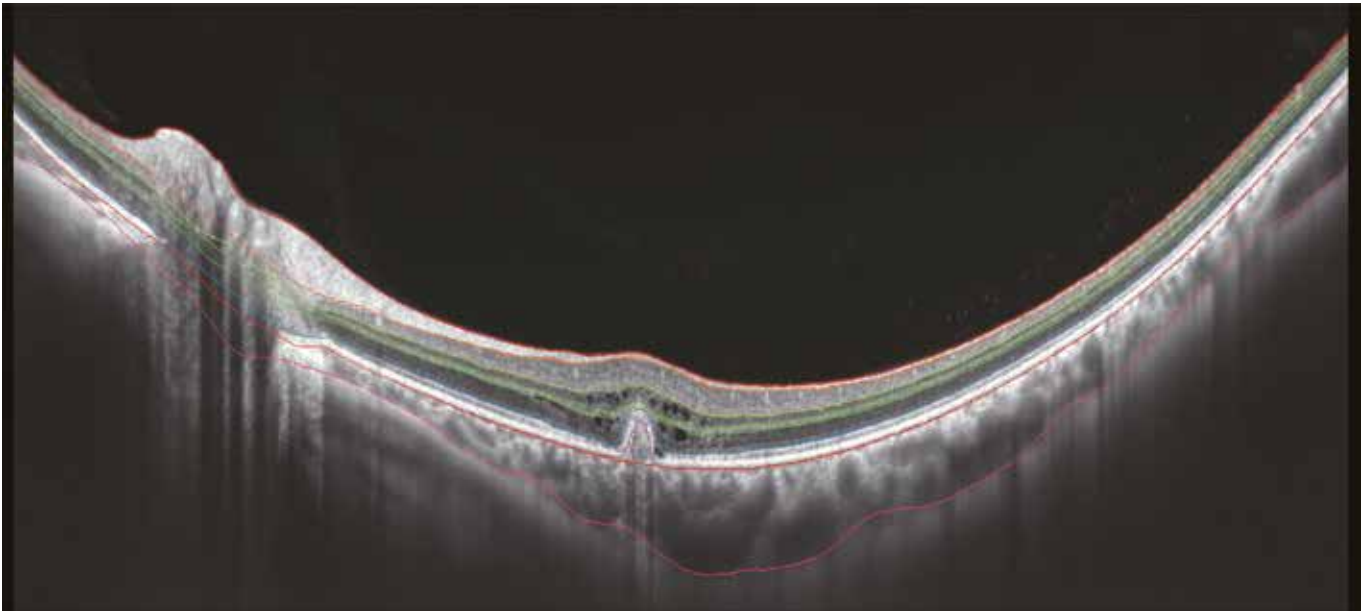
All-Slabs Quantitative Analysis for Posterior Segment

In-built AI Segmentation Algorithm, More Accurate, More Reliable

Provide automatic thickness and volume measurement including ETDRS rings for the inner, outer, and whole retina.

Provide flow area measurement, flow density quantification and automatic FAZ parameters (area, perimeter circularity, FD-300, etc.).

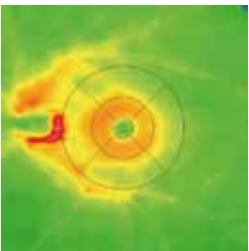
Provide quantifications for choroid (automatic and manual), including choroidal thickness measurement, flow density, and flow volume quantifications for choroidal capillaries, Haller's layer, and Sattler's layer.



