

NEW HTG-1 INTRODUCTION



SE Team

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- **HTG-1 Overview**
- **Measurements**
- **Dry Eye Screening**

HTG-1 Measurements

Measurement - KERATO

HTG-1 MEASURE Keratometry Complete. Keratometry Calculating... test 00128

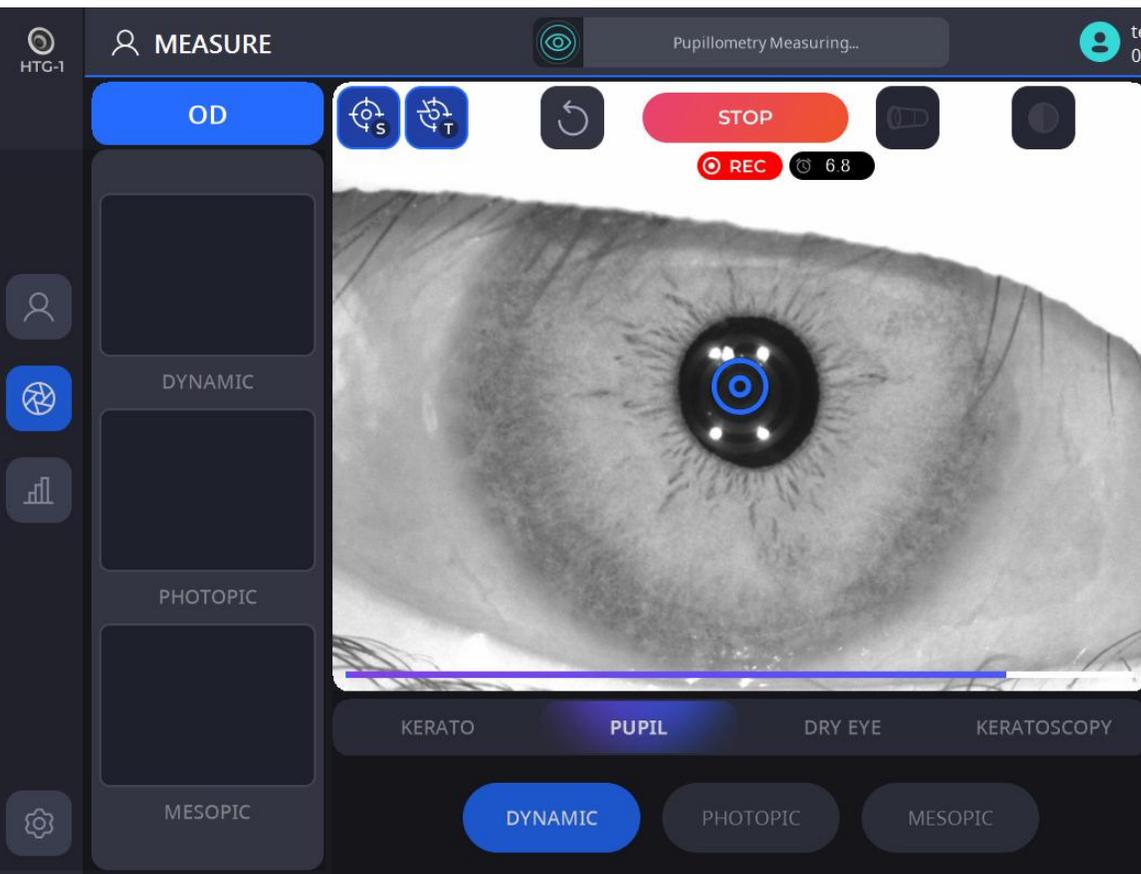
OD	OS
K1 39.32 D	K1 - D
K2 40.29 D	K2 - D
AXIS 76°	AXIS - °
CYL -0.97 D	CYL - D
WTW 12.20 mm	WTW - mm

Auto Shot / Tracking Clear data Manual Measurement Measurement Type

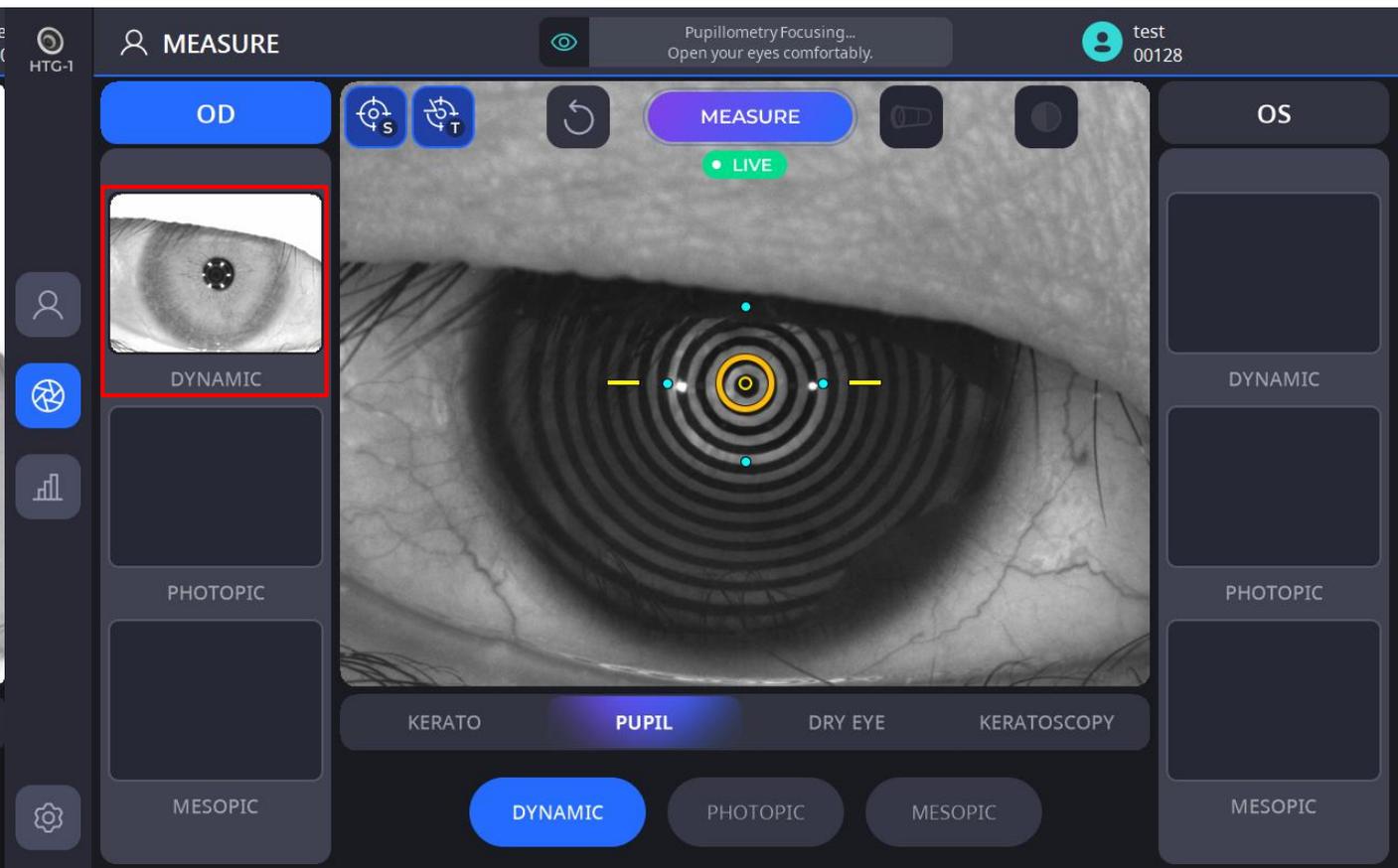
KERATO PUPIL DRY EYE KERATOSCOPY

Measurement Scale Diopter <-> mm

Measurement - Pupil



Measuring



Measurement Finish

Measurement - Dry Eye

HTG-1

MEASURE

NIKBUT Focusing...
Open your eyes comfortably.

test
00128

OD

MEASURE

LIVE

Brightness Control

Auto Brightness (NIKBUT Only)

DRY EYE

NIKBUT MEIBO TMH BLINK REDNESS LIPID LAYER

Measurement – KERATOSCOPY

The screenshot displays the Huvitz keratometry software interface. At the top, it shows 'HTG-1', 'MEASURE', and 'Keratotomy Focusing... Open your eyes comfortably.' with a user ID 'test 00128'. The main area features a live video feed of an eye with a keratometry target. A 'MEASURE' button is prominent, with a 'LIVE' indicator. Callouts identify 'Magnification 0.5 / 1.0 / 1.5' and 'Color / Gray' options. Below the video, there are buttons for 'FLUO IMAGE', 'FLUO VIDEO', 'IMAGE', and 'VIDEO'. A 'Setting' panel at the bottom includes 'Placido' (ON), 'White' (OFF), and 'IR' (OFF) with sliders. A 'Monitoring' callout points to the 'IMAGE' button. On the right, callouts indicate 'LED Setting' (top), 'LED Setting Off' (middle), and 'LED Setting ON' (bottom).

HTG-1 Dry Eye Screening

Dry eye screening : Lipid Layer

LIPID LAYER

Analysis

Normal

Color Diversity & Pattern Regularity
Color based Grading Scale

Normal Mild Moderate Severe

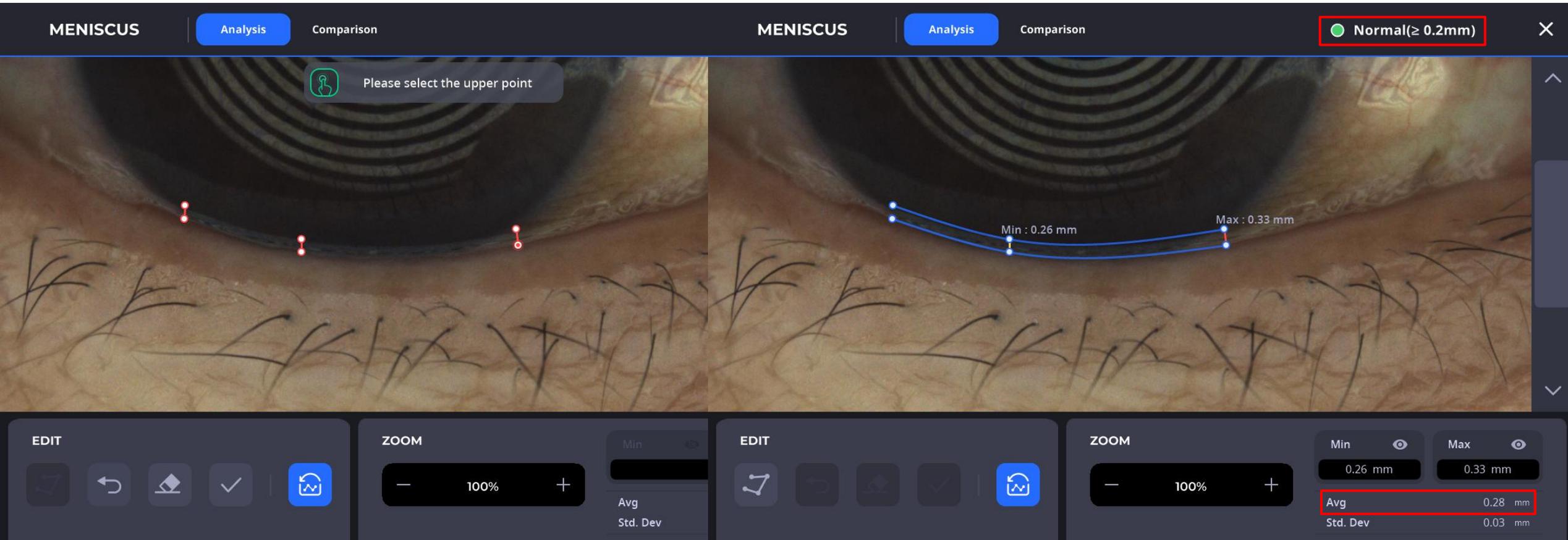
Rich, vivid rainbow colors seamlessly align with a clear and consistent pattern

