



**Sets a new standard  
in dry eye assessment**

 **SBM**  
Sistemi  
*Care and Research*

  
Italian  
**Xcellence**

**The patient gets comfortable  
and the device does the rest**

**No manual operation required**



Voice guidance



**100%  
AUTOMATIC**  
NO MANUAL  
INTERVENTION



**Assessment with a single acquisition.**  
**IDRA X automatically detects the patient's eye, adjusts to the optimal focus, and initiates a comprehensive series of dry eye assessments.**

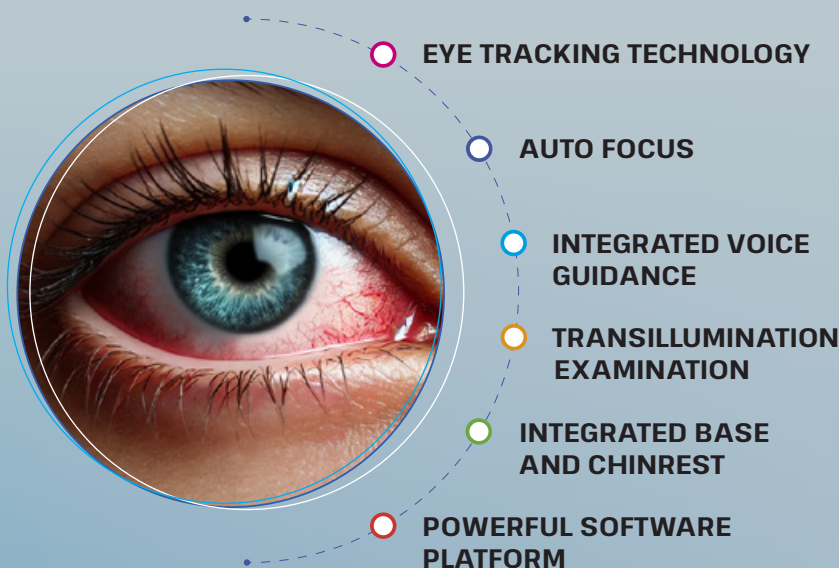
## Advanced Automation for Tear Film Analysis

The IDRA X technology suite is accessible with **minimal user interaction**, delivering advanced performance with maximum ease of use.

Once the procedure is initiated, **IDRA X automatically detects and focuses on the patient's eye**, following guided protocols that ensure optimal data acquisition.

This setup allows for delegation to non-specialized personnel when appropriate, **minimizing the risk of operator error**.

### Product features



Together, they perform real-time acquisition, analysis, and evaluation of all essential parameters related to dry eye disease.



### Exams

- Interferometry
- Tear Meniscus height
- Auto NIBUT
- Lacrimal topography map and stability chart
- Meibography
- Transillumination
- 3D Meibography
- Eye blink detection
- Protocol
- Connection with patient App
- Report
- Lifestyle questionnaire
- Staining test
- DEQ5, OSDI, OSDI6, CDEQ, CLDEQ8, SPEED
- Pupillometry test
- Bulbar redness

As an advanced technological solution, **IDRA X delivers a detailed understanding of the patient's condition**, covering the type, severity, and classification of dry eye, supporting targeted and effective treatment choice.

**IDRA X is the ultimate expression of innovation in ocular surface analysis.**

## TFOS DEWS III ready

The new report endorses a simpler patient screening questionnaire and links specific disease characteristics to treatment approaches.

The definition of dry eye has also been tweaked to emphasize symptomatic involvement.

