Specifications

OCT Model: YG-100K	
OCT optical source	Swept Source
Center wavelength	1060nm
OCT B-scan	
Scan speed	100,000 A-scans/sec
Max. Length (posterior)	17mm
Max. Length (anterior)	24mm
Scan depth (posterior)	12mm
Scan depth (anterior)	15mm
Refractive adjustment range	-20D to +15D
Axial optical resolution	≤6µm
Axial best digital resolution	1.9µm
Transverse optical resolution	10µm
Fundus Imaging	
Methodology	Line-scanning ophthalmoscope (LSO)
LSO wavelength	850nm
LSO FOV	40° ×40°
Minimum pupil diameter	2.0mm
Eye tracking speed	60Hz
OCT Angiography	
Max. Single scan size (anterior)	18mm×18mm
Max. Single scan size (posterior)	15mm×15mm
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	☑

TowardPi

YAIkaid

100kHz | Full Range SS-OCT/OCTA

TowardPi

CE Marking under the EU MDR

YAlkaid

▌100kHz Full-range Swept-Source OCT/OCTA

15x15 mm
OCT Angiography

100 kHz
Self-Innovated High-Speed
Acquisition Card

*Brand-New 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
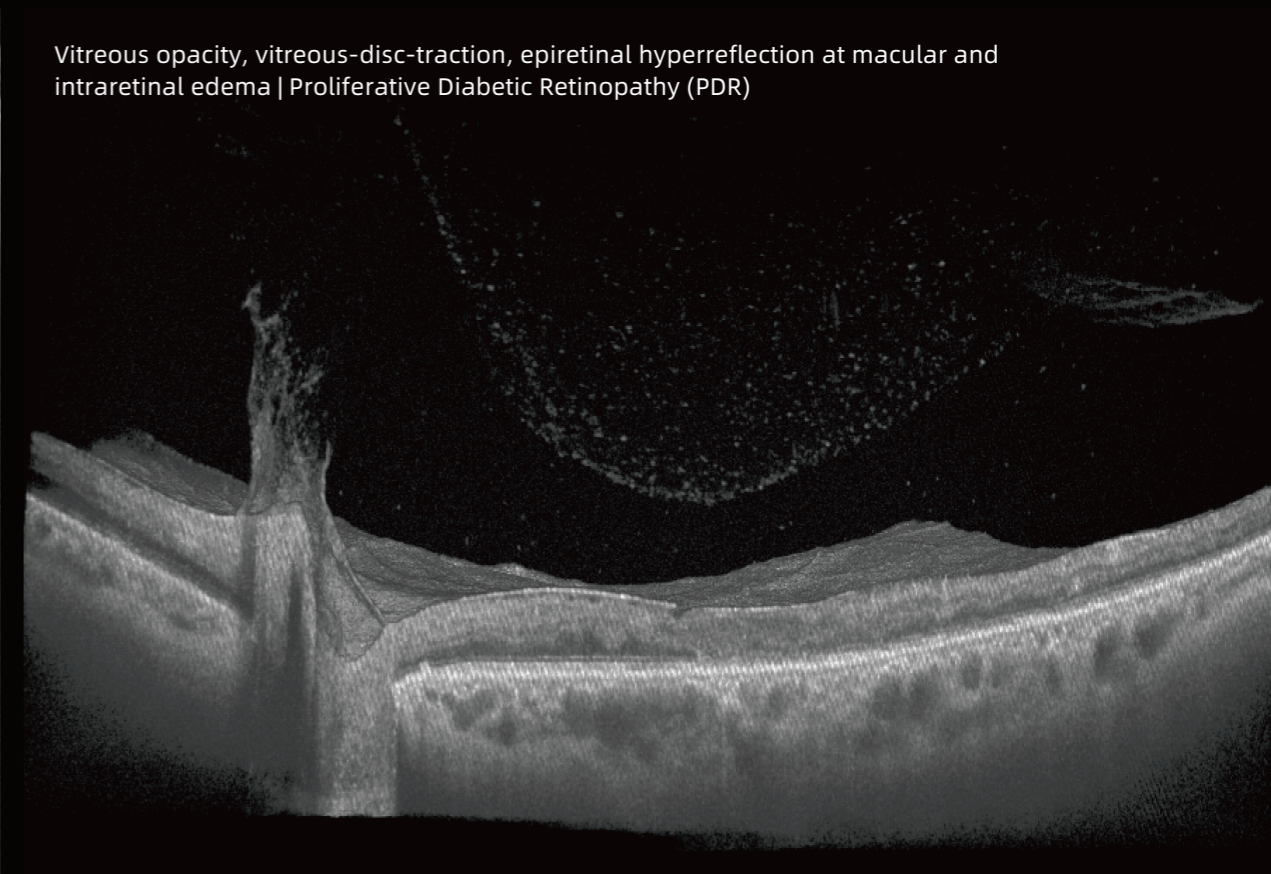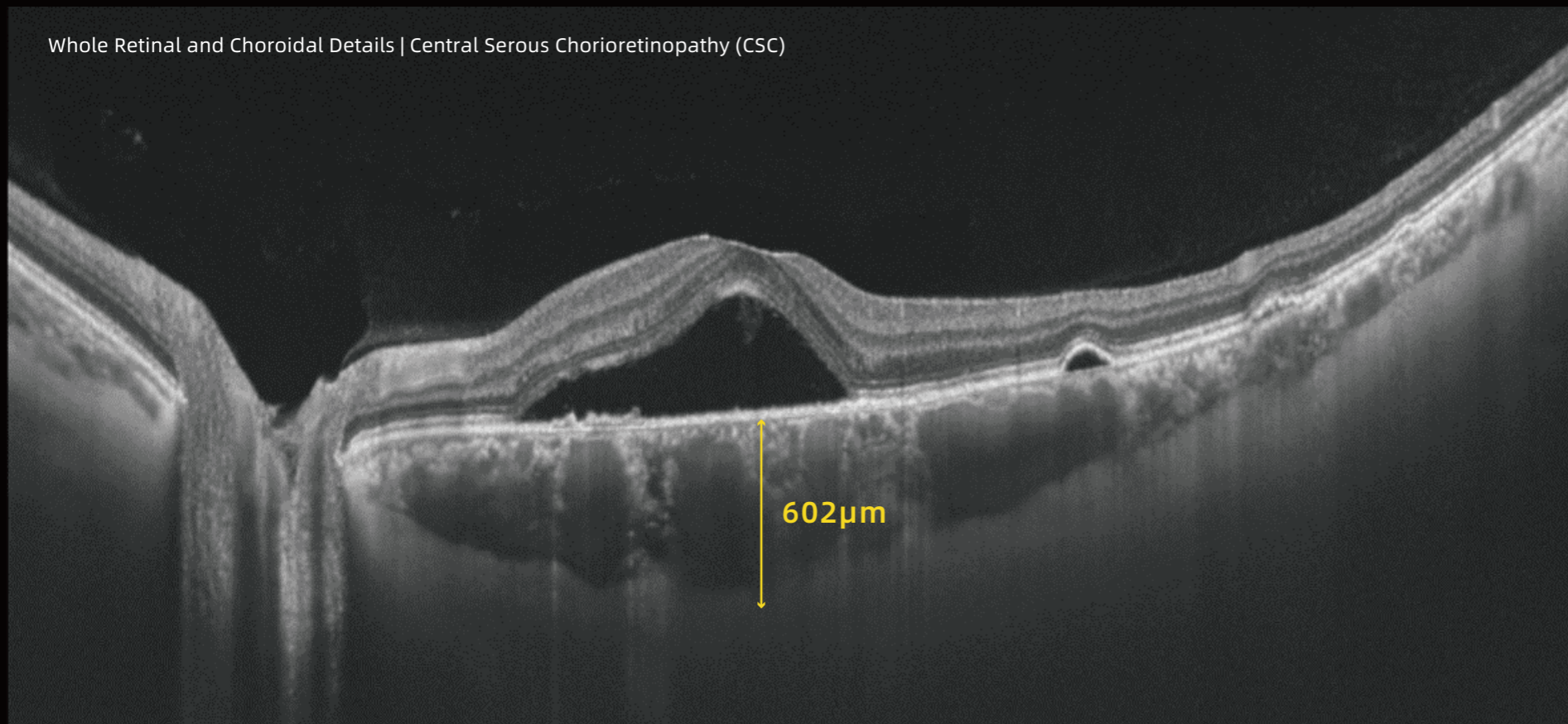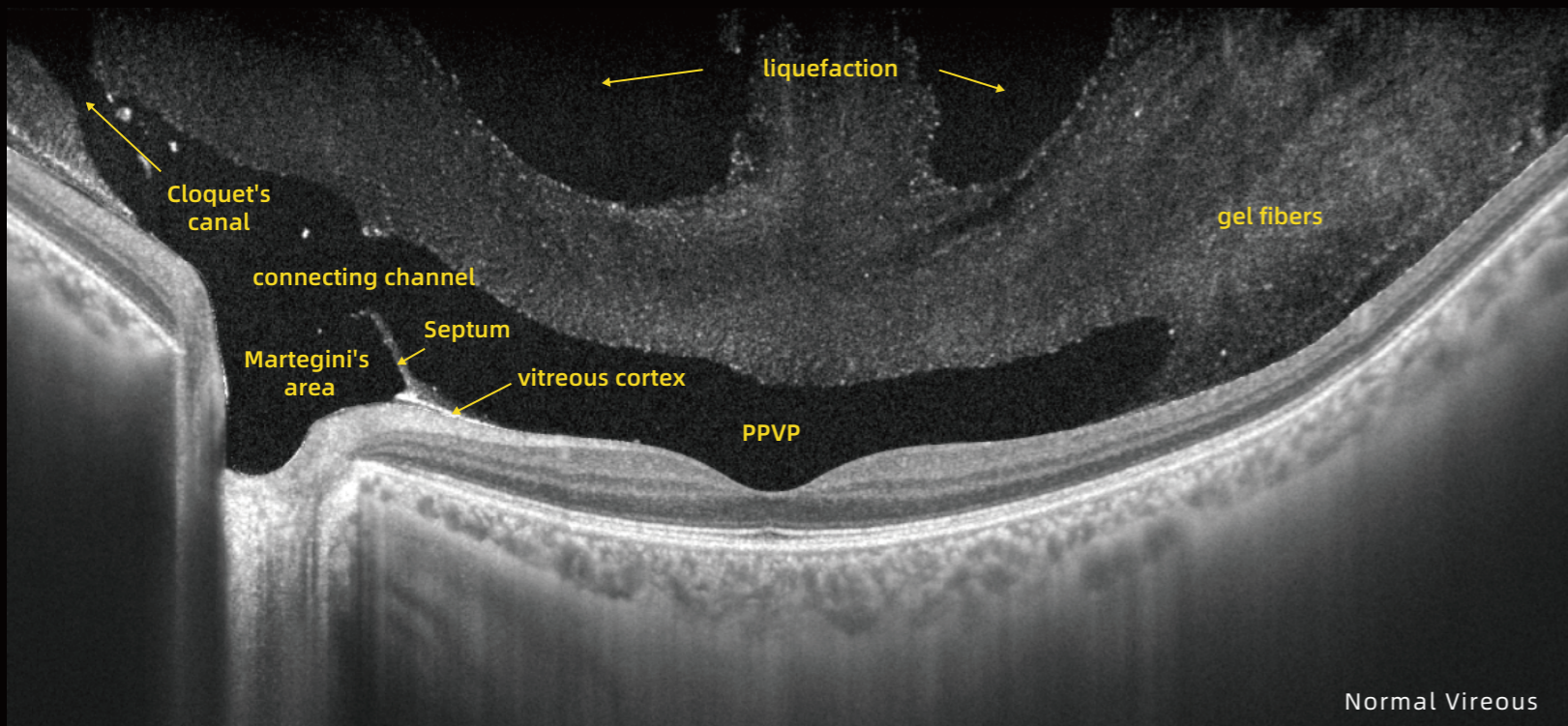Wide-Field OCTA
2-3mm Depth

