

Dry Eye Diagnostic System

Dry Eye Diagnosis / AI Meibomian Glands Analysis Anterior Segment Photography / Lens Fitting Patient Management

Dry eye diagnostic system

Complete examination, Comprehensive evaluation, Precise Diagnosis

As an excellent dry eye device, our dry eye diagnostic system enhances accurate diagnoses and earlier intervention, providing guidance for customized treatment.

Platform for Comprehensive Ocular Surface Examination

Dry eye diagnosis/Anterior segment photography/Lens fitting/
Patient management/Telemedicine

Guided examination:providing a comprehensive report covering 8 dry eye diagnosis.

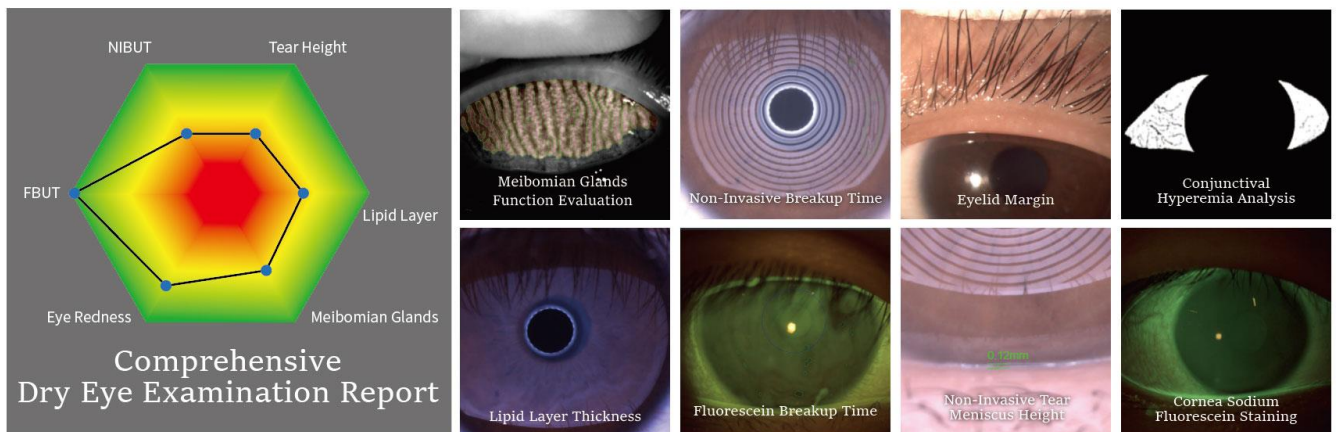
Non-invasive examination,Quantitative data.

Full-automatic Firefly digital module ,easy operation without parameter settings.

High quality optics and built-in yellow filter efficiently increase the accuracy of lens fitting.

Professional 1/1.8-inch sensor and 2.4 μm pixel,real-time playing and storage.

Smart patient management system,DICOM supported.



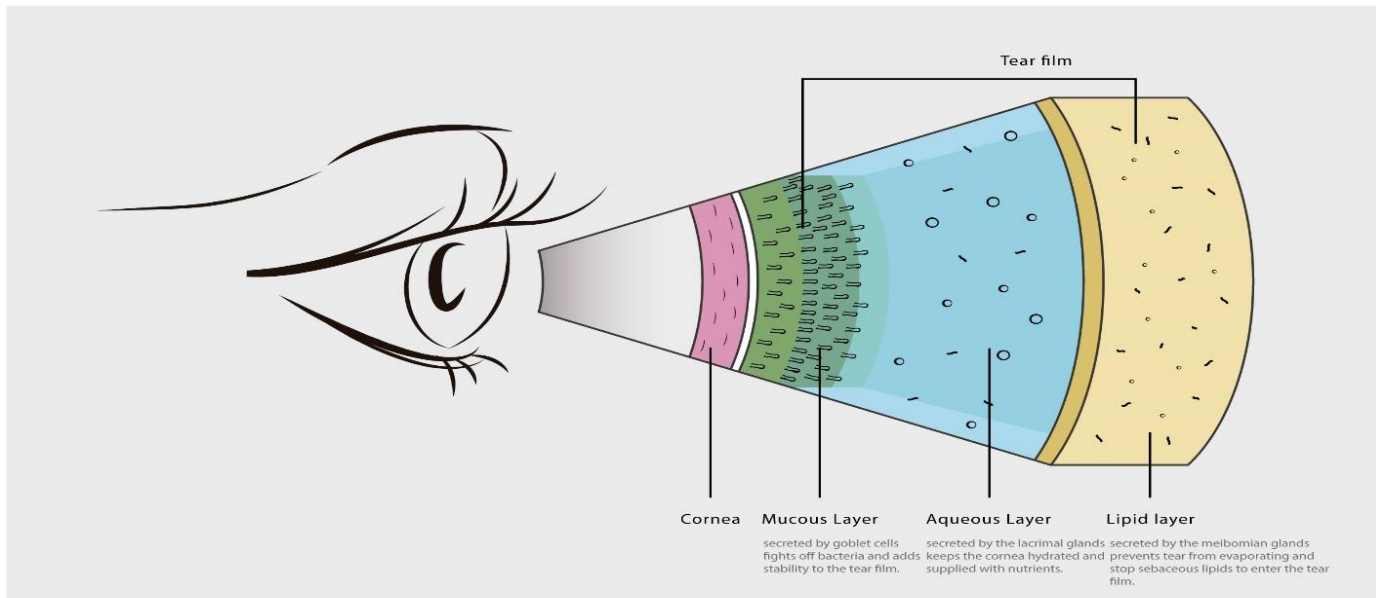
Dry eye diagnostic system

Easy Pathogenic Diagnosis provides guidance for customized treatment.