### Ocular Surface Disease Index 6: OSDI 6

|                                                                                                                     | Constantly<br>4        | Mostly<br>3 | Often<br>2 | Sometimes<br>1 | Never<br>0 |
|---------------------------------------------------------------------------------------------------------------------|------------------------|-------------|------------|----------------|------------|
| Have you experienced any of the following during a typical day of the last month?                                   |                        |             |            |                |            |
| 1. Eyes that are sensitive to light?                                                                                | 4                      | 3           | 2          | 1              | 0          |
| 2. Blurred vision?                                                                                                  | 4                      | 3           | 2          | 1              | 0          |
| Have problems with your eyes limited you in performing any of the following during a typical day of the last month? |                        |             |            |                |            |
| 3. Driving at night?                                                                                                | 4                      | 3           | 2          | 1              | 0          |
| 4. Watching TV (or similar)?                                                                                        | 4                      | 3           | 2          | 1              | 0          |
| Have your eyes felt uncomfortable in any of the following situations during a typical day of the last month?        |                        |             |            |                |            |
| 5. Windy conditions?                                                                                                | 4                      | 3           | 2          | 1              | 0          |
| 6. Places or areas with low humidity?                                                                               | 4                      | 3           | 2          | 1              | 0          |
| Sum of all questions:<br>Likely Dry Eye if total sum $\geq 4$                                                       | <div><div></div></div> |             |            |                |            |
|                                                                                                                     | Normal 4 Dry Eye       |             |            |                |            |

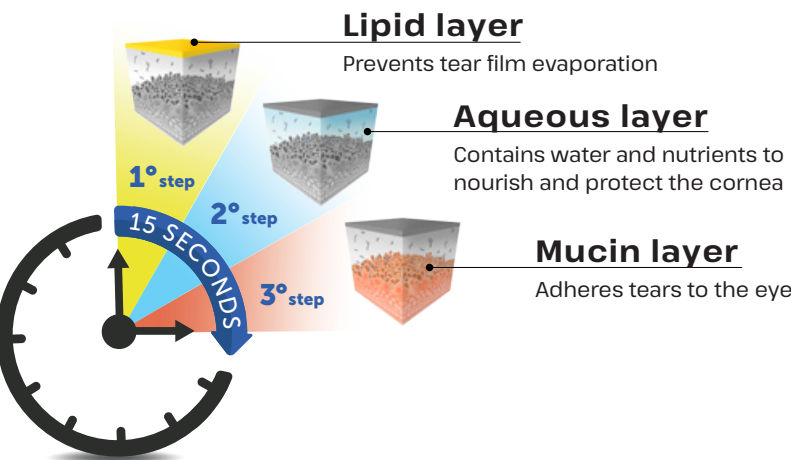
# Ocular Surface Analysis - Dry Eye Suite

## The fastest and most comprehensive Dry Eye suite

Idra is the innovative instrument for individual tear film analysis, enabling a rapid and detailed structural assessment of tear composition.

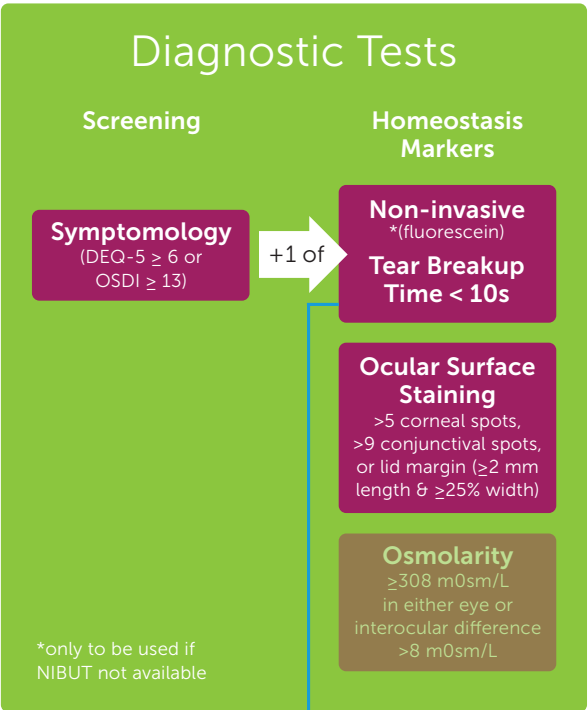
## Evaluation of all the layers (Lipid, Aqueous, Mucin) and Meibomian Glands

With the SBM device, it becomes possible to identify the type of Dry Eye Disease (DED) and determine which components can be treated with specific, targeted treatments based on the identified deficiencies.