0:00.1 / 0:08.4

➤ Assessment of Lipid layer quality
Comparing with reference image

- Normal
- Mild
- Moderate
- Severe

Dry eye screening : Tear Meniscus Height



➤ Tear Meniscus height selection

➤ Result of Tear Meniscus height

- A TMH higher than **0.20mm** is considered normal, while lower values indicate not enough watery tears.

Dry eye screening : NIKBUT

NIKBUT Analysis Comparison NIKBUT Analysis Comparison

Short(5 ~ 10s)

EYE EYE & MAP

Breakup Time Characteristic

50 (%)

40

30

20

10

0

0 4 8 12 16 20 24 (sec)

Breakup Time (Avg.) 8.79 sec

5% Level BUT 5.02 sec

First BUT 0.84 sec

0:13.12 / 0:13.12

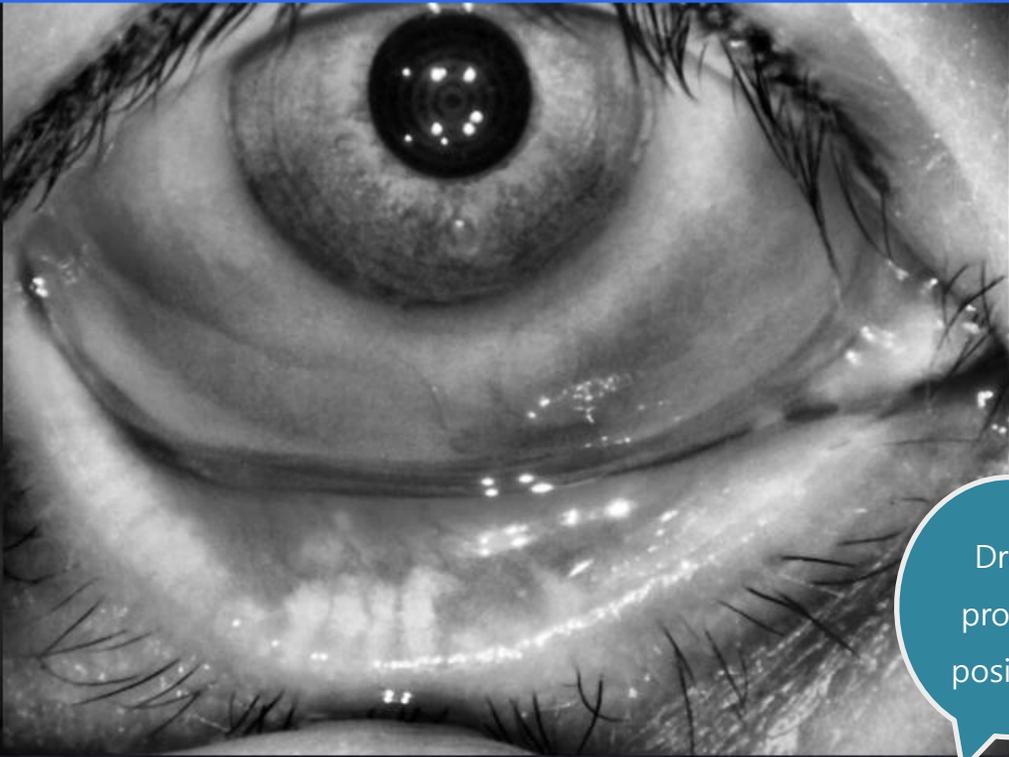
➤ More than **10s** suggests an normal tear film break up time.

Dry eye screening : Meibomian(Grade)

MEIBOGRAPHY | Analysis | Comparison

LOWER  GRADE: 2.4 (Area Of Loss: 59%) 

Mode Set
Grade
Edit

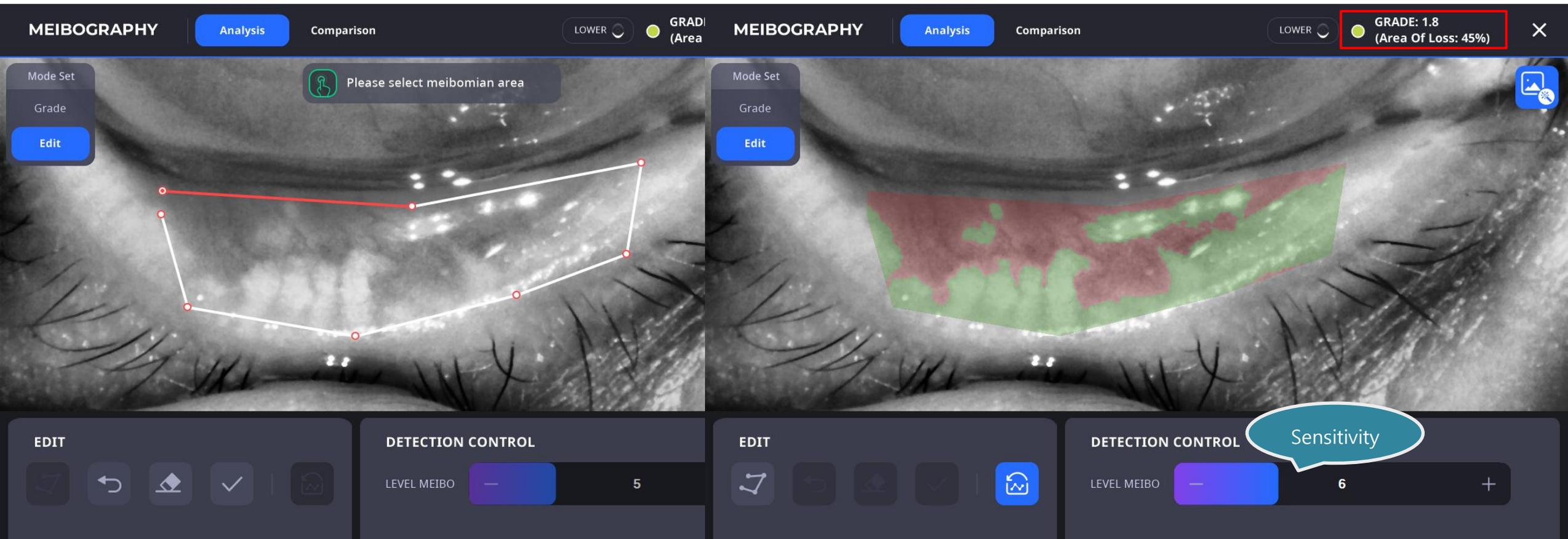


Drag proper position

2.4

0 (0% ~ 25%)	1 (25% ~ 50%)	2 (50% ~ 75%)	3 (75% ~ 100%)
			

Dry eye screening : Meibomian(Edit)

