# MACKINAC ISLAND OEC MEETING 

## Mackinac Island 2023



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## WELCOME

Greetings!
Thank you for joining us this weekend. This is our third Mackinac Island conference and we welcome our returning doctors and those attending an OEC conference for the first time. We appreciate your patronage as you have many choices for education. We would also like to introduce you to the newest member of OEC's team, Maureen Trusky. Maureen is assuming the role of Conference Administrator and Vanessa will remain on staff to assist during the transition period.

We could not offer the pricing, meals and guest speakers without our exhibitors and ask you to take some time to visit with them during breaks. We implemented a game/quiz game to encourage vendor-attendee interaction. Prizes awarded are as follows: First place- full refund of Mackinac 2023 registration, second place $50 \%$ refund of registration and third place - $25 \%$ refund of registration. Visit each sponsor and obtain the answer to their question to become eligible for the drawing.

Florida Doctors: The TQ exams are sent to everyone and the cost is $\$ 10$ per course. Certificates are issued immediately upon taking the online test. CE Broker will be updated a few days later. If you do not need the exams of course simply delete the link.

Regardless of the location, our conferences are always COPE accredited and Florida approved. We have recently added Texas approval now that the state requires that everything run through CE Broker similar to Florida. If you need additional hours and you are licensed outside of Florida, consider our webinar and/or live conference schedule. We have enduring courses that can be taken at your leisure also. Our enduring and webinar courses are all COPE approved but we ask that you confirm that this type of education is acceptable for your state.

To view upcoming webinars bookmark: webinars
To view enduring courses bookmark: enduring
To view upcoming in-person conferences: live conferences
Music City Fall Classic October 20-22, 2023
Doubletree Hilton
Nashville, TN

## WELCOME

We have most of our 2024 schedule confirmed also.

Mid-Winter Getaway, January 26-28, 2024
Hilton Scottsdale Resort \& Villas
6333 N. Scottsdale Road
Scottsdale, AZ 85250

Pittsburgh Primary Eyecare Conference February 17-18, 2024
Doubletree By Hilton Pittsburgh - Green Tree
500 Mansfield Ave
Pittsburgh, PA 15205

CE Sarasota March 9-10, 2024
The Westin Sarasota
100 Marina View Drive
Sarasota, FL 34236

Rosenberg and OEC Education Abroad May 22-24, 2024
H10 Urquinaona Plaza
Plaça Urquinaona, 2-08010 Barcelona
Barcelona, Spain

Sunshine State Summer Conference June 7-9, 2024
Disney's Contemporary Resort
4600 North World Drive
Lake Buena Vista, FL 32830

Northern Escape August 23-25, 2024
Hilton Quebec
1100 Rene Levesque East
Quebec City, QC G1R 4P3

Music City Fall Classic September 27-29, 2024
Hilton Doubletree
315 4th Avenue North
Nashville, TN 37219

Again, thank you for trusting OEC with your educational needs!

## INDUSTRY PARTNERS

Information, Awareness, \& Improvement Talks

## BAUSCH + LOMB Dompé HORIZON

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## Gold Industry Partners



# OOThéa <br> let's open our eyes 

Silver Industry Partners
(D) neurolens ${ }^{\circ}$
Relief is in Sight

ScienceBased
HEALTH.


## sanofi

This activity is supported with unrestricted educational grants from Horizon Therapeutics and Sun Ophthalmics.

## SCHEDULE

Friday, August 18, 2023

| 7:00am - 7:30am | Registration \& Continental Breakfast with Exhibitors | Hours | FL TQ |
| :---: | :---: | :---: | :---: |
| 7:30am-8:00am | Industry Innovation Talk | N/A | N/A |
| 8:00am -9:40am | Autoimmune Disease of Neuro-ophthalmic Significance: Myasthenia Gravis and Thyroid Eye Disease Len Messner, OD | 2 | Y |
| 9:40AM - 10:10am | Break with Exhibitors |  |  |
| 10:10 am - 11:50 am | The Neuro-ophthalmology of Multiple Sclerosis Len Messner, OD | 2 | Y |
| 11:50am - 1:30pm | Lunch Information, Awareness, and Improvement Industry Talk Dompé 12:00-12:30 Ehryn Cartwright, OD 12:30-1:00 Horizon Therapeutics Jasmina Bajric, MD |  |  |
| 1:30pm-3:10pm | Anterior Segment Grand Rounds: Corneas, Cases, and Complexities Joseph Sowka, OD | 2 | Y |
| 3:10pm - $3: 40 \mathrm{pm}$ | Break with Exhibitors |  |  |
| 3:40pm - 5:20pm | Glaucoma Update 2023 Greg Caldwell, OD | 2 | Y |
| 5:20pm | Conference Adjourns |  |  |
| 5:30pm - 7:00pm | Cocktail Reception hosted by Neurolens and OEC Location Main Lodge Colonial Room |  |  |

Saturday, August 19, 2023

| $7: 00 \mathrm{am}-7: 30 \mathrm{am}$ | Check-In \& Breakfast with Exhibitors |  |  |
| :--- | :---: | :---: | :---: |
| $7: 30 \mathrm{am}-8: 00 \mathrm{am}$ | Industry Innovation Talk First Insight | $\mathrm{N} / \mathrm{A}$ | $\mathrm{N} / \mathrm{A}$ |
| $8: 00 \mathrm{am}-8: 50 \mathrm{am}$ | Demodex Diaries <br> Cecelia Koetting, OD | 1 | N |
| $8: 55 \mathrm{am}-9: 45 \mathrm{am}$ | Friday at 5 Grand Rounds: Ocular Emergencies <br> Cecelia Koetting, OD | 1 | N |
| $9: 45 \mathrm{am}-10: 15 \mathrm{am}$ | Break with Exhibitors | 1 | N |
| $10: 15 \mathrm{am}-11: 05 \mathrm{am}$ | The Non-Healing Cornea: Neurotrophic Keratitis |  |  |
| Greg Caldwell, OD |  |  |  |$\quad$|  |  |
| :---: | :---: |
| $11: 05 \mathrm{am}-11: 50 \mathrm{am}$ | Break Information, Awareness, and Improvement Industry Talk <br> Bausch \& Lomb - Michael Chaglasian, OD <br> Bausch \& Lomb - Cecelia Koetting, OD |
| $11: 50 \mathrm{am}-1: 30 \mathrm{pm}$ | Updates and Innovations in Macular Degeneration <br> Cecilia Koetting, OD |
| $1: 30 \mathrm{pm}$ | $\mathrm{N} / \mathrm{A}$ |
| $1: 30 \mathrm{pm}-2: 15 \mathrm{pm}$ | Conference Adjourns |

## SCHEDULE

| Sunday, August 20, 2023 |  |  |  |
| :---: | :---: | :---: | :---: |
| 7:15am - 8:00am | Check-In, \& Continental Breakfast Industry Innovation Talk- |  |  |
|  | Concurrent Lectures |  |  |
| 8:00am -9:40am | Bringing Love Back to the Visual Field Greg Caldwell, OD | 2 | Y |
| 8:00am -9:40am | Prevention of Medical Errors (Florida required) Joseph Sowka, OD | 2 | N |
| 9:40am - 9:50am | Break |  |  |
|  | Concurrent Lectures |  |  |
| 9:50am-11:30am | OCT - Red, Yellow, and Blue Disease What is Real Disease and What is Physiologically Normal? Greg Caldwell, OD | 2 | Y |
| 9:50am - 11:30am | Florida Jurisprudence (Florