

I-PEN®

THE NEW STANDARD FOR DIAGNOSING DRY EYE DISEASE

RAPID - RELIABLE - REPRODUCIBLE

I-PEN®, the world's first, point-of-care, electronic diagnostic testing device to detect and indirectly measure the tear film osmolarity levels associated with marginal, mild, moderate and severe Dry Eye Disease.



Uses Single-Use-Sensors

I-PEN® MEASURES TEAR OSMOLARITY IN SECONDS

The I-PEN® Osmolarity System, used in conjunction with the I-PEN® Osmolarity Single-Use-Sensors (SUS), provides a quick and simple method for determining tear osmolarity from the tear soaked papabral conjunctiva.

After approximately 2 seconds of contact with the eyelid tissue, the I-PEN® will display a quantitative tear osmolarity test result on the liquid crystal display (LCD) in units of mOsms/L. **No calculations required!** The I-PEN®

osmolarity test utilizes an impedance measurement to provide an indirect assessment of osmolarity of the tear film of the eye.

The I-PEN® is designed for use as an in-practice screening device both for patients presenting with dry eye symptoms and for all pre- and post-surgical patients. In addition, the I-PEN® is an invaluable asset for monitoring the progress of dry eye treatment therapies.

THE I-PEN® IS FOR PROFESSIONAL IN-VIVO DIAGNOSTIC USE ONLY.

To arrange an in-office demonstration, please contact your local I-MED Pharma Sales Representative.

Affordable ✓



I-PEN® INSTRUCTIONS FOR USE

Consult the User Manual for complete instructions prior to use.

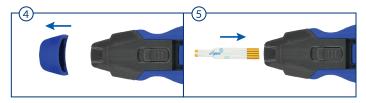
REMOVE THE SINGLE-USE-SENSOR FROM PACKAGE

- 1. Tear along the dotted line to separate the attached ①, wrapped Single-Use-Sensor.
- 2. Grasping the bottom firmly with one hand ②, with the other hand, tear in the direction of the pre-cut section to expose the end of the Single-Use-Sensor ③ to be inserted into the I-PEN® device.



INSERT THE SINGLE-USE-SENSOR

First 4 remove the unit cover, then 5 insert the disposable Single-Use-Sensor and DO NOT TOUCH THE GOLD NODES or the sterile tip.



TAKING A READING

- 1. Ask the patient to close their eyes for 30-60 seconds prior to taking a reading.
- 2. Position the tip of the disposable Single-Use-Sensor just above the lower eyelid with the LCD screen facing upwards.
- 3. Turn on the I-PEN only when you are ready to take the reading by pushing the on/off switch to the on position.
- 4. Approach at a 30-45 degree angle from horizontal and gently lower the end of the Single-Use-Sensor on to the conjunctiva on the inside of the lower eyelid.
- 5. When correctly placed, the tip of the Single-Use-Sensor should be depressing the surface slightly so that both gold nodes are in good contact with the conjunctiva.
- 6. The I-PEN® will make an audible beep after a couple of seconds and display the reading on the LCD screen.

Please note: In order to conserve battery life, the I-PEN is programmed to enter Sleep Mode automatically thirty seconds after it powers up. In doing so, this can invalidate the SUS and a new SUS should be inserted.

WATCH THE I-PEN® IN ACTION

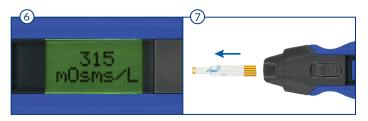
imedpharma.com/diagnostic-tools/tear-osmolarity

THE LCD WILL DISPLAY THE TEST RESULT

⑥ I-PEN® test results are displayed on the LCD in units of mOsms/L. No calculations are required. The chart below shows some typical test results and their possible interpretations. All such interpretations are subject to the review of the physician/medical professional.

EJECT THE SINGLE-USE-SENSOR

Push the Ejector button and the Single-Use-Sensor will be ejected. You may now discard the Single-Use-Sensor and insert a new one for the second eye.



DRY EYE SEVERITY SCALE

275	290	305	320	335	350	365	380
Normal	Marginal		Mild		Moderate		Severe > 350
< 290	290-310		310-330		330-350		

REFERENCE TEAR OSMOLARITY VALUES

Reading in mOsms/L (Use result from eye with highest reading)	Variance Between Right & Left Eye	Interpretation
<290		Normal Patient
290-310	≤7	Normal Patient
290-310	≥8	Dry Eye Disease Patient
>310		Dry Eye Disease Patient

QUESTIONS OR COMMENTS?

Customer satisfaction is an I-MED Pharma Inc. priority. To help us in providing you with the best possible product and support, please send us your comments and suggestions to info@imedpharma.com.

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Marking by the CE symbol indicates compliance of this device as a Class 1 medical device with a measuring function, with the Medical Device Directives 93/42/ EEC as amended by 2007/47/CE.