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
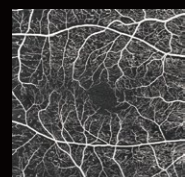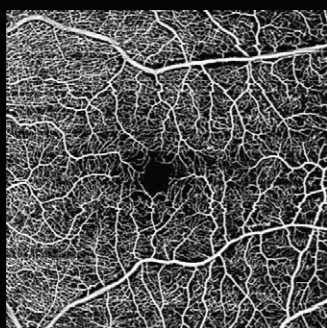
Deep Depth High-resolution

liquefaction

Cloquet's canal

gel fibers

connecting channel

Septum

Martegini's area

vitreous cortex

PPVP

Normal Vireous

Wide Field & Deep Scan Depth | Retinal Detachment

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

602μm

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

Full-range Swept Source OCT Angiography

Fast Non-invasive Efficient
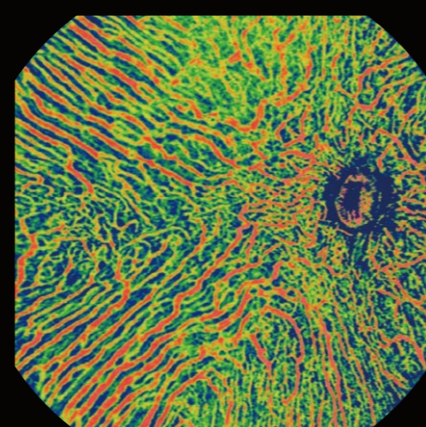

3×3mm OCTA
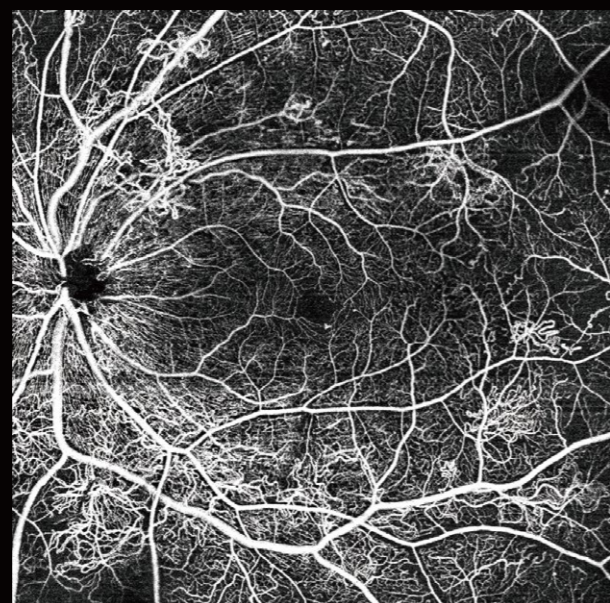
6×6mm OCTA

12×12mm OCTA
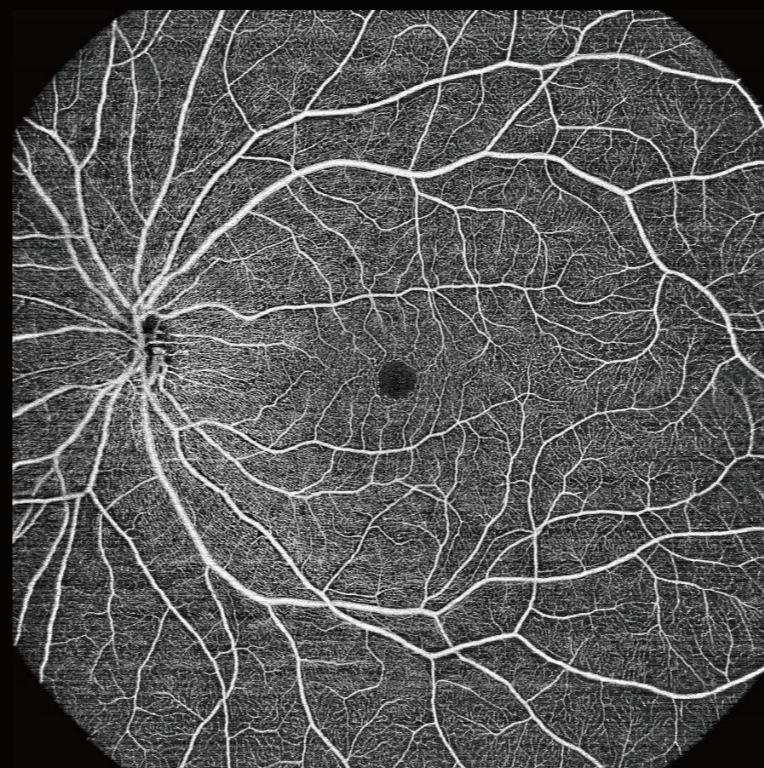
15×15mm OCTA
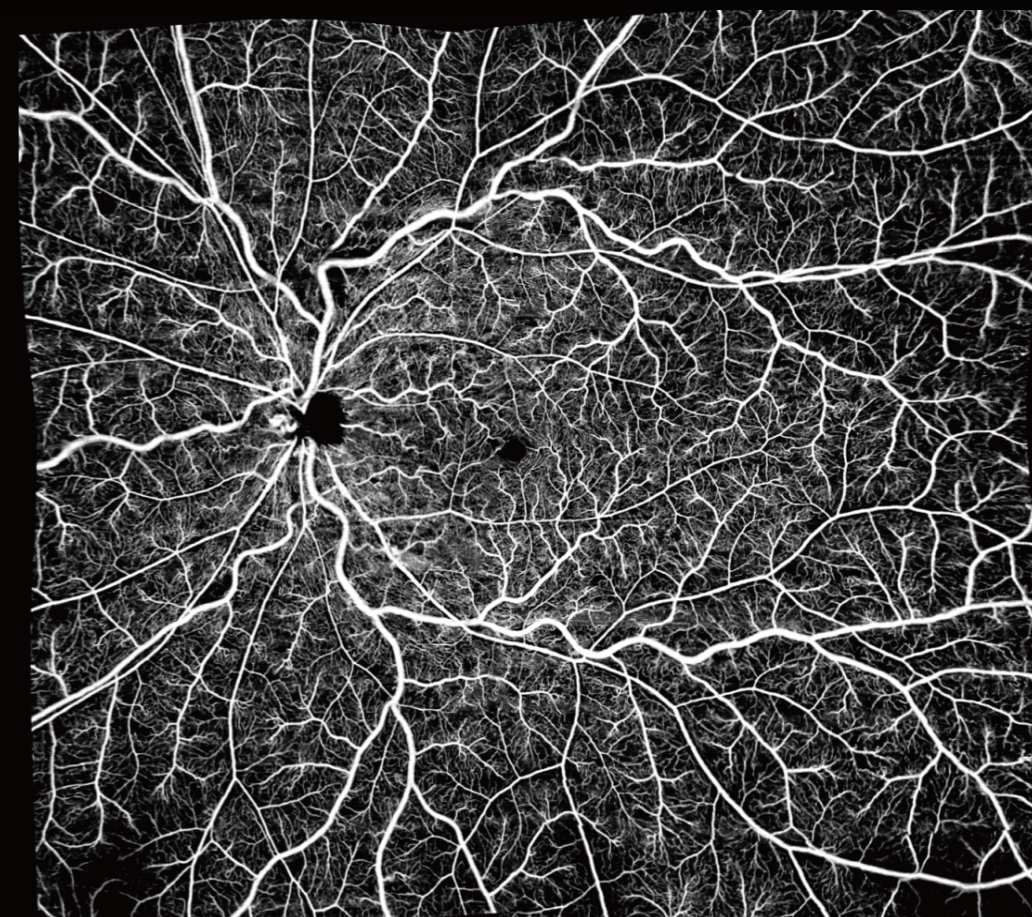
Ultra-wide-field (Flexible Montage)