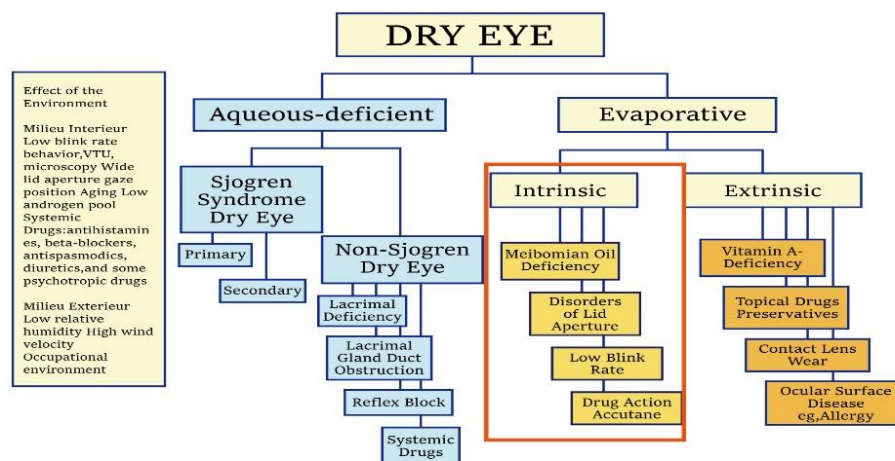
Automatic Analyzing Meibomian Glands

Precise diagnosis of Dry Eye caused by MGD is guaranteed with the help of AI identification system.

Unique Built-in infrared lighting system provides a larger scope capture of Meibomian Glands, adjustable depth of field and aperture enables more vivid images.



Dry eye classification from the 2007 DEWS Report

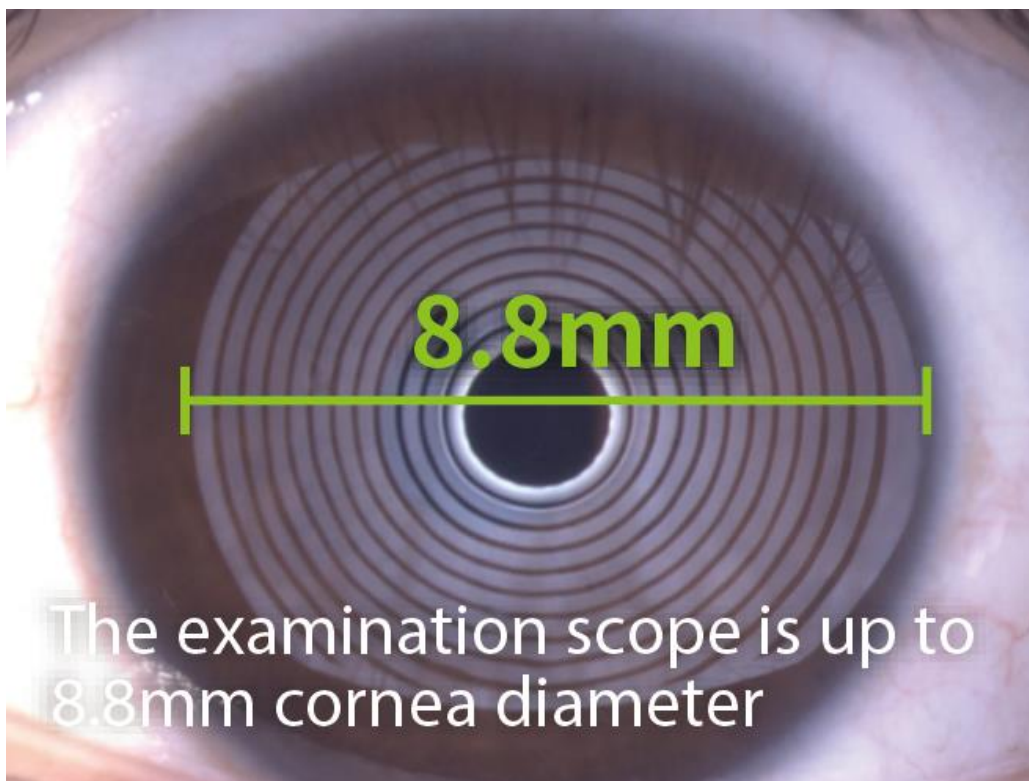


Ocular Surface Disease Index (OSDI)/McMonnies/SPEED/DEQ Dry Eye Questionnaire

The image shows two side-by-side screenshots of digital questionnaires. The left one is the Ocular Surface Disease Index (OSDI), and the right one is the SPEED questionnaire. Both forms have a dark header with navigation options like 'Home', 'Test', 'Print', 'Export PDF Report', 'Submit', and 'Total Score Grade Description'. The OSDI form asks about symptoms like light sensitivity, gritty eyes, pain, blurred vision, and poor vision over the last week. The SPEED form asks about symptoms like dryness, grittiness, burning, and eye fatigue over different time periods (at this visit, within past 72 hours, and within past 3 months).

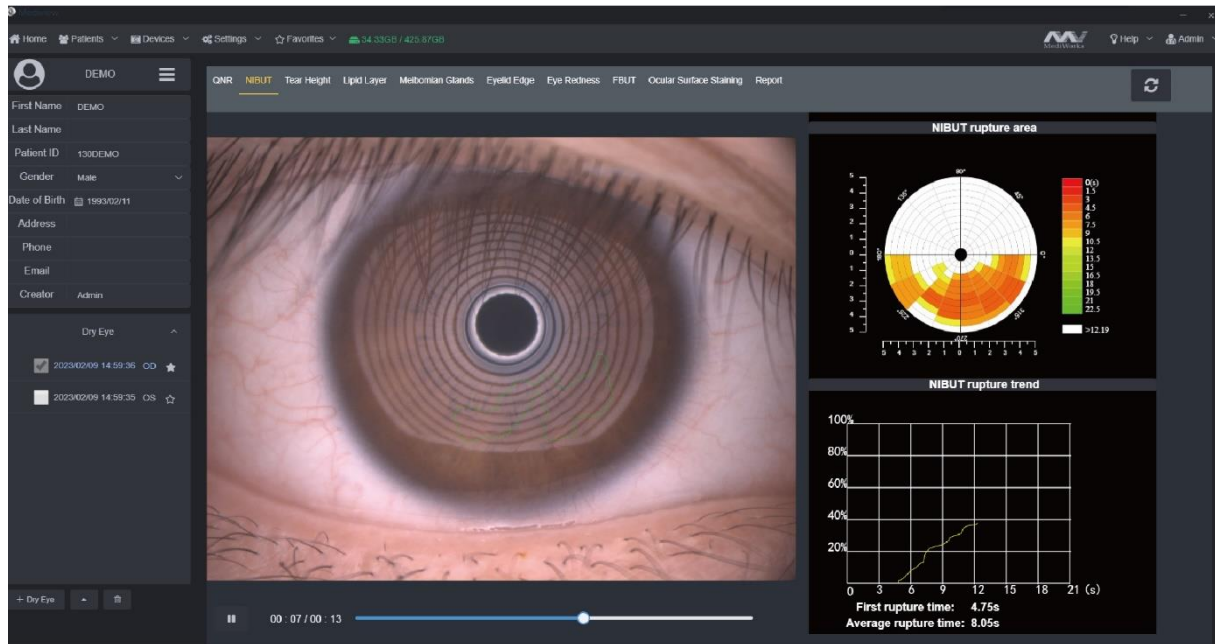
The built-in dry eye questionnaire is designed according to the risk factors and clinical characteristics of dry eye, providing a simple preliminary assessment for dry eye, improving diagnosis and treatment efficiency and facilitating patient follow-up.

Functions Non-Invasive Breakup Time



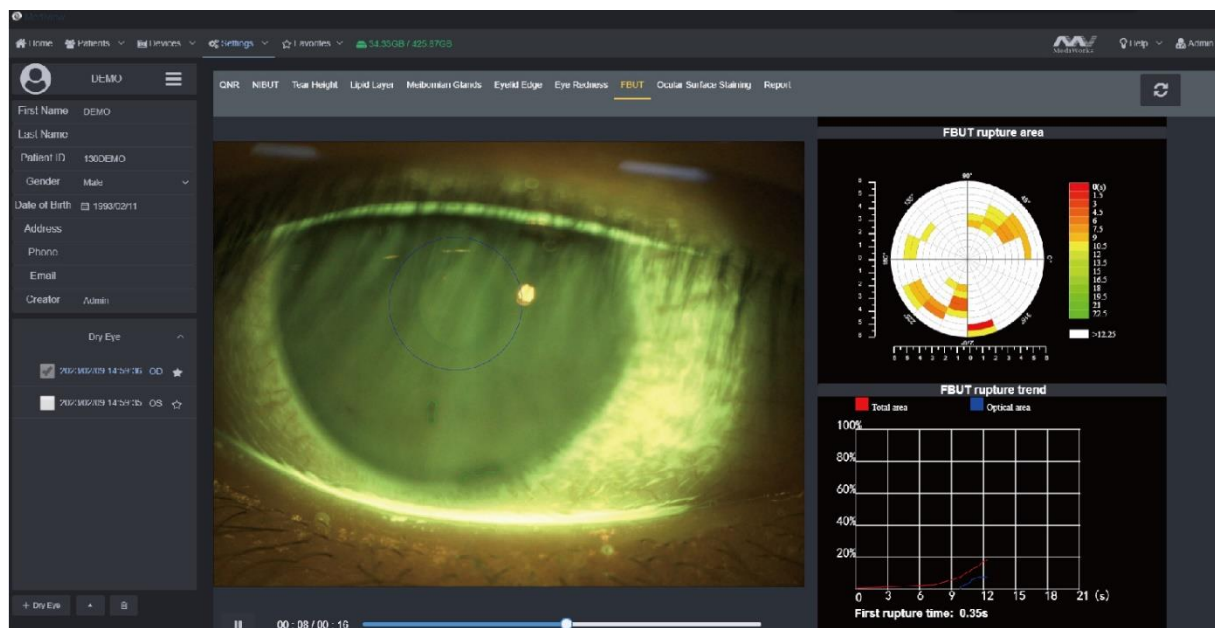
After taking one video, it brings out automatic result of NIBUT and Tear Meniscus Height. AI identifies the breakup area and analyzes NIBUT automatically. Fully automatic analysis system provides efficient quantified evaluation for the overall stability of tear film. It automatically acquires the first breakup time, average breakup time, breakup distribution, break up area percentage curve and time distribution.

Grade 0 Normal, First Rupture Time: 10 s Average Rupture Time: 14 s
 Grade 1 Warning, First Rupture Time: 6 ~ 9 s Average Rupture Time: 7 ~ 13 s
 Grade 2 Dry eye, First Rupture Time: 5 s Average Rupture Time: 7 s



Placido ring projection system with visible light to do NIBUT examination, the examination scope is up to 8mm cornea diameter which brings much more comprehensive diagnosis outcome. The non-invasive examination avoids the irritation brought by the traditional Cornea Sodium Fluorescein Staining.

Fluorescein Breakup Time



Normal: >10 s;
 Mild: 6 ~ 10 s;
 Moderate: 2 ~ 5 s; Severe: < 2 s or no complete tear film.

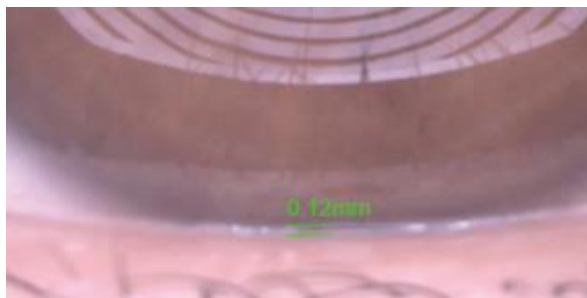
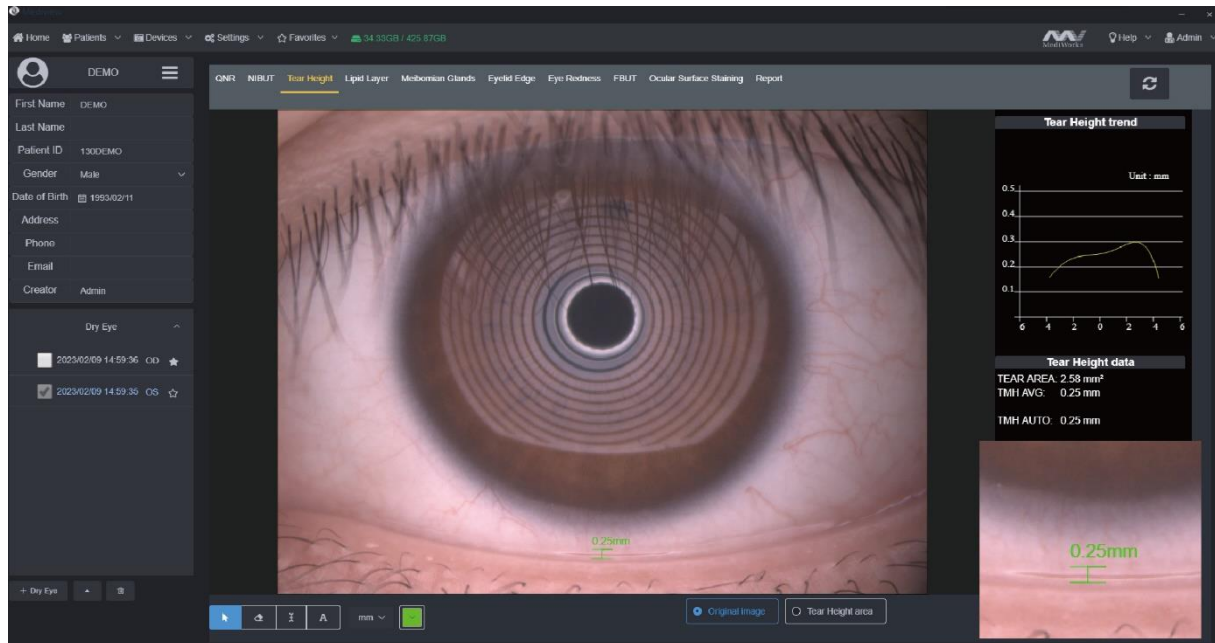
Non-Invasive Tear Meniscus Height

Normal: ≥ 0.2 mm

AI identification system depicts Tear Meniscus area and measures the tear height automatically.

Evaluate tear secretion amount and continuity objectively.

More efficient and less irritation compared with the traditional Schirmer's test.