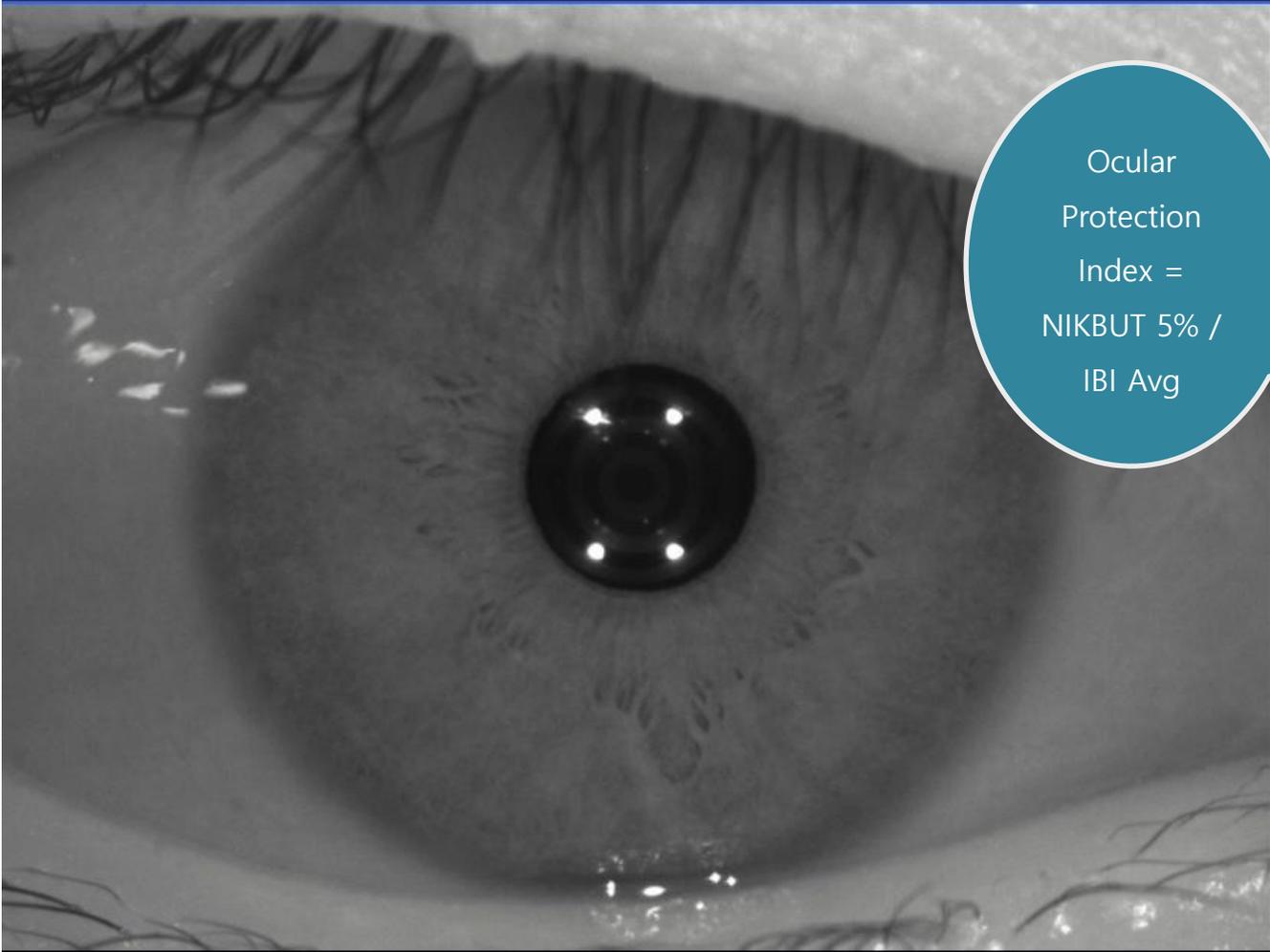


➤ Meibomian area selection

➤ Result of selected meibomian area

Dry eye screening : Blink

BLINK Analysis Comparison



Ocular Protection Index = NIKBUT 5% / IBI Avg

Inter-Blink Interval

IBI	
Min	0.57s
Max	2.95s
Avg	1.94s
Std	0.81s

OPI

8.18

Blink/min

27.35

Graph



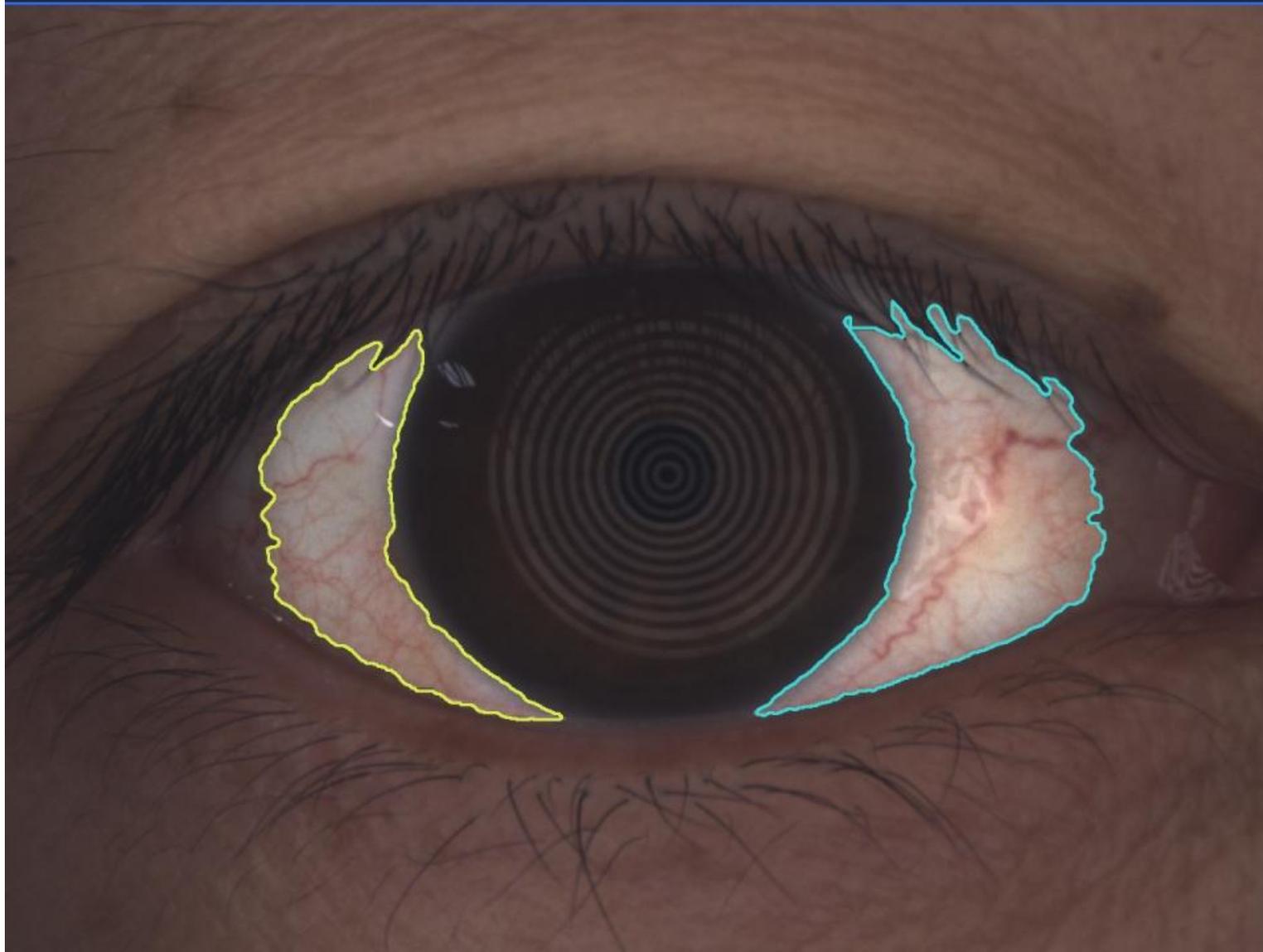
0:00.06 / 0:13.81

Dry eye screening : Redness

REDNESS

Analysis

Comparison



Redness Temporal

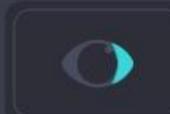


1.7



Editable

Redness Nasal



1.8



Value	Definition
0	No Visible Redness
1	Mild, standard value for adults
2	Moderate
3	Marked
4	Severe

Dry eye screening : OSDI Questionnaire

QUESTIONNAIRE

OSDI
SPEED

Have you EXPERIENCED any of the following during the last week:

	All of the time	Most of the time	Half of the time	Some of the time	None of the time
1. Eyes that are sensitive to light?	4	3	2	1	0
2. Eyes that feel gritty?	4	3	2	1	0
3. Painful or sore eyes?	4	3	2	1	0
4. Blurred vision?	4	3	2	1	0
5. Poor vision?	4	3	2	1	0

Have PROBLEMS WITH your eyes limited you in performing any of the following during the last week:

