

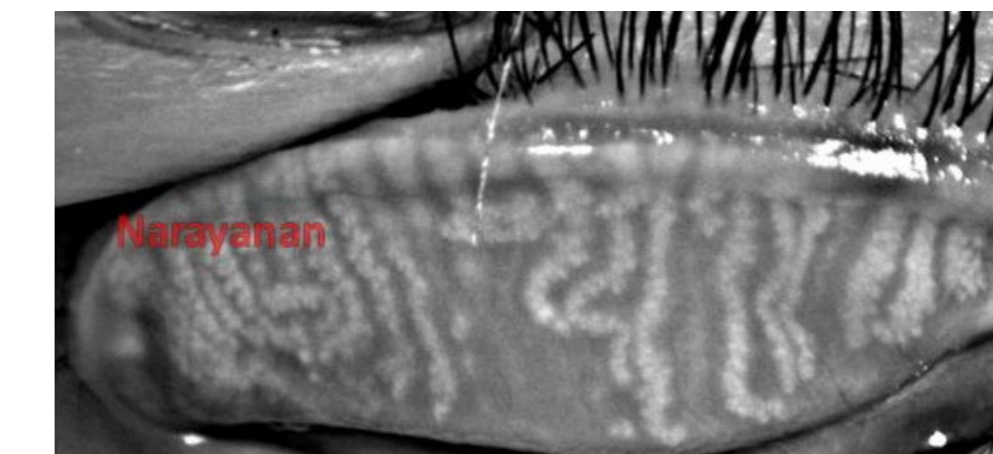
Introduction

- Contact lens discomfort (CLD) reduces CL tolerance and wear times. Meibomian Gland Dysfunction (MGD) often causes CLD.
- We have previously shown that lid margin debridement-scaling improves MGD signs and symptoms and decreases inflammatory marker matrix metalloproteinase-9 (MMP-9)
- Zocular is a novel “okra-based” formulation to enhance lid margin hygiene. The Zocular Eyelid System Treatment (ZEST) is performed in-office by the clinician
- The purpose of this clinical trial (NCT03968731) was to study improvement in CLD associated with MGD using the ZEST protocol.

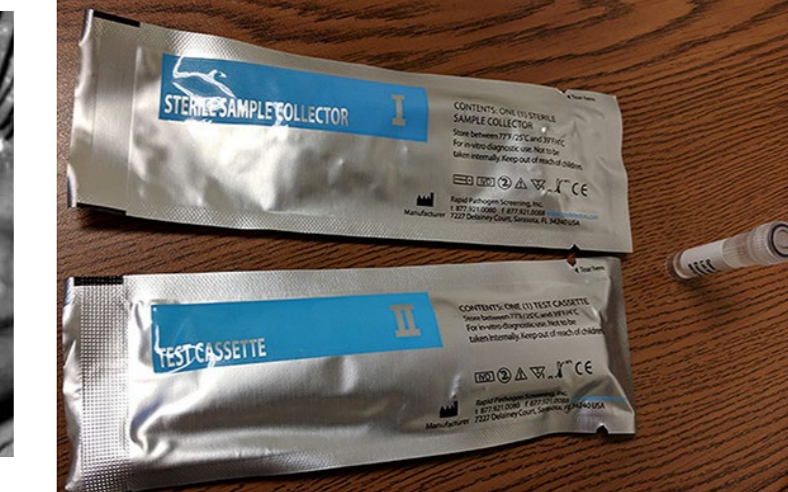
Methods

- Thirty CLD patients with MGD (8 men; 26.5 +/- 7.51 years) consented to the study; ZEST was performed in all eyelids on the first visit
- Patients reported number of hours of CL wear per day and completed the CLDEQ-8 questionnaire prior to treatment and at 2-weeks and 1-month post treatment
- Quidel Inflammadry MMP-9 test was done prior to and 1-month post-treatment; Non-invasive tear break-up (NITBUT) was measured at each visit; Data was analyzed by paired samples t-test.

Meibomian Gland Dropout



Quidel Inflammadry

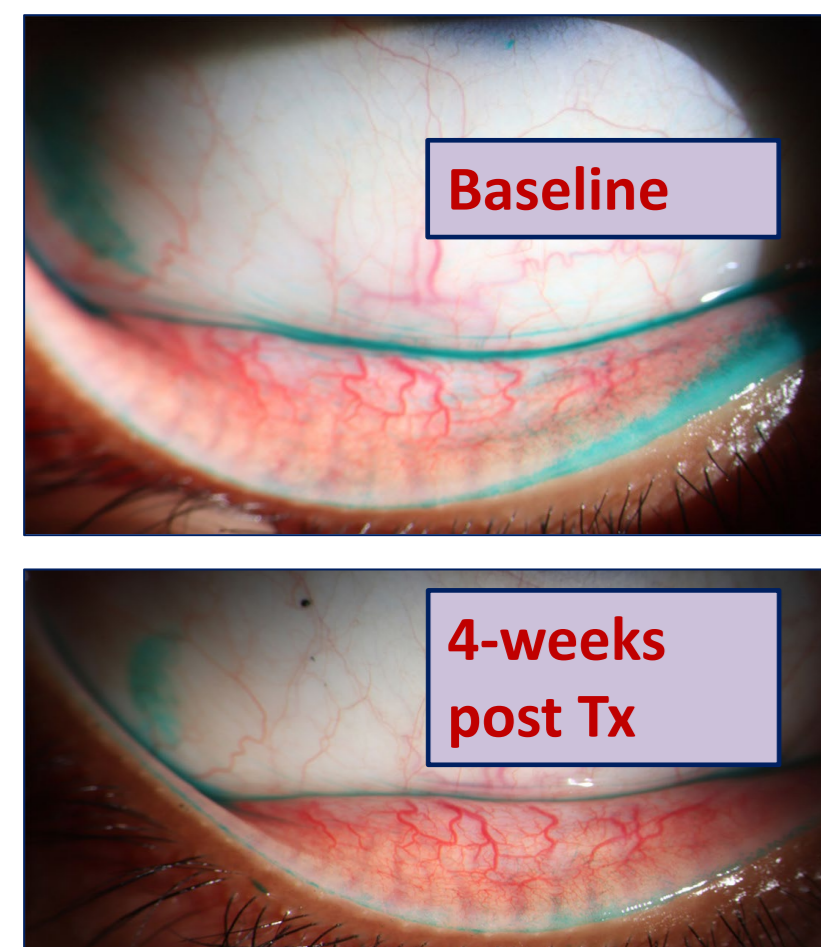


Zocular ZEST

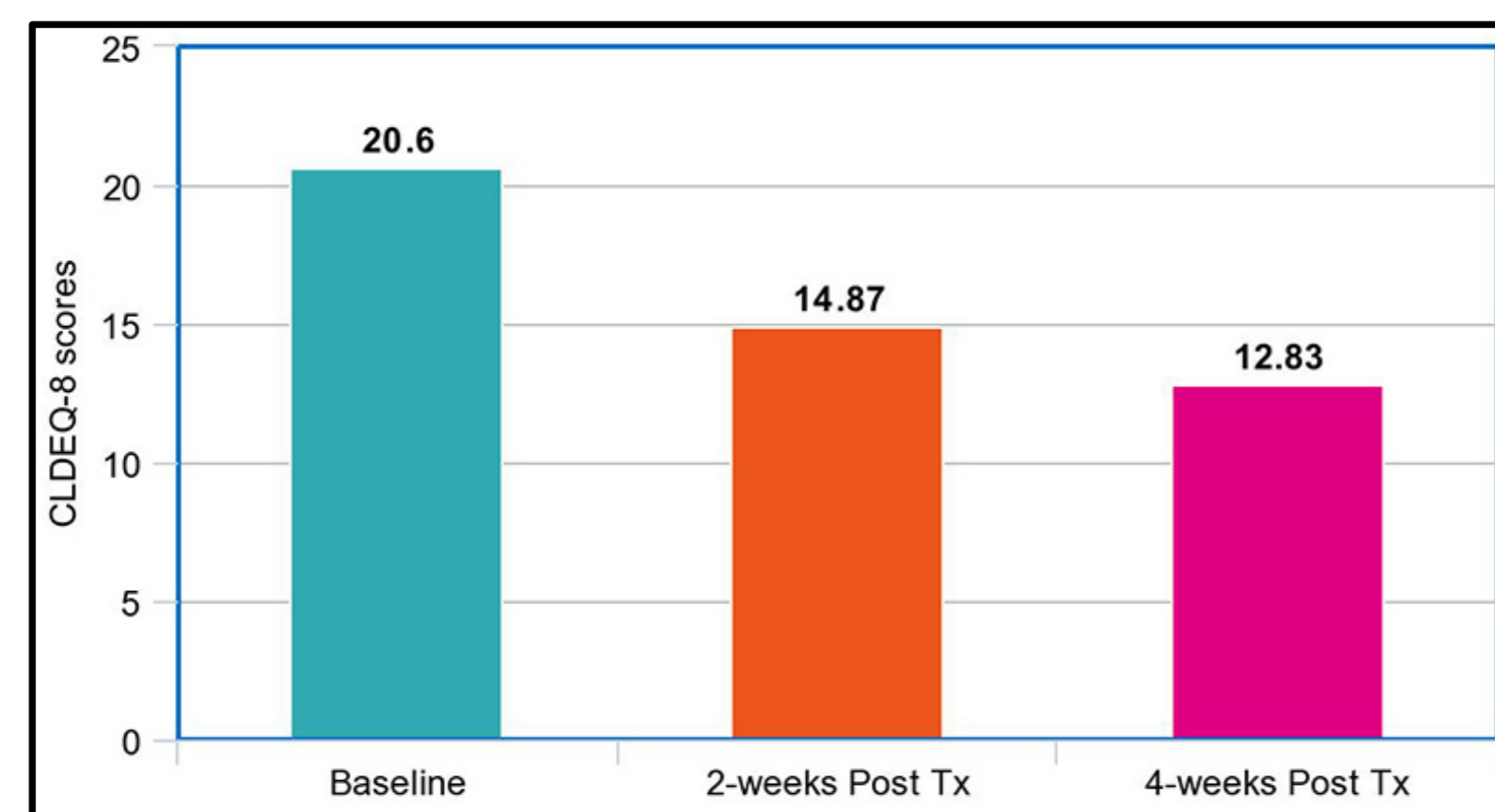


Results

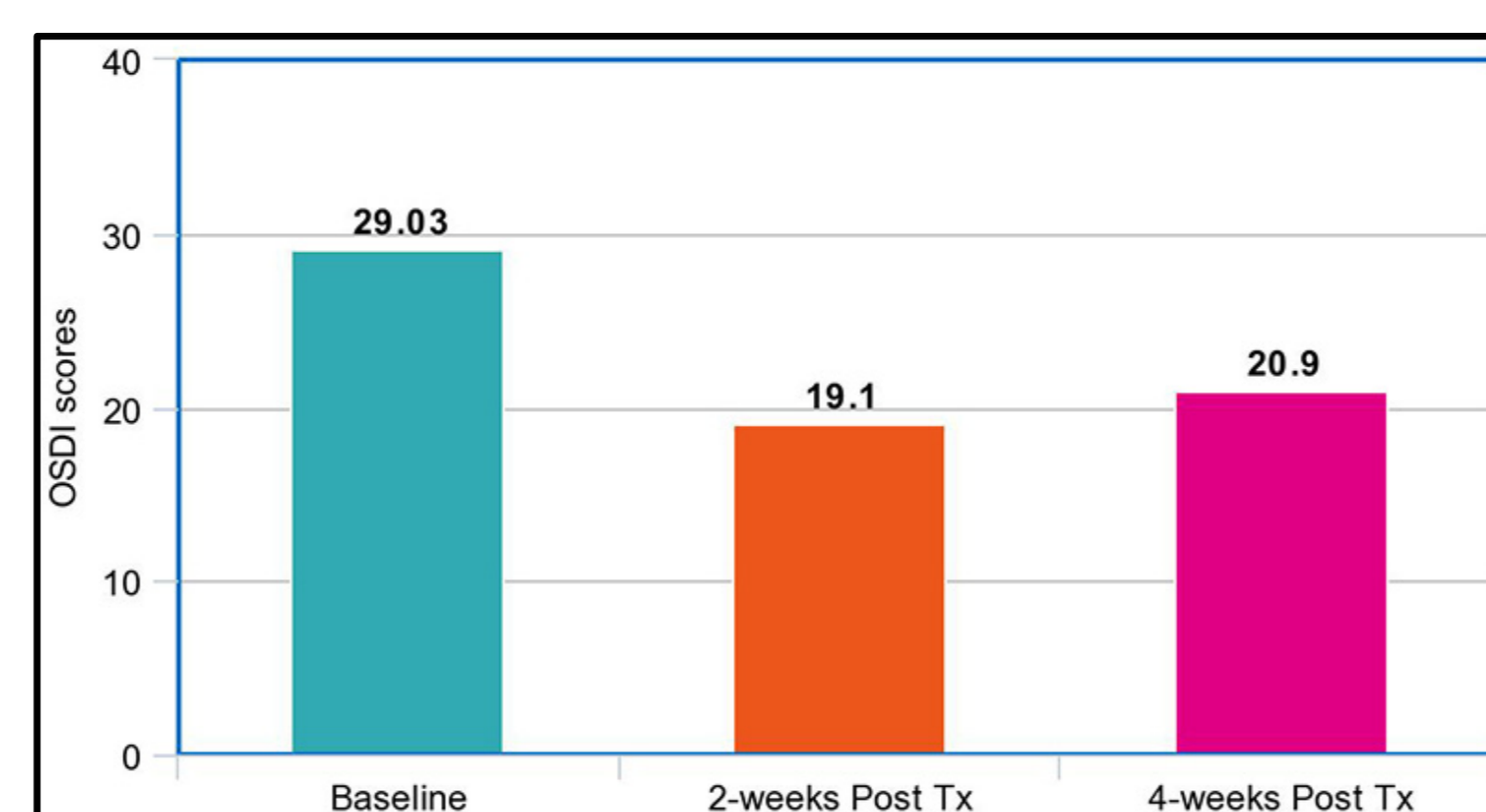
Decreased Lid Wiper epitheliopathy



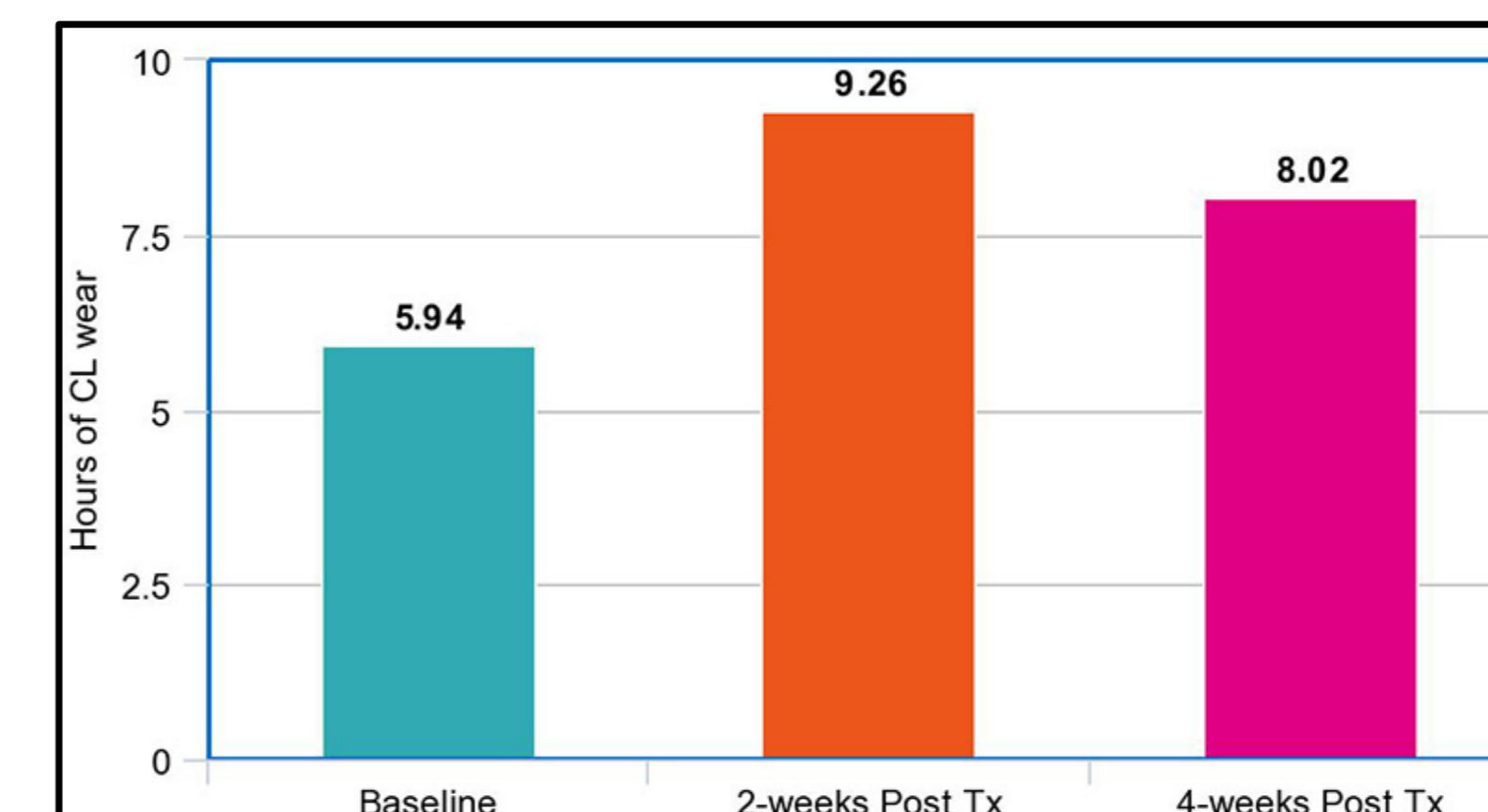