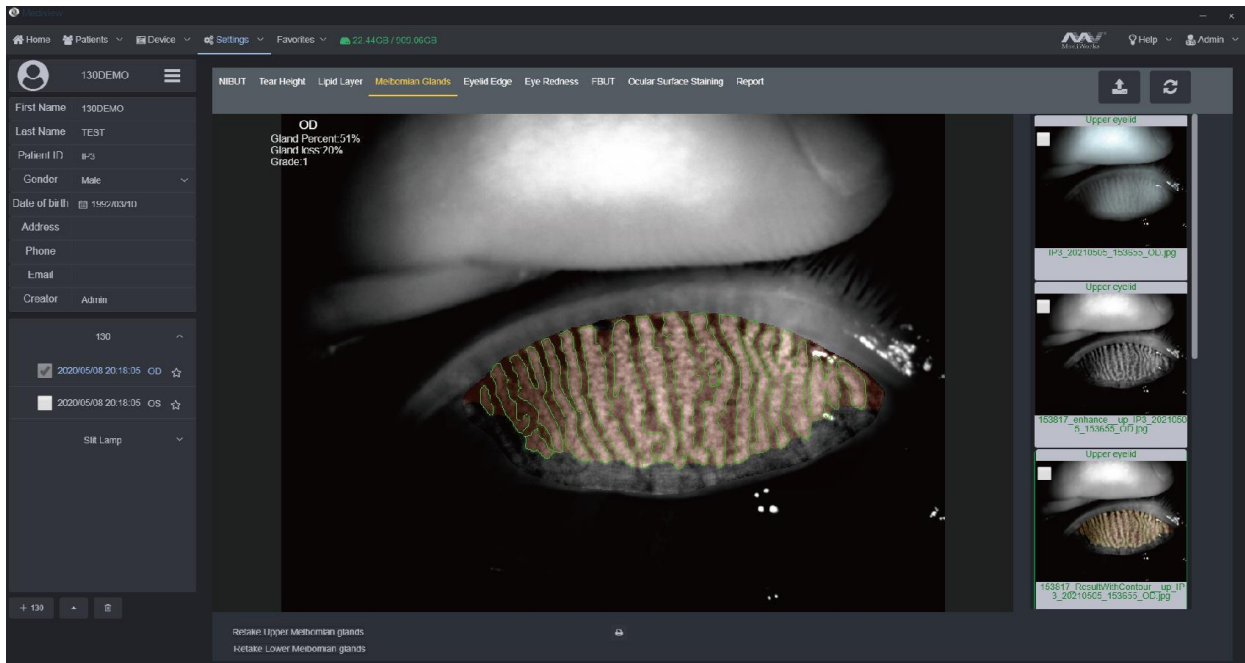


Insufficient tear secretion



Abnormal dynamics and conjunctival chalasis

Meibomian Glands Function Evaluation



Get original/enhanced/result images by one click

AI identification system automatically analyzes meibomian glands loss

caused by meibomian glands dysfunction with precise and quantified diagnosis results.

Built-in infrared lighting system helps doctors obtain larger image scope of the meibomian glands.

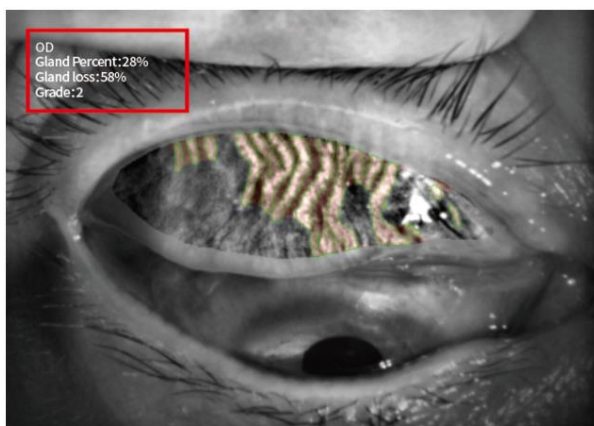
Adjustable depth of field makes the glands more prominent and distinguishable against the background.

Grade 0: No Meibomian Glands Loss

Grade 1: Meibomian Glands Loss $< 1/3$

Grade 2: Meibomian Glands Loss $1/3 \sim 2/3$

Grade 3: Meibomian Glands Loss $> 2/3$



Meibomian glands loss

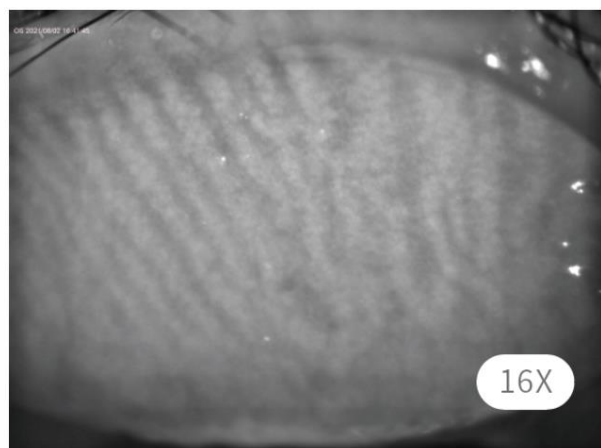


Image of Meibomian Glands under high-magnification

Lipid Layer Thickness

White ring projection system ensures a larger examination area compared to Placido ring. By comparing with the standard grading template and recording the Lipid Layer thickness, it is helpful for judging MGD.