	All of the time	Most of the time	Half of the time	Some of the time	None of the time
6. Reading?	4	3	2	1	0
7. Driving At Night?	4	3	2	1	0
8. Working With A Computer Or Bank Machine(ATM)?	4	3	2	1	0
9. Watching TV?	4	3	2	1	0

Have your eyes felt UNCOMFORTABLE in any of the following situations during the last week:

	All of the time	Most of the time	Half of the time	Some of the time	None of the time
10. Windy Conditions?	4	3	2	1	0
11. Places Or Areas With Low Humidity	4	3	2	1	0
12. Areas That Are Air Conditioned?	4	3	2	1	0

RESULT

OD
OS

HTG-1

SUM

KER

ZER

PUPIL

WTW

CONT.FIT

DRY EYE

KERATOSCOPY

TYPE: Questionnaire

Analysis

Comparison

TOTAL 52.1

* OSDI formula for determining the severity of dry eye disease:
OSDI(Total score) = (Sum of subtotal scores) x 25 ÷ 12(#Of questions answered)

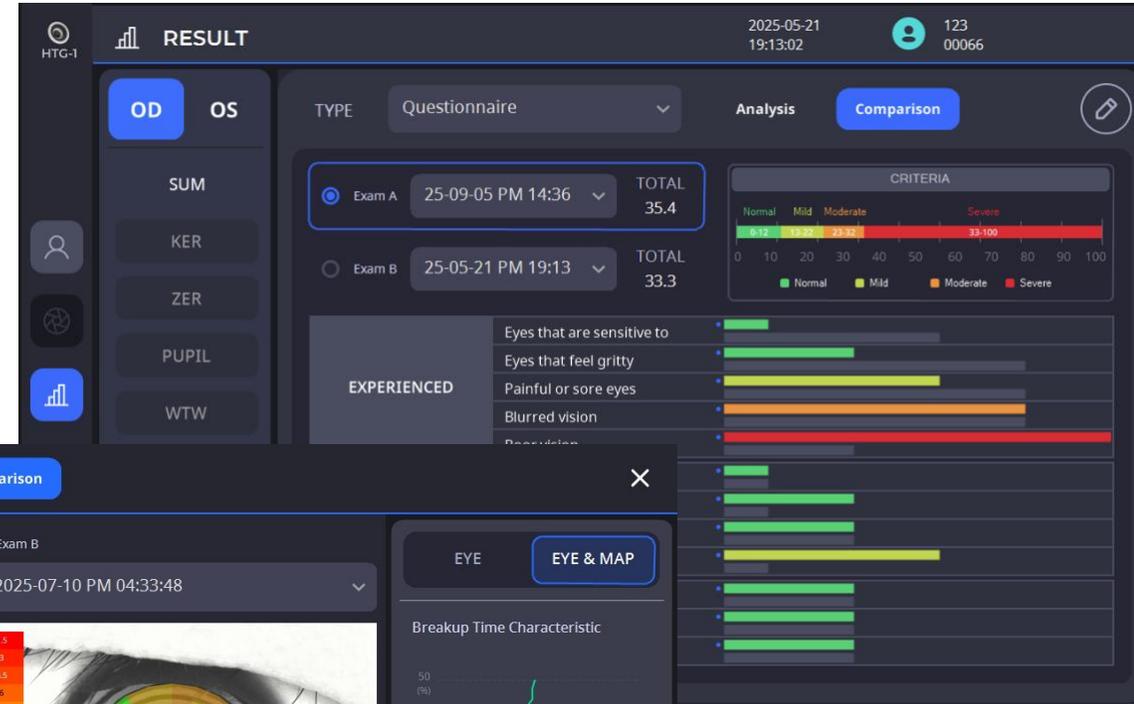
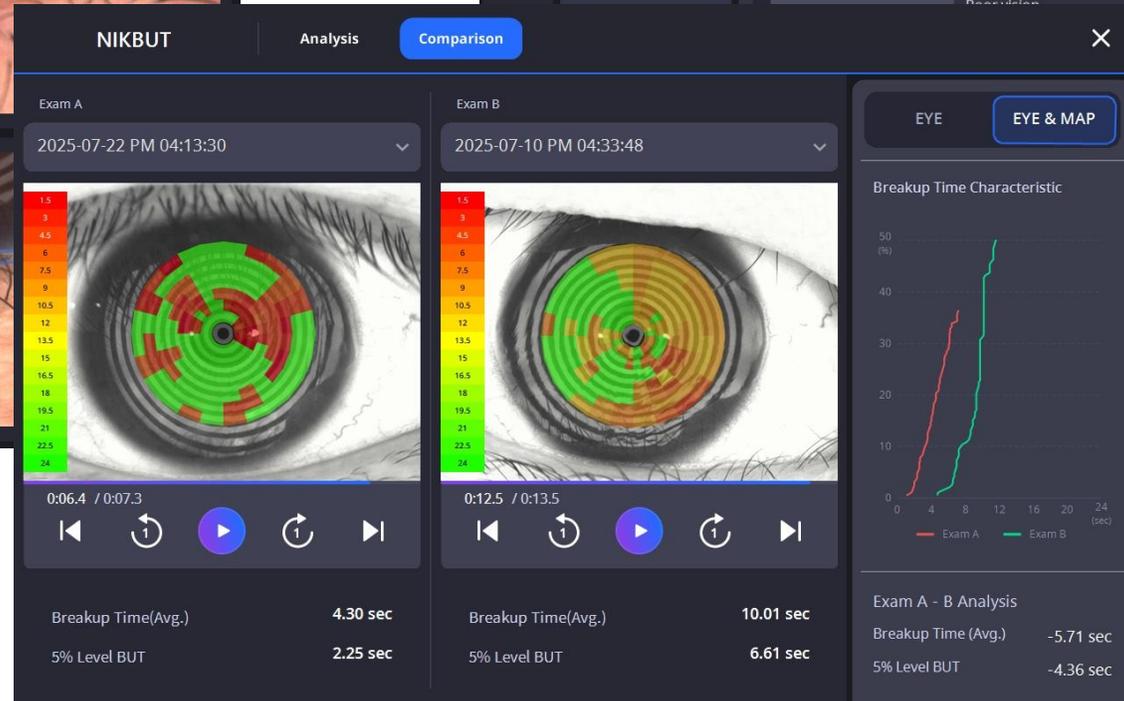
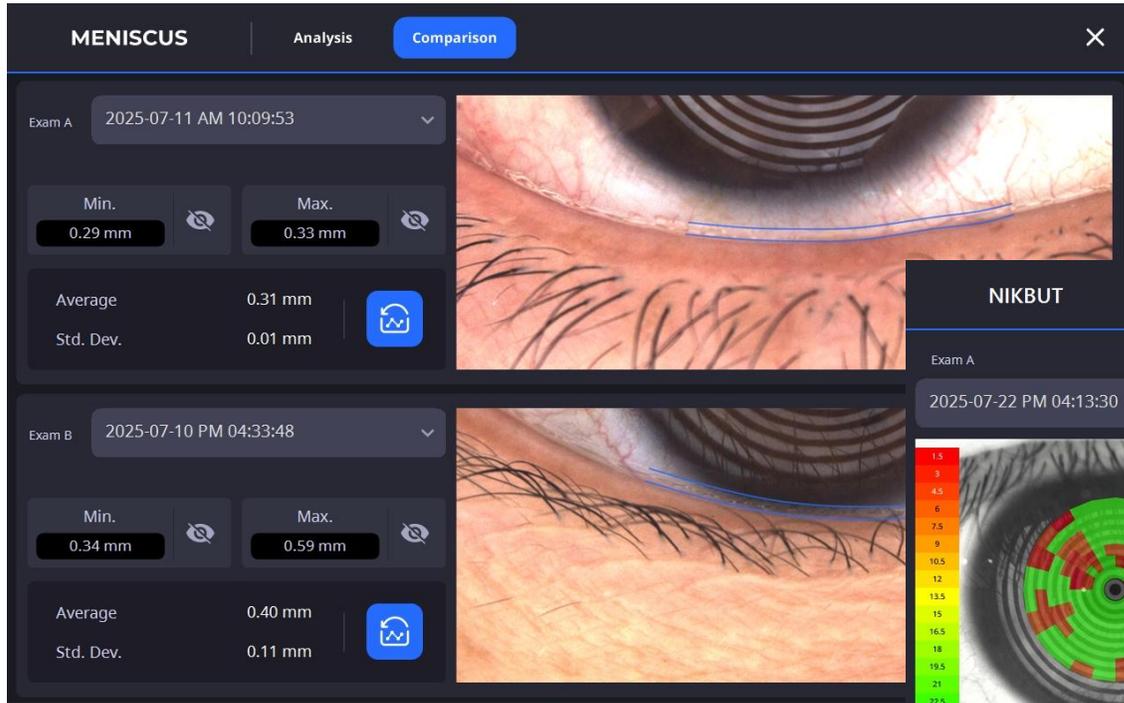
CRITERIA