## The tests essential for diagnosing Dry Eye are clearly outlined in the 2017 TFOS DEWS II report.

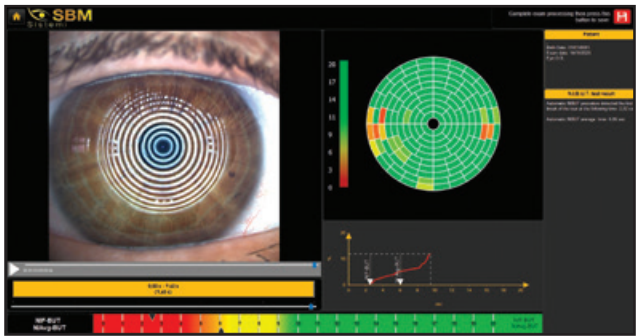
Idra X allows the complete analysis using the guidelines in a completely automatic and objective way, providing the results automatically without operator intervention, thus making the analysis incredibly fast and easily delegated.



## Automatic NIBUT

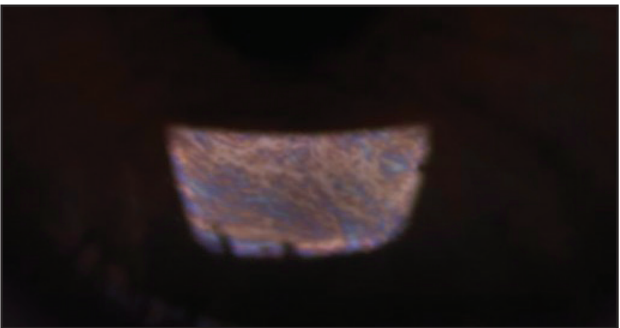
The SBM device allows to evaluate tear film stability and regularity, using non-invasive break up time measurement (NIBUT). It measures the number of seconds between one complete blinking and the appearance of the first discontinuity in the tear film. With the SBM Device, thanks to one single video, the physician can gain lots of information and tear film stability automatically evaluated without fluorescein:

- Automatic NIBUT
- Graph to understand the trend of tear film stability during the video.
- Tear topography that shows the breaking of the tear film during time.



## Automatic Interferometry

Thanks to the Interferometry technology, Idra can acquire the lipid layer secretion present over patient's cornea. The device highlights the lipid layer and the software evaluates the quantity and quality of the lipid component on the tear film.



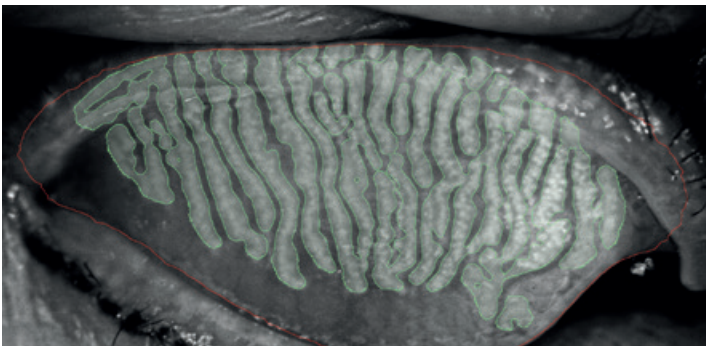
## Meibography

### Meibomian gland auto detection on upper and lower eyelids.

Meibomian Glands (MGs) play a significant role in tear quality by producing lipids (meibum) that are part of the superficial tear film. Dysfunction of the MGs destabilizes tear composition resulting in evaporative dry eye.

### Automatic lid detection

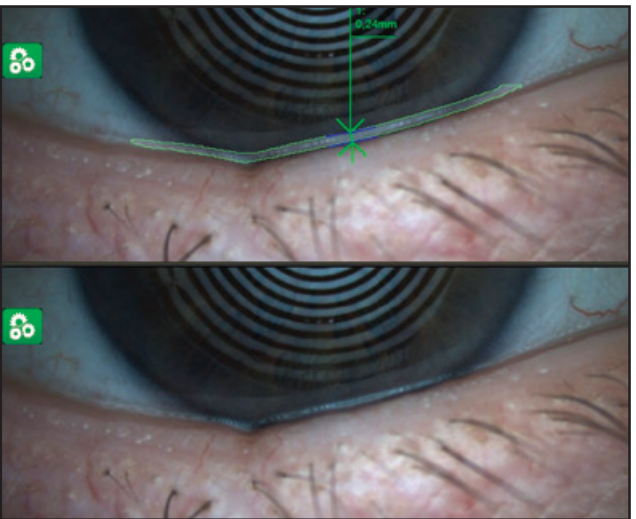
To decrease evaluation time, the software automatically detects the lid margin for MG analysis.