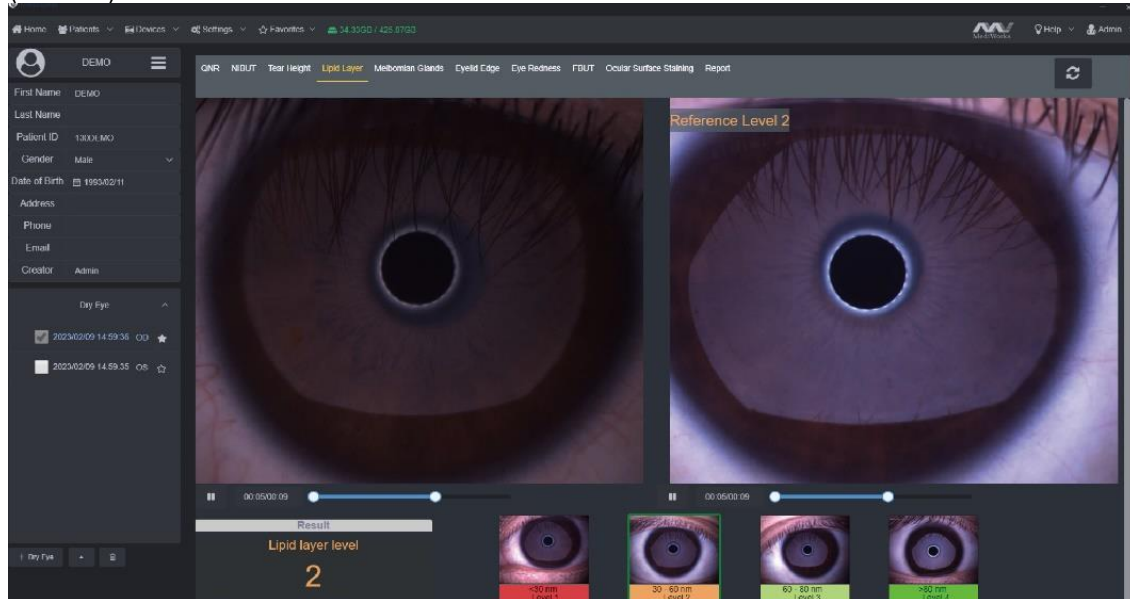
Grade 1: < 30

Grade 2: 30 ~ 60

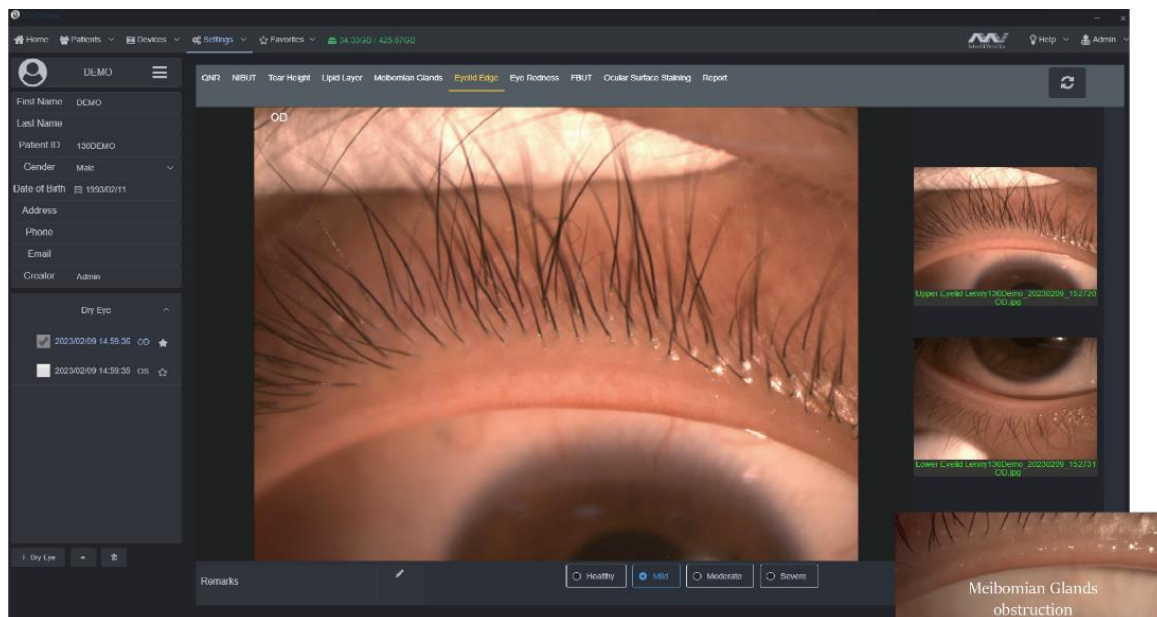
Grade 3: 60 ~ 80

Grade 4: > 80

(Unit:nm)



Eyelid Margin



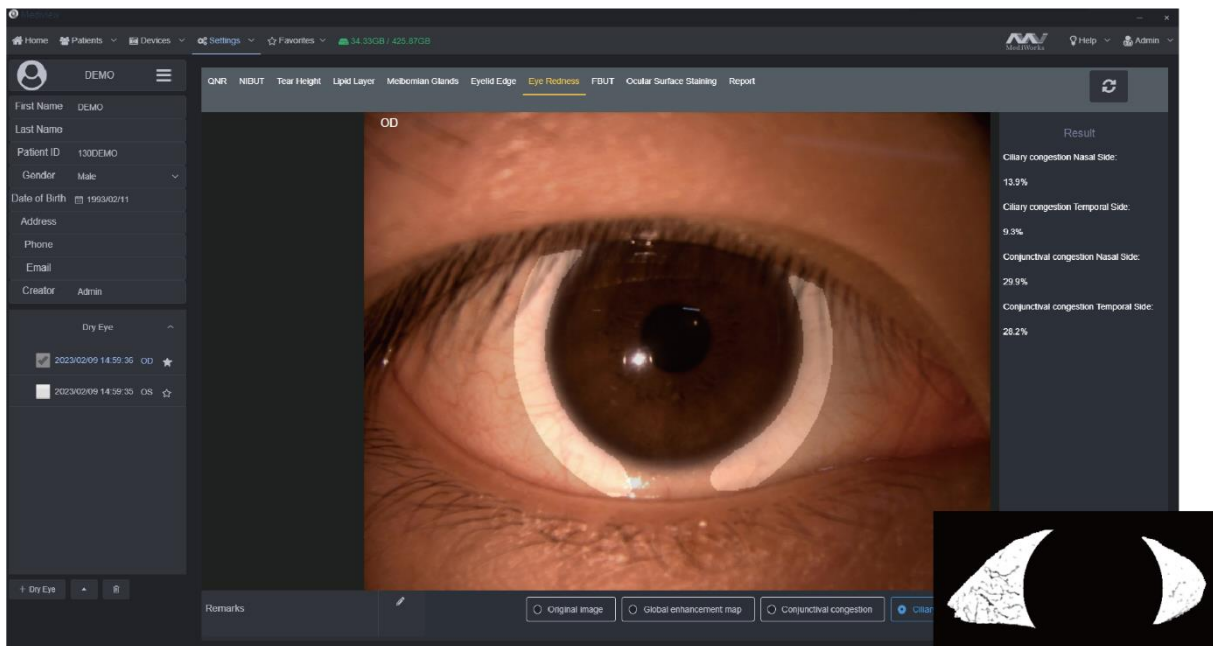
Design of optical system is capable of providing HD digital image that remains clear and sharp even zoom in, meets the examination requirements of the overall shape of eyelid margin and its slight change.