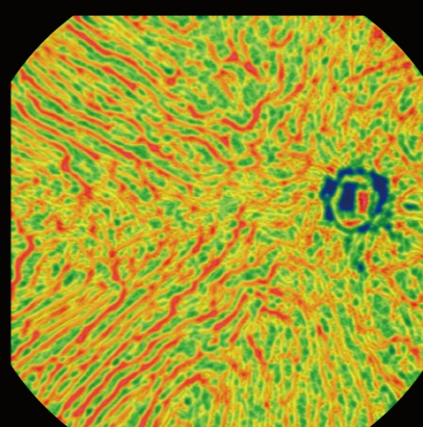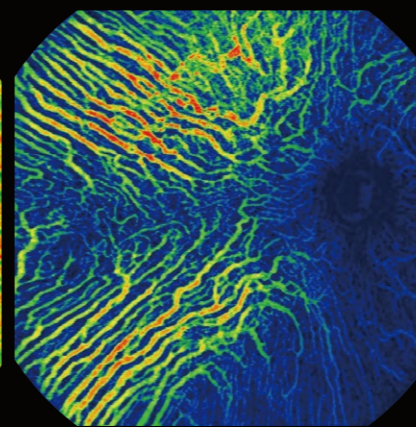
Brand-New Choroid OCTA with Quantification Parameters

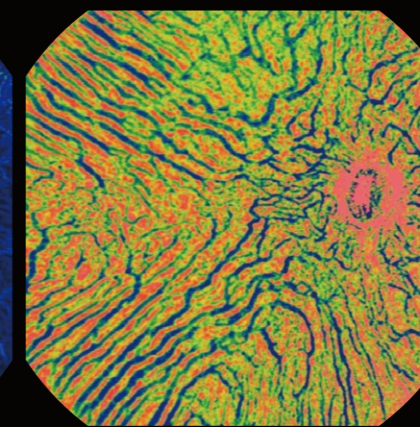**Exclusive algorithm in the world, reveal the truth of choroid**
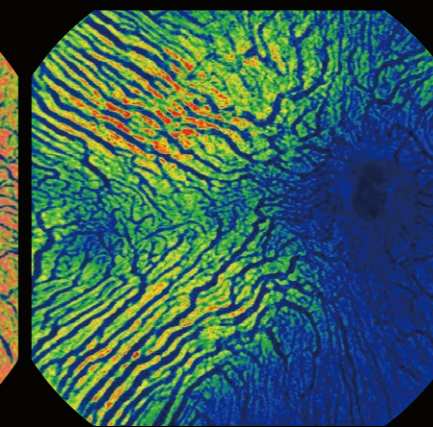