## Automatic tear meniscus height

Low tear production may result in aqueous tear deficiency (ATD) and cause dry eye symptoms. However, measuring the tear volume is difficult since the methods normally used are invasive and irritating. Reflex tear production can be induced, giving an over-estimation of basal tear flow and volume. Tear meniscus height is related to the tear secretion rate and tear stability and for this reason it's a good indicator of tear production. The aqueous layer is evaluated through the non-invasive "Tear Meniscus" test and is then classified into different categories. The tear meniscus can be examined considering its height, regularity and shape. An artificial intelligence determinates automatically:

- Position of tear meniscus
- Highest value in TM



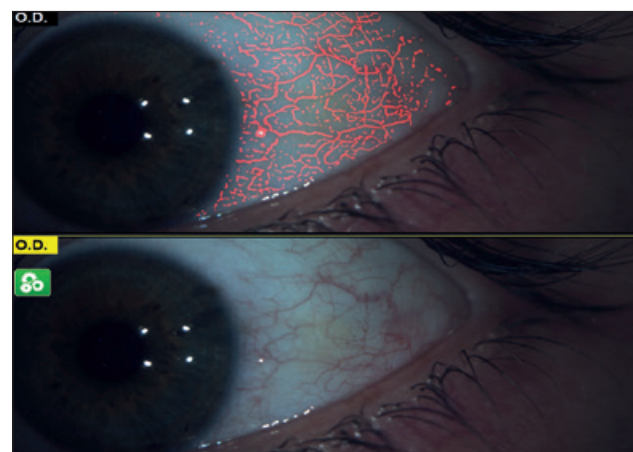
### Auto Blinking quality

It is well known that using electronic devices and wearing contact lenses can induce significant changes in blinking rate and completeness, leading to MGD. It has been established that **efficient blinking plays an important role in ocular surface health during contact lens wear** and that it improves contact lens performance and comfort. Inefficient blinking during contact lens wear may be related to a low blinking rate or incomplete blinking and can often be a reason for dry eye symptoms.



### Bulbar redness

Acquiring an image of the conjunctiva, it will be possible to compare the patient's condition with different international grading scales. Once the image of the conjunctiva with its blood vessels is captured, it is possible to compare it with the classification scales of bulbar and limbal redness degrees.



**You position the patient,  
the rest is magic!**

**Relax, and the device  
does the rest**



## Meibography (3D and transillumination)

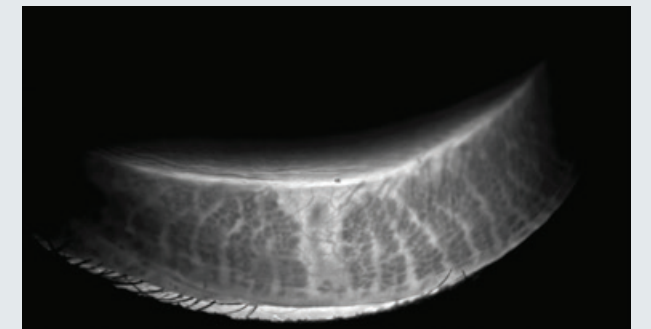
IDRA X - unveils meibomian gland health like never before.

IDRA X captures distinct, high-resolution images using advanced infrared technologies:

- **Structural Insight** - Visualize and assess gland architecture with unmatched clarity.
- **Functional Analysis** - Reveal how the glands perform, identifying blockages and meibum flow disruptions with ease.

### What sets IDRA X apart?

Its **transillumination infrared feature**, designed to expose critical details, often detecting gland dysfunction, oil buildup, and vascular changes with striking accuracy.