Normal	Mild	Moderate	Severe
0-12	13-22	23-32	33-100

Category	Item	Score
EXPERIENCED	Eyes that are sensitive to	1
	Eyes that feel gritty	1
	Painful or sore eyes	1
	Blurred vision	2
	Poor vision	2
PROBLEMS WITH	Reading	3
	Driving at night	0
	Working with a computer	4
	Watching TV	3
DISCOMFORT	Windy conditions	3
	Places or areas with low	2
	Areas that are air	3

OSDI Questionnaire & Result

Dry eye screening : Comparison

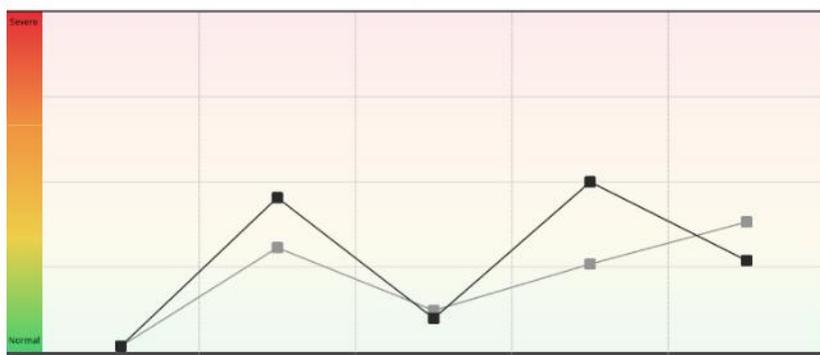
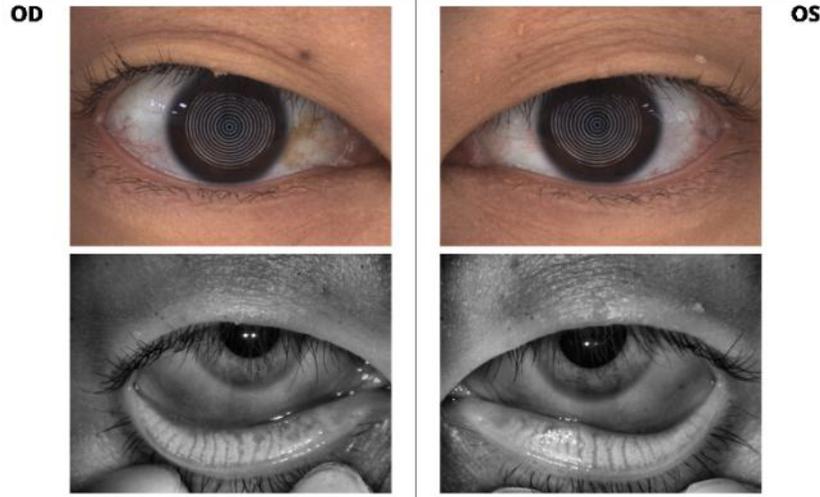


➤ Enable objective treatment plan

Since treatments often take weeks or months to show results, progression data is the only objective way to know if a medication is working.