AI-based Segmentation



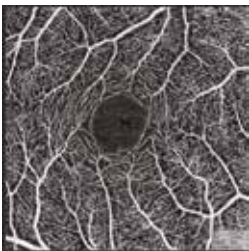
Retinal Length Density



Retinal Thickness Map



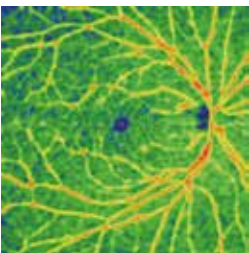
CNV Area (customized contour)



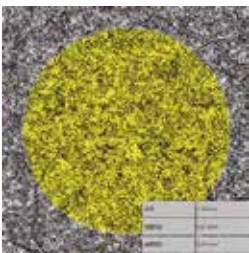
FAZ Parameters



Non-Perfusion Identification



Flow Density (ETDRS rings)



Flow Area (circle tool)

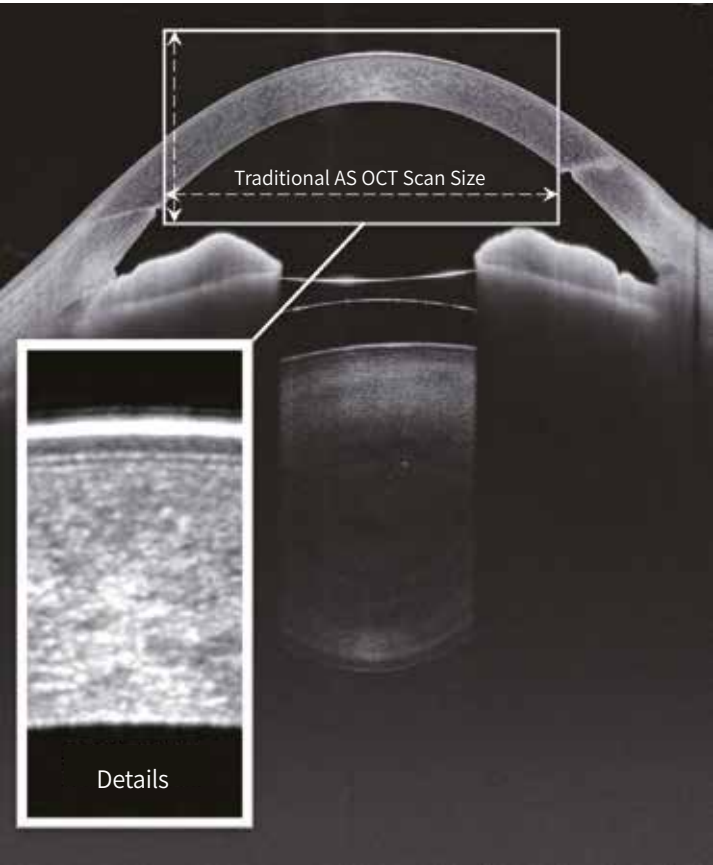
Analysis and Qualifications for Panoramic Anterior Segment

High Resolution Imaging of the Whole Cornea, Anterior Chamber, Lens, etc.

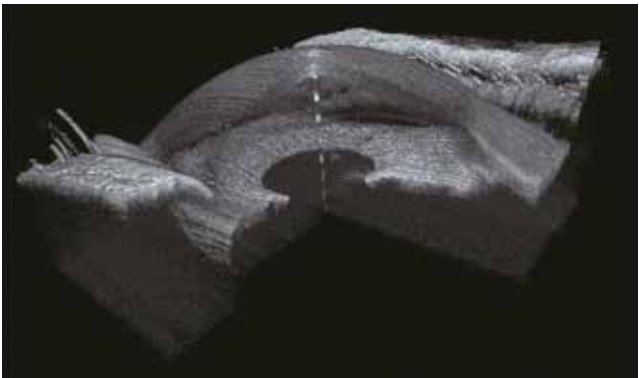
Provide corneal morphological analysis, keratoconus analysis, corneal thickness, and epithelial thickness measurement, etc.

Provide automatic and manual measurements: anterior chamber depth and volume, lens thickness, lens vault, ICL vault, angular recess width, scleral spur distance, etc.