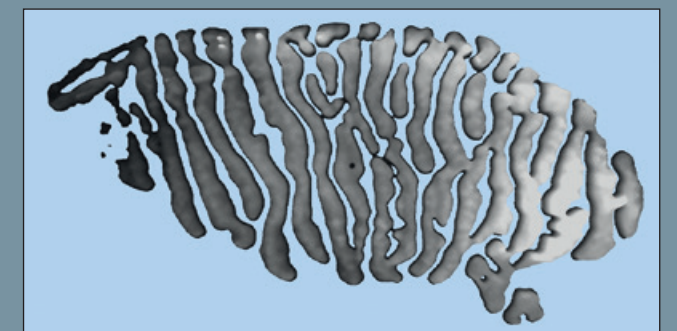


Overall, the IDRA X meibography system provides strong evidence to support the choice of a specific therapy (for example ACTIVA treatment) and helps the patient to understand why the solution is needed.

**Elevate your analysis and transform meibography with the power of IDRA X!**

### Meibography 3D

The revolutionary introduction of the 3D Meibomian Gland imaging gives two big advantages. Firstly, it enables to **confirm the presence of abnormal glands** compared to a healthy subject in a 3D view; secondly, it provides **a clear image to share with the patients**, to help explain the potential reason of their discomfort.



# Additional exams

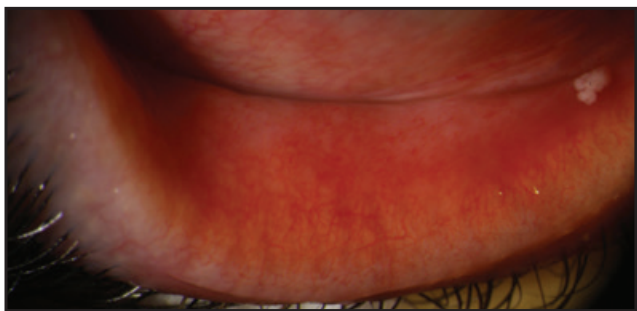
## Pupillometry

The measurement of the pupil diameter has become increasingly important in the field of refractive surgery. Larger scotopic pupil sizes may be partially responsible for the occurrence of postoperative symptoms such as halos, glare, and monocular diplopia. Refractive surgeons also need an accurate scotopic pupil measurement to determine appropriate treatment zones for excimer laser, corneal, and intraocular surgery.



## Cylindrical Dandruff and Blepharitis

Blepharitis is an inflammation caused by some bacteria that lie at the base of eyelashes. They produce dandruff-like flakes in the skin, which lead to infection and inflammation. Problems with the Meibomian Glands (meibomianitis) in the eyelids can also cause blepharitis.



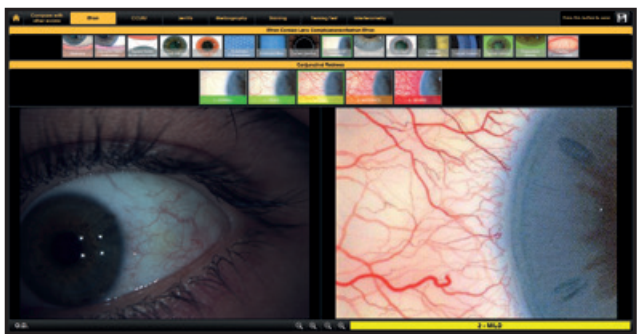
## Demodex

Demodex brevis is a kind of mite found on the skin of humans. D. brevis is so small that mites can't be seen macroscopically. The average mite causes noticeable reactions and problems in people largely infested. Symptoms of D. brevis usually only occur in case of large infestations. Signs might include: Red skin, Rough or tough skin, Scaly or patchy skin.