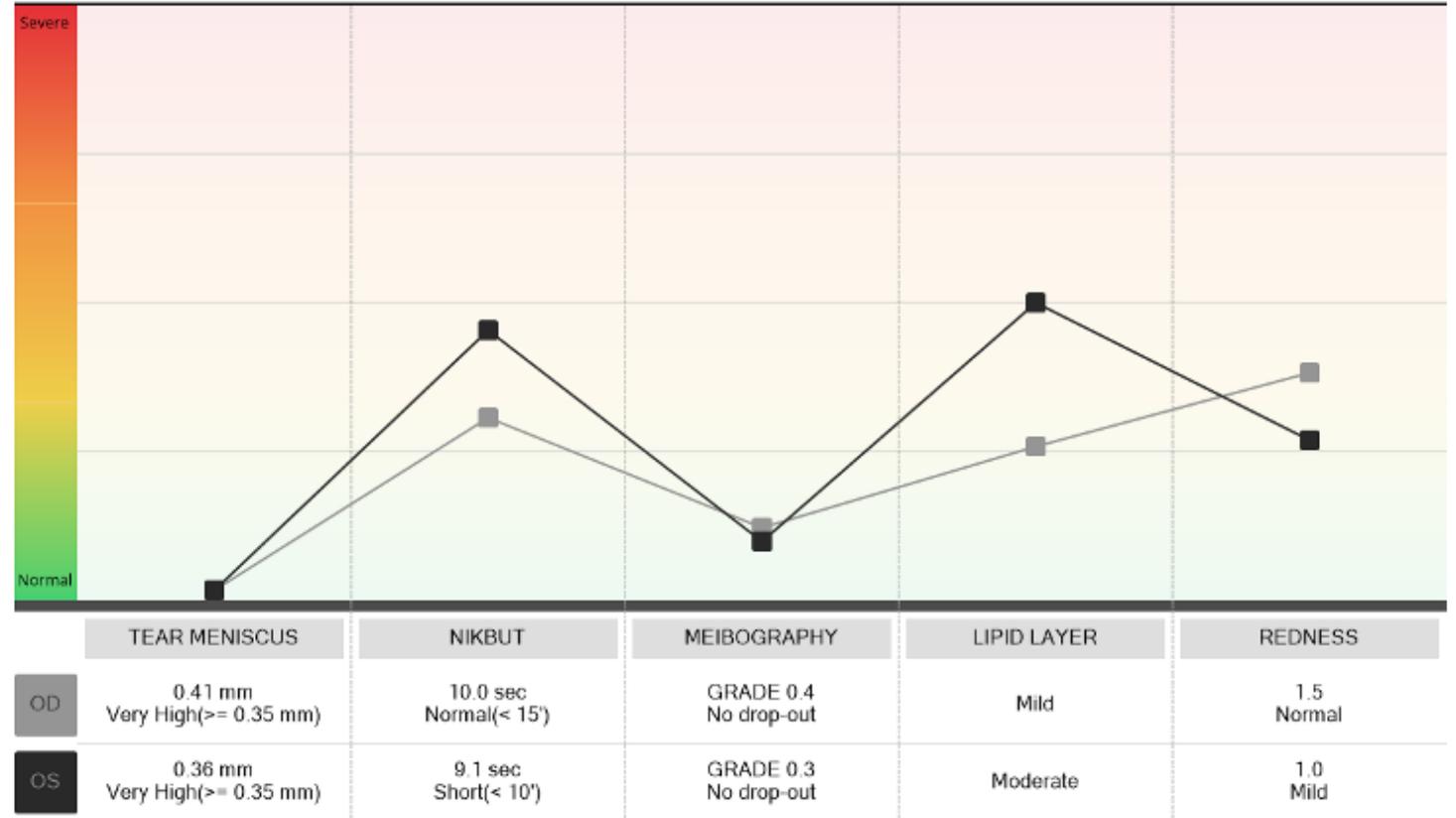
4. Dry eye screening : Integrated Report

Huvitz Name: _____
 ID: _____ Gender: _____ Exam Date: _____
 Date of Birth: _____ Physician: _____



	TEAR MENISCUS	NIK BUT	MEIBOGRAPHY	LIPID LAYER	REDNESS
OD	0.41 mm Very High(>= 0.35 mm)	10.0 sec Normal(< 15')	GRADE 0.4 No drop-out	Mild	1.5 Normal
OS	0.36 mm Very High(>= 0.35 mm)	9.1 sec Short(< 10')	GRADE 0.3 No drop-out	Moderate	1.0 Mild

Comments: _____ Signature: _____
 Device / SW Info: HTG-1 / v1.1.0(2025_08_05)
Report generated on 2025-08-22



➤ Enhancing Diagnostic Precision

Integrated report is its ability to provide a comprehensive and reliable diagnosis for a condition that lacks a single test.



THANK YOU