Choroid OCTA

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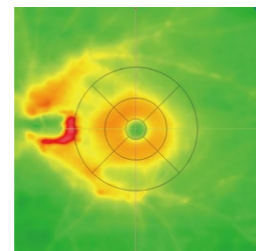
Provide quantifications for choroid (automatic and manual), including choroidal thickness measurement, flow density, and flow volume quantifications for choroidal capillaries, Haller's layer, and Sattler's layer.
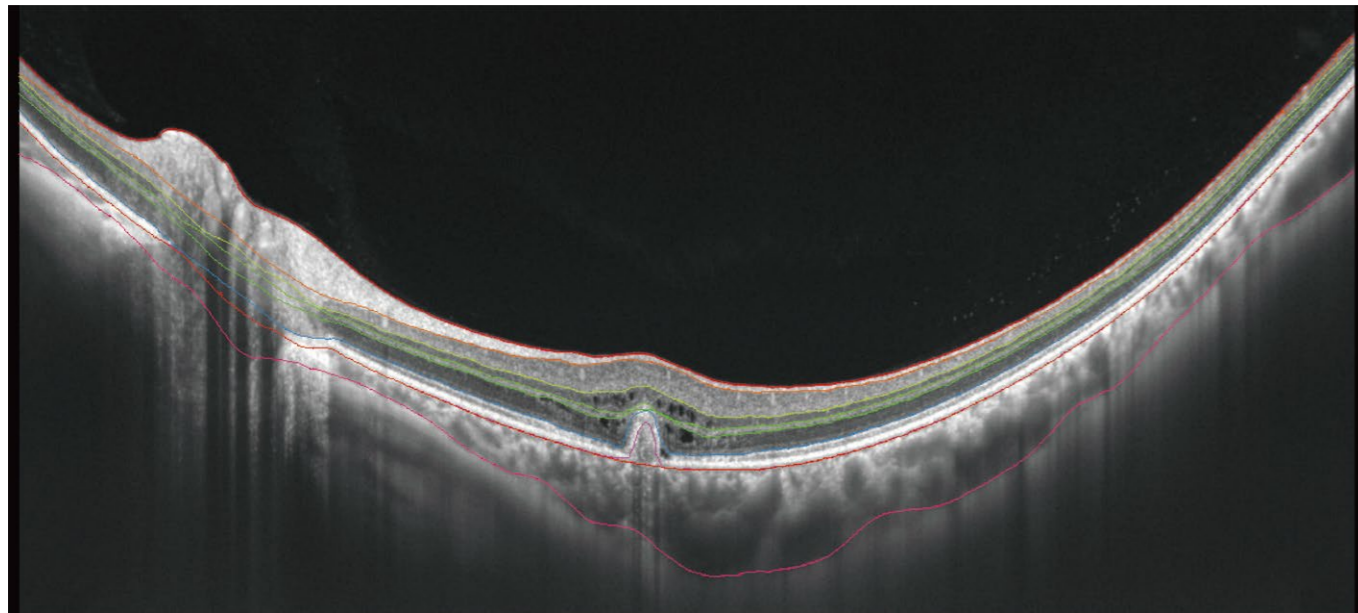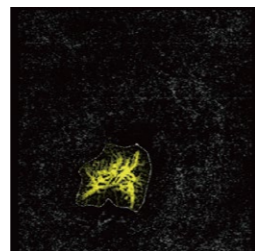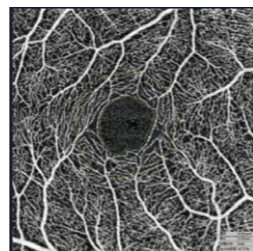

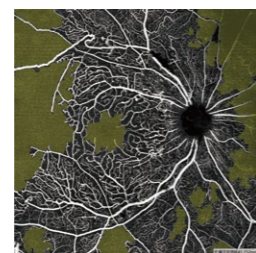AI-based Segmentation
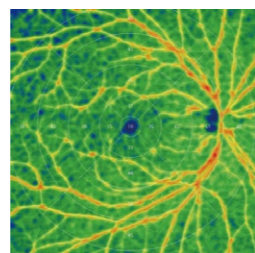