## Efron / CCLRU / Jenvis

Comparative tables

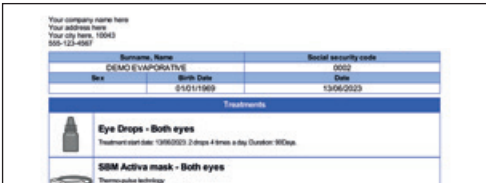


# Dry Eye reports

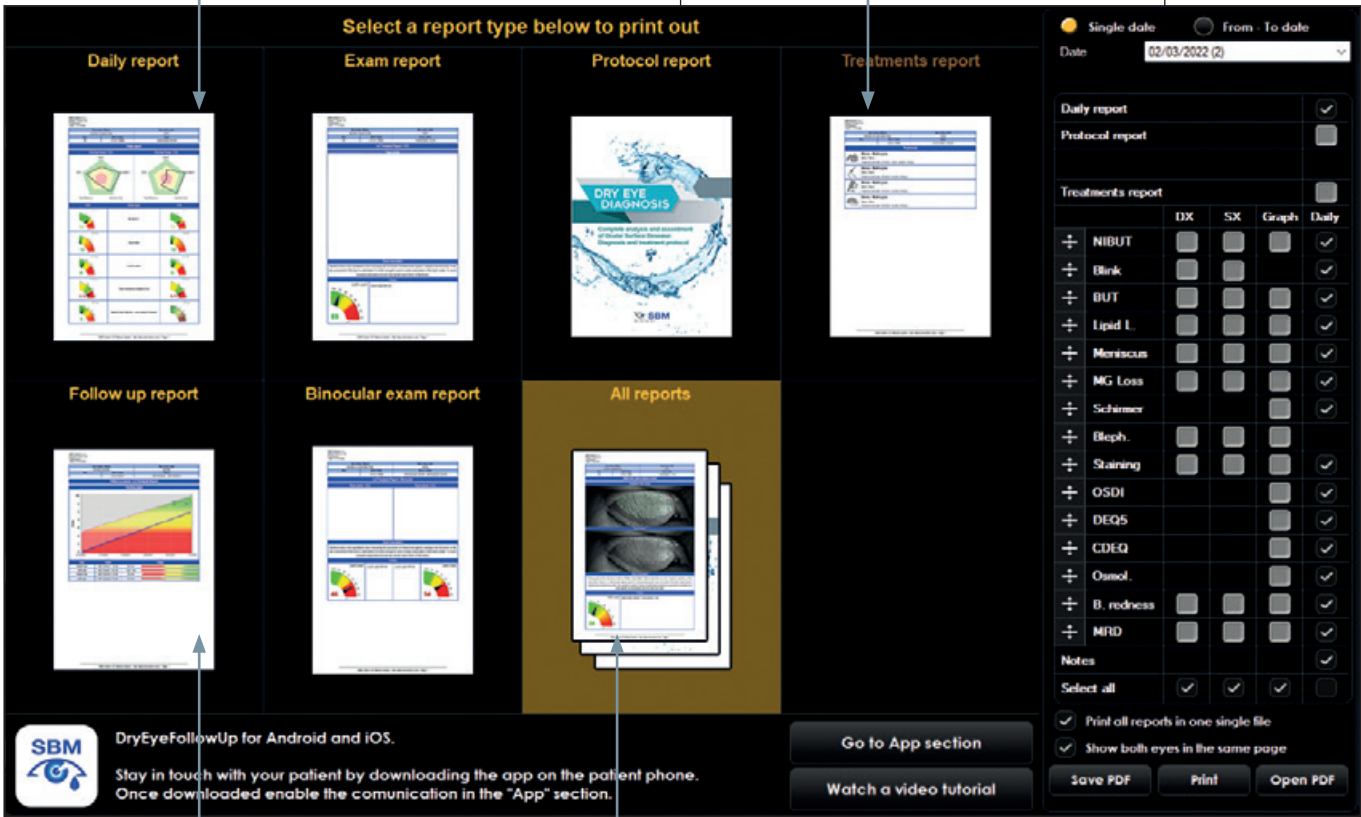
The software is a dedicated platform for dry eye and allows, in addition to helping in the diagnosis and classification of diseases, can print and save medical reports, offering the most professional and clinical solutions to patients.

For customer satisfaction, it is often advisable to provide technical documentation relating to the exams taken. Thanks to the various print reports of the SBM device, you will have the possibility to visually explain and simply demonstrate the pathology situation. Furthermore, it's possible to explain how the pathology has changed over time.

The "Daily report" groups all results of the patient's exams of one single day. Multiple visualization options are available, including with or without pictures of the exams.