1. Normal including (Ophthalmic embolism bright, transparent)
2. Mild including (gland cap crown - glandular prominent)
3. Moderate including (glandular fat plug - disappearance of the marginal mucosa, hyperkeratosis)
4. Severe including (uneven margins, disappearance of the meibomian glands - posterior margin Blunt round, thickening, new blood)

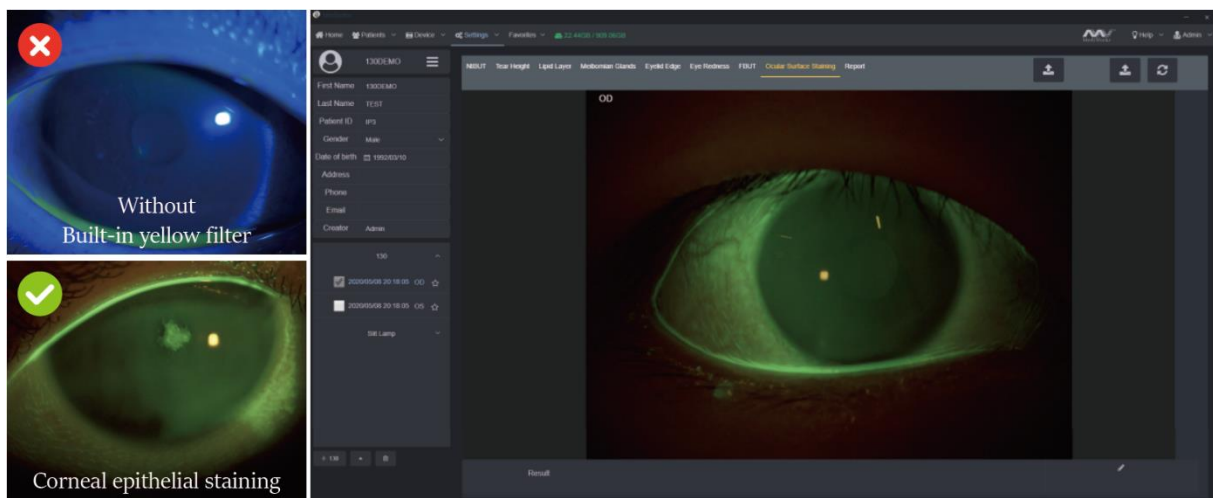
Analysis of Conjunctival Hyperemia

Normal: ≤ 2 Abnormal: > 2

The unique AI identification system can identify and calculate percentages of conjunctival congestion and ciliary congestions and evaluate severity of eye congestion.



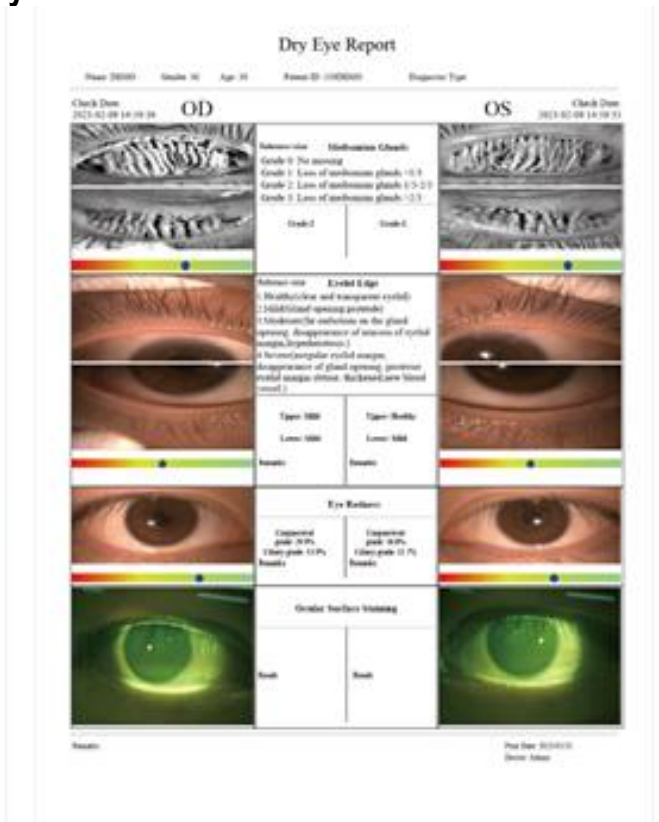
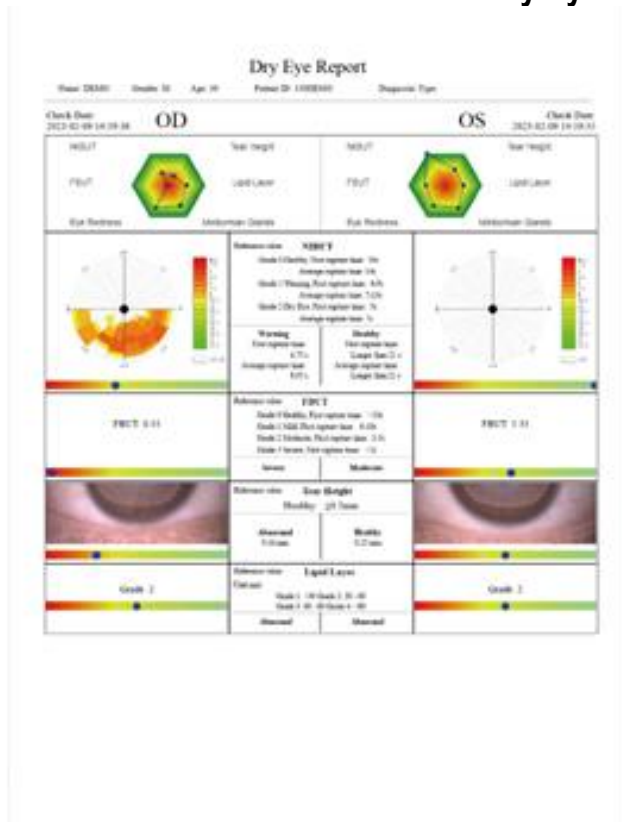
Cornea Sodium Fluorescein Staining