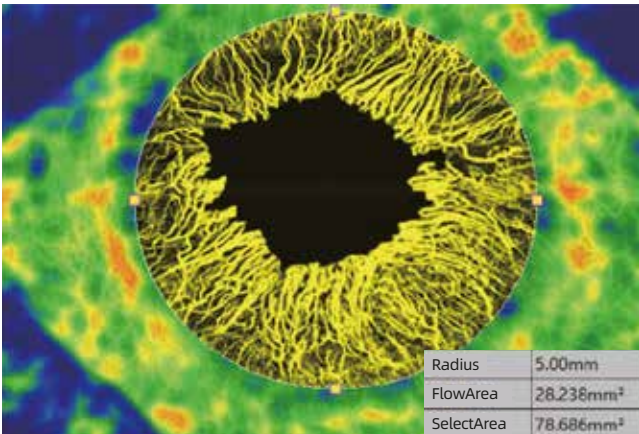
Provide 3D reconstruction, automatic anterior chamber angle measurement, angle opening distance, trabecular iris space area, angle recess width, scleral spur distance, etc.



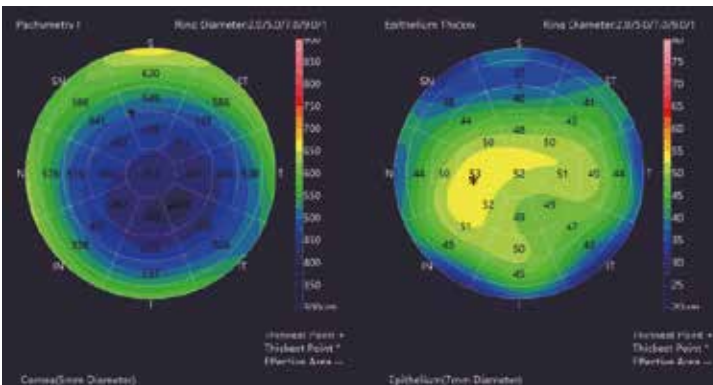
High Resolution Panoramic Anterior Segment