Retinal Length Density

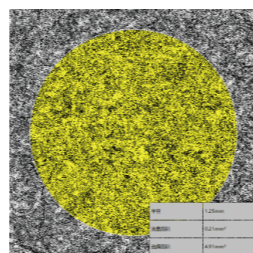Retinal Thickness Map

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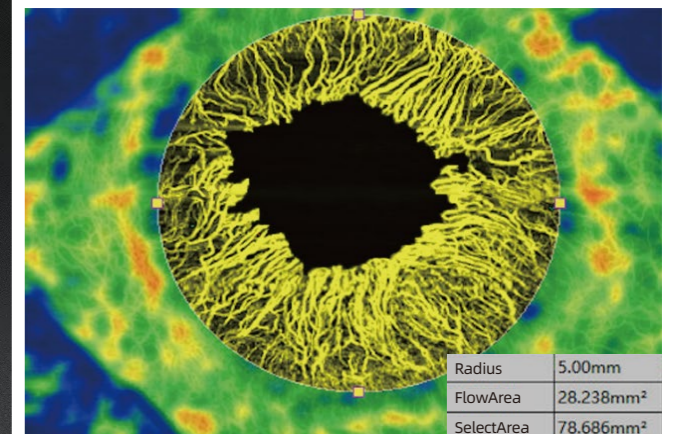
Provide 3D reconstruction, automatic anterior chamber angle measurement, angle opening distance, trabecular iris space area, angle recess width, scleral spur distance, etc.
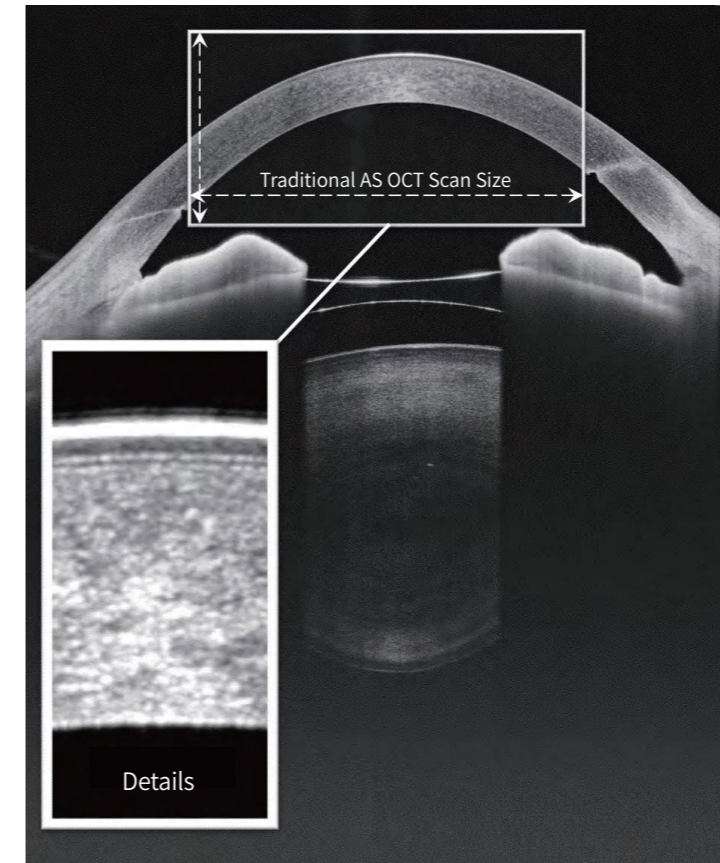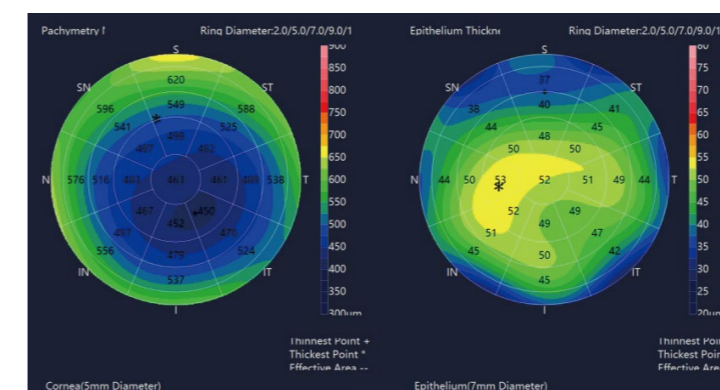

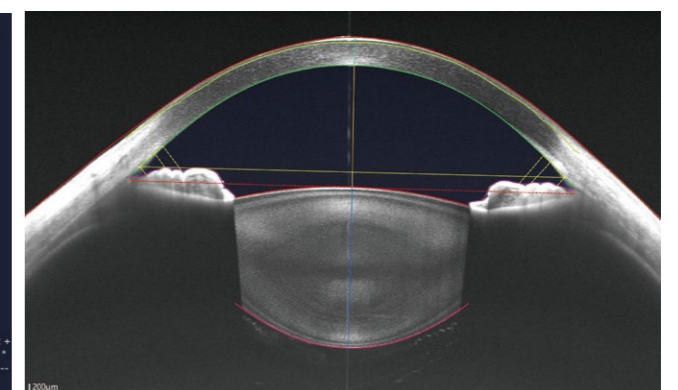High Resolution Panoramic Anterior Segment
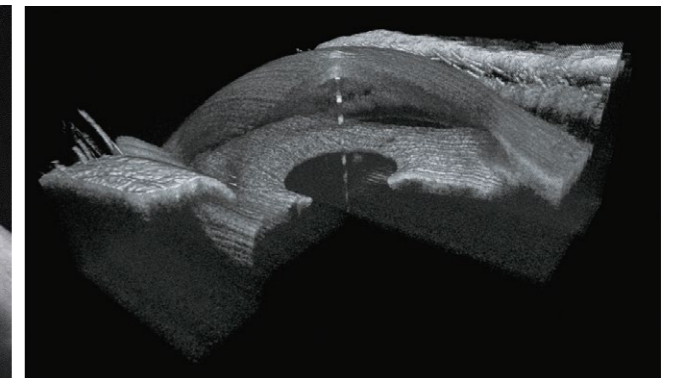
3D Reconstruction of AS

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.