Decreased CLDEQ-8 scores Post ZEST Tx



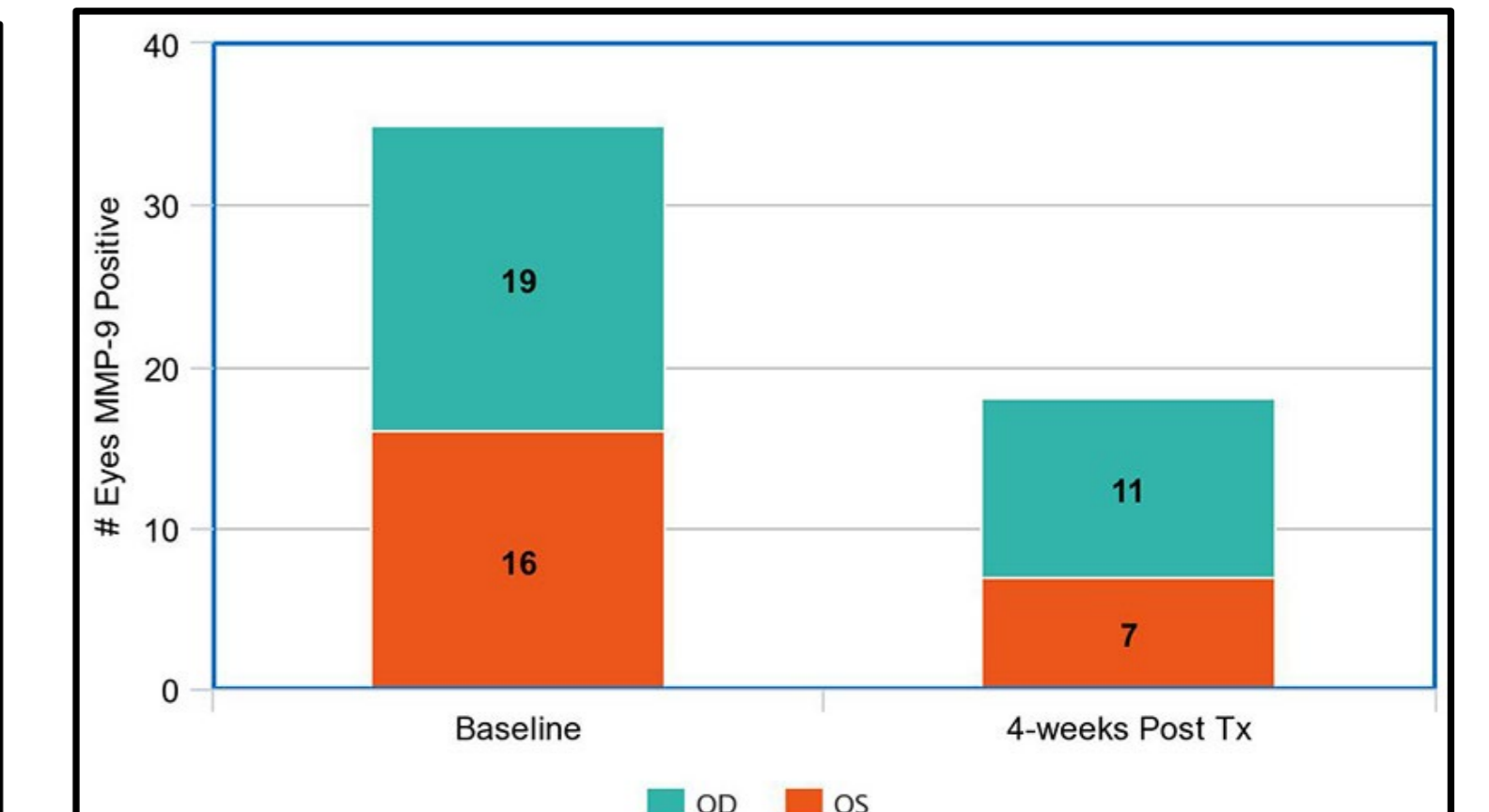
Decreased OSDI scores Post ZEST Tx



Increased CL Wear Time Post ZEST Tx



Decreased MMP-9 Post ZEST Tx



Conclusions

- Results show significant increase in CL-wear time and betterment in CLD symptoms following ZEST treatment
- The inflammatory marker MMP-9 was significantly decreased in the group post-treatment
- NITBUT showed a trend of betterment at the conclusion of the study
- The outcomes suggest that improvement in lid margin hygiene subsequent to ZEST protocol contributes to better comfort and tolerance of contact lenses as well as an ocular surface environment with decreased inflammation

Acknowledgements

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