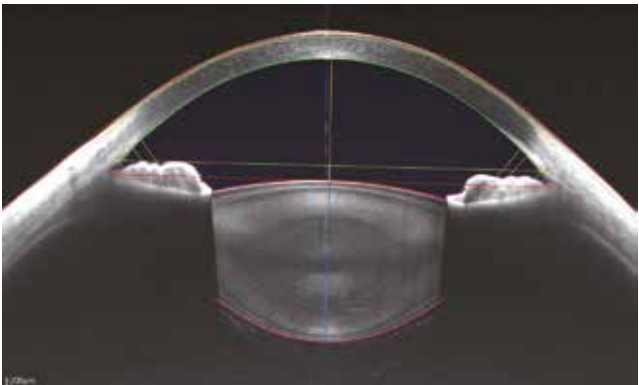
3D Reconstruction of AS



AS OCTA and Quantification | Corneal Neovascularization



Cornea Thickness Map and Epithelium Thickness Map



Automatic Measurement

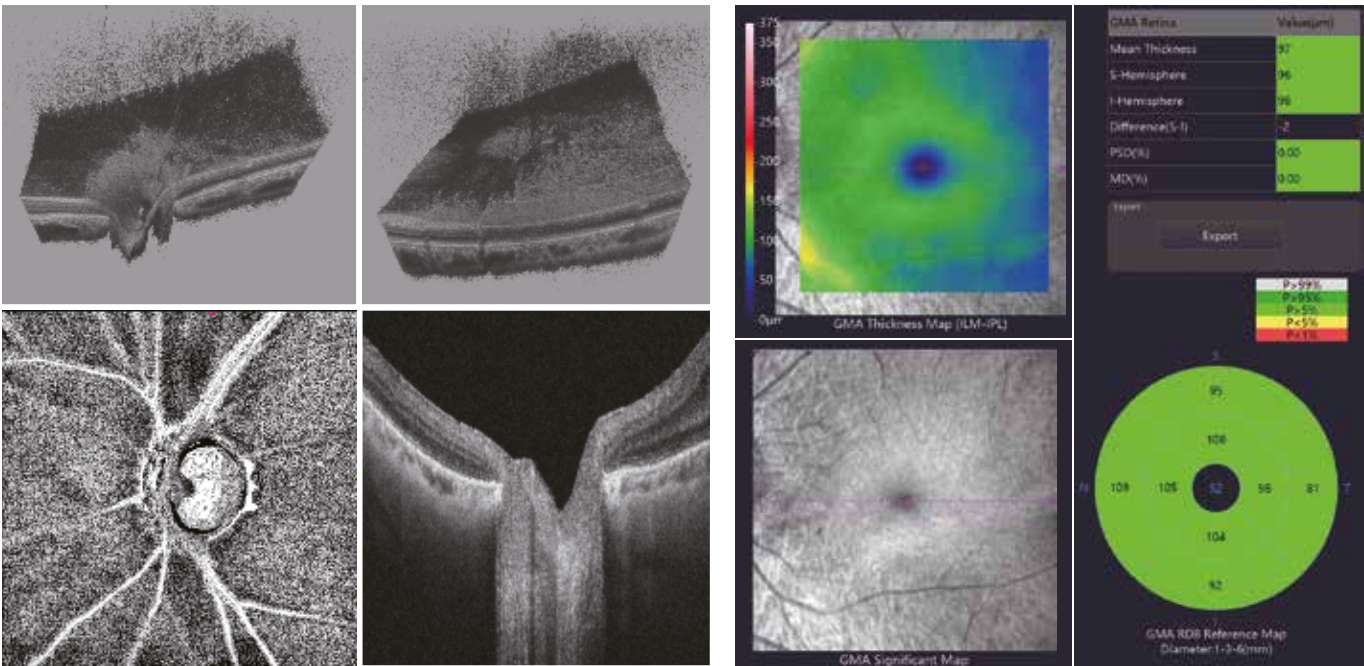
Comprehensive Glaucoma Analysis

Precision quantitative glaucoma progress management and early diagnosis with smart iHealth. Analysis and comprehensive structural and flow analysis.

Provide GMA and ONH analysis for scan sizes larger than 15mm×9mm.

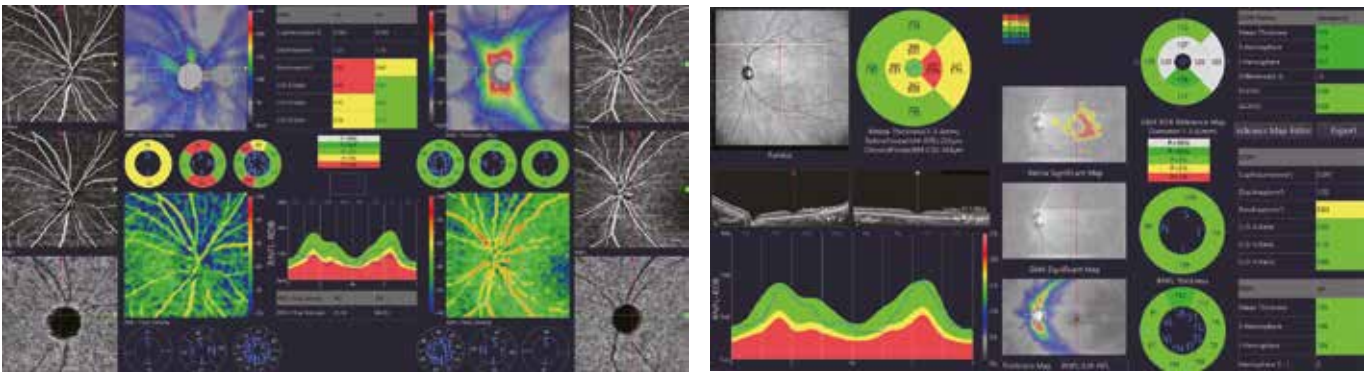
Provide automatic identification of optic cup and disc, cup disc ratio (area, vertical, horizontal), cup volume, etc.

Provide RNFL analysis, ganglion cell complex analysis, ONH flow quantifications, etc.



ONH OCT and 3D reconstruction

GMA thickness analysis



ONH analysis (structure & flow)

iHealth analysis (15mm x 9mm scan size)

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 comprehensive-ly and precisely, improve efficiency and accuracy, and provide patients with better diagnosis and treatment experience.