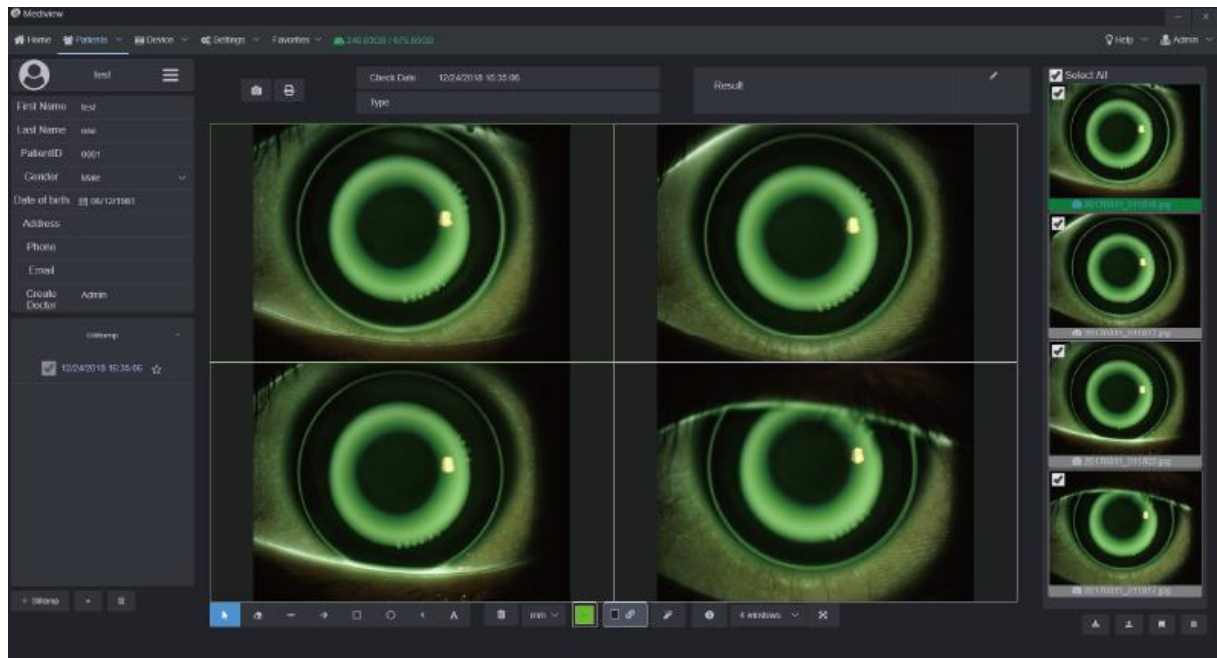
Effectively increases positive rate of early corneal epithelial staining.

Built-in yellow filter along with cobalt-blue filter makes the corneal sodium fluorescein images more clearly.

Dry Eye Comprehensive Evaluation Report Convenient Medical Consultation on Dry Eye Syndrome

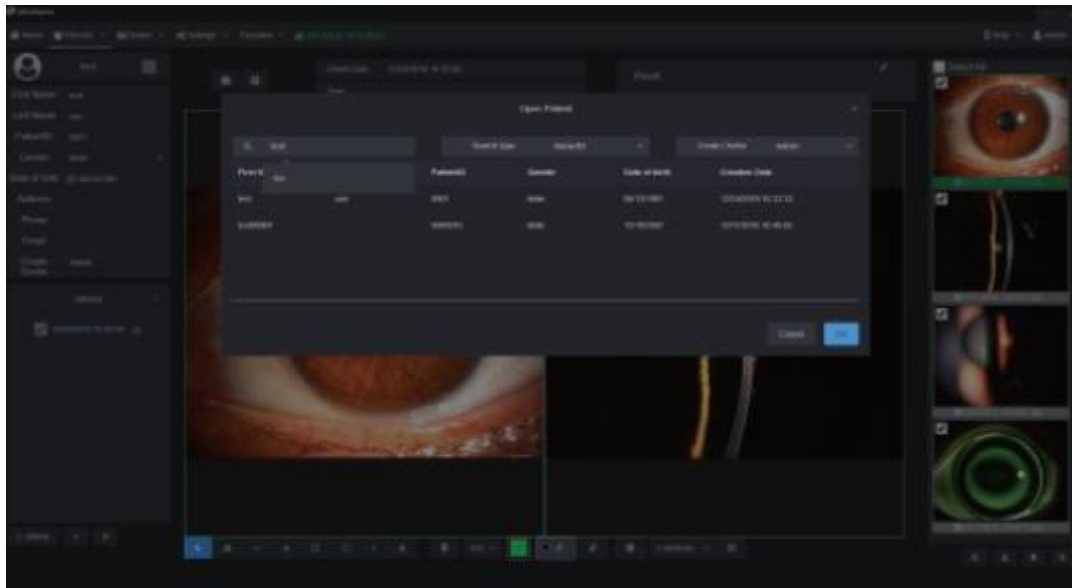


Smart Patient Management System



Comparison of Patient records

Smart Patient Management system supports repeated comparison among medical records to help doctors develop customized treatment plans and evaluate treatments.



Patient Management system allows doctors to build and edit medical records, and quickly search the patient case by key words. Besides, doctors can note patients' situation via the software. With the DICOM-supported system, is connected with medical systems in hospitals.