

# What Do We Do with the Information We Obtain from Tear Osmolarity Testing

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Just ordering a test is never enough. It is key to use the gathered information to help shape the treatment plan for each patient for enhanced outcomes. Moreover, the better patients understand about their chronic disease process, the more they may grasp the importance of adhering to a prescribed treatment regimen.

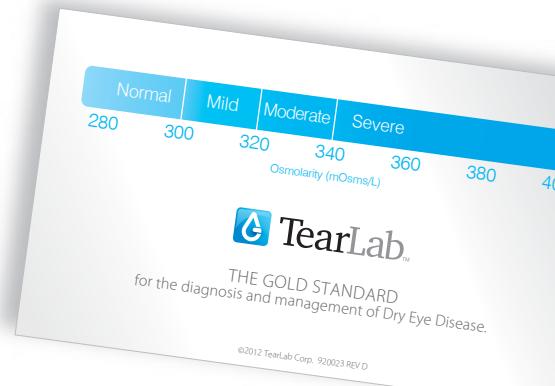
## We use the information we gather from TearLab® osmolarity testing in the following manner:

**We educate our patients:** We let out patients know their tear osmolarity number which we document on an osmolarity tracker that looks similar to a business card and is provided by TearLab. We discuss the normal values and let the patients know where they stand in the spectrum of ocular surface disease. We refer our patients to our website where we have information on Dry Eye Disease.

**We recommend our patients look at the back of the osmolarity tracker card** where the scale of Dry Eye Disease is outlined according to the osmolarity results. We help our patients understand where they fall in the continuum of ocular surface disease.

**We explain inter-ocular variability to our patients** and let them know a difference of >8 mOsm/L between eyes is considered abnormal.

**We perform InflammaDry®** at times in conjunction with tear osmolarity to assess the presence of MMP-9 inflammatory markers and accordingly, design a more aggressive treatment plan if the InflammaDry® test is positive.



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**We email our patients a comprehensive video from Eyemagination** on Dry Eye Disease by stringing together short vignettes on the topic.

**We have learned to intervene earlier rather than later to treat OSD.** We are able to turn around the disease process more quickly and have our patients experience faster relief by earlier diagnosis and sooner implementation of treatment options.

**We start with preservative-free artificial tear solutions,** which we have available at Matossian Eye Associates for patient convenience but rarely use them as a stand-alone option. Most patients have tried multiple brands of tears on their own without relief before making an appointment with an eye physician. Therefore, additional treatments are often required besides artificial tear solutions.

**We recommend Omega 3 oral supplements** which we have available at Matossian Eye Associates through PRN. We recommend PRN's health coach model where, with the patient's agreement, trained omega 3 health coaches call the patients to explain the benefits of omega 3 for dry eye disease. It is an educational call. I let my patients know that once they are an educated consumer, they will better understand what to look for in an oral omega 3 fish oil supplement.

**We prescribe cyclosporin ophthalmic emulsion 0.05% BID when needed.** We clearly explain to our patients that these are medication drops and they must be used twice daily and not on an as needed basis.

**We recommend a microwavable re-usable moisturizing mask from Bruder** which we have available at Matossian Eye Associates for our patients' convenience. This mask provides the sustained heat at the proper temperature for the meibomian glands. Our patients love this mask and find it to be inordinately helpful.

**We perform Omega index finger prick blood test** 6 months to one year after the initiation of omega 3 therapy to make sure our patients are in the therapeutic range. If their omega level is not within the therapeutic range, then, we investigate the quantity, brand, and type of O3 the patient is taking. Accordingly, we recommend to either increase the O3 intake or to change the type of omega 3 from the ethyl ester to the triglyceride variety for better absorption.

**We offer Intense Pulsed Light (IPL)** if all steps listed above have been tried or implemented yet the patient remains symptomatic, then I recommend IPL - a series of 4 to start then a customized maintenance treatment averaging one treatment every 6 months. I have found the IPL to be very helpful for my patients with evaporative Dry Eye Disease from meibomian gland dysfunction.