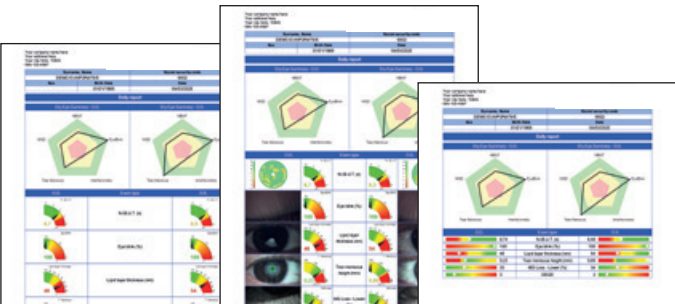
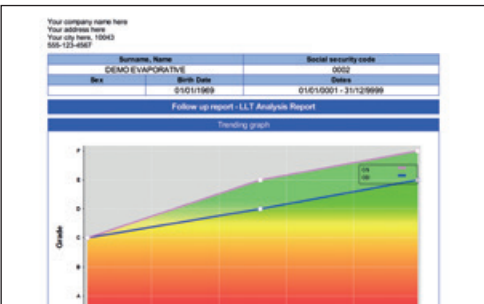


The "Treatments report" lists all pre-scribed treatments for the patient.



The "Follow-up report" can show to the patient the benefit of the therapy showing the improvement of the symptoms related to the dry eye pathology.

The "All reports" options can print a folder including up to 16 pages. When the patient is paying out-of-pocket, receiving a detailed multi-page report will provide an added value and increase the satisfaction.



# Patient follow-up

## 1. Treatment protocol

The software stands as an advanced platform, presenting multiple versatile solutions meticulously designed to empower medical professionals and users alike in the intricate task of assigning therapy:

### Manual treatment management

Through TREATMENT MANAGING tab, the software allows the physician to fill in the database with all treatments available in the practice. Treatment brand and type can be loaded in the software to be prescribed to the patients in two clicks.

### Automatic treatment suggestion

The unique integrated algorithm, developed in collaboration with MD. Luca Vigo from Studio Medico Carones, can provide a dedicated treatment approach based on the results of the analysis.

In addition...

### Personalized treatment suggestion

All users can customize their own protocol (this makes it possible to delegate the diagnosis to an assistant). Each of the options provides comprehensive and dedicated printable reports.



## 2. Application

### IDRA X Workflow

1. Customized symptomatology questionnaire
2. Automatic acquisition and objective evaluation of clinical parameters
3. Pathology and treatment suggestions based on integrated protocols
4. Patient education via customizable reports and the dedicated Dry Eye Follow-Up mobile application.

Dry Eye Follow-Up is an app for the smartphone of the patient to receive exams results, therapy, and a complete knowledge about the dry eye disease.

### Benefits of Dry eye follow-up

- Fast, simple doctor-patient two-way communication
- Accurate report sharing and updates
- Progress tracking to monitor symptom changes
- Helps schedule regular appointments and clinic interaction
- Sends reminders to patients and notifications to doctors
- Speeds up info delivery, appointment booking, and treatment setup

### Stop forgetting your medications!

Set reminders on your mobile phone for all your treatments.

The App will remind you when and how to use the specific suggested drug.

Download on



# Specification

|                                     |                                                    |
|-------------------------------------|----------------------------------------------------|
| Image resolution                    | <b>8 Megapixel</b>                                 |
| Upscaled analyzed image resolution  | <b>23 Megapixel</b>                                |
| Acquisition mode                    | <b>Single shot, multishot, video</b>               |
| Focus                               | <b>Manual focus / Automatic focus</b>              |
| ISO management                      | <b>Variable</b>                                    |
| Image color                         | <b>Colours - Infrared (IR)</b>                     |
| Lighting source                     | <b>Infrared led - White led - Blue led</b>         |
| Working distance                    | <b>60 mm - 90 mm from the center of the placid</b> |
| Output 1                            | <b>USB 3.0</b>                                     |
| Electromagnetic compatibility (EMC) | <b>IEC 60601-12 (2015)</b>                         |
| Supply voltage                      | <b>100 - 240 V</b>                                 |
| Device operating voltage            | <b>24 V - 5V - 3,3 V</b>                           |
| Dimensions                          | <b>48 cm (L) x 47 cm (A) x 40 cm (P)</b>           |
| Weight                              | <b>12 Kg</b>                                       |

Patient  
experience



SBM website



About us



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