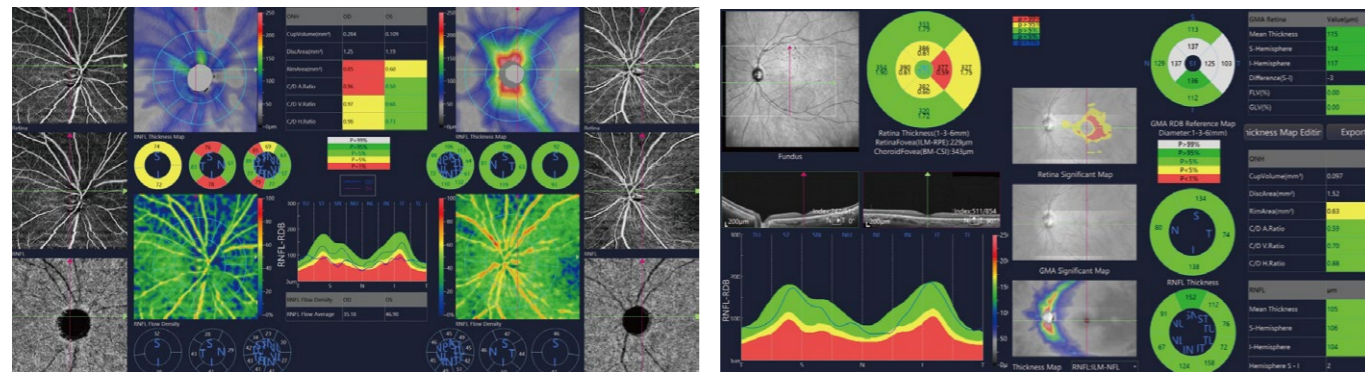Provide GMA and ONH analysis for scan sizes larger than 15mm×9mm.

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.
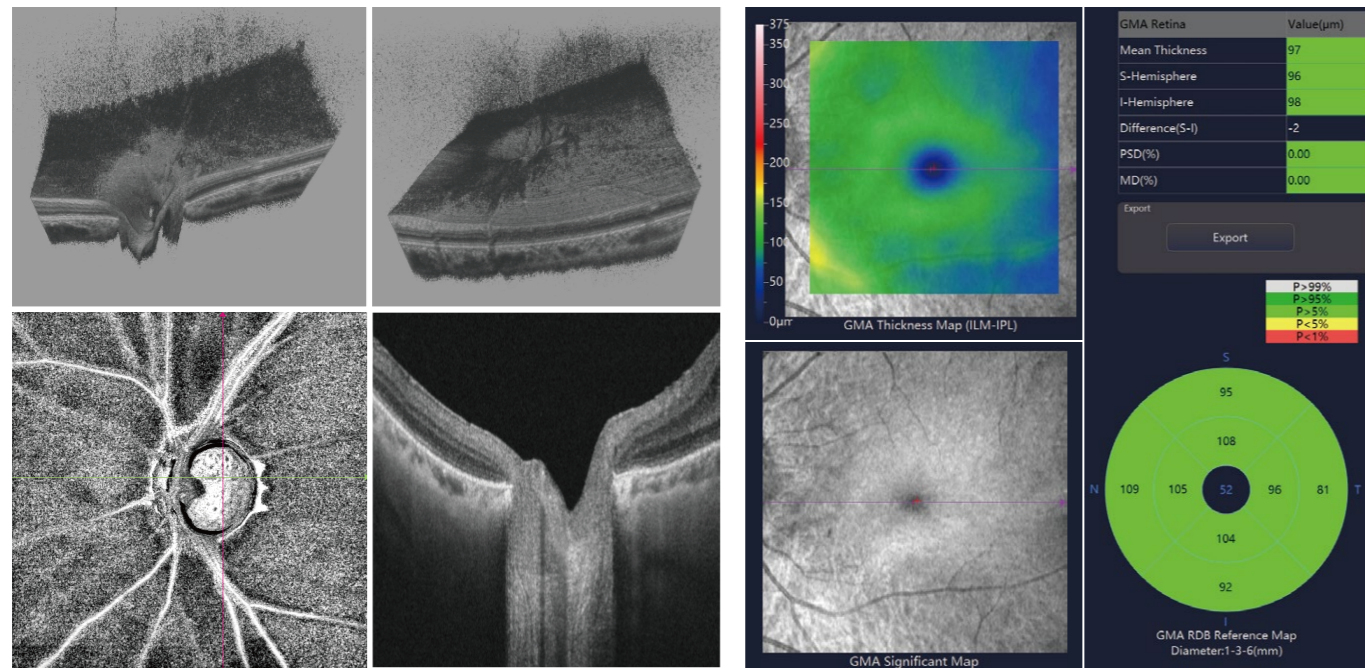
ONH OCT and 3D reconstruction

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 comprehensively and precisely, improve efficiency and accuracy, and provide patients with better diagnosis and treatment experience.

YAlkaid

Zursa

BMizar

Zalioth

Baryon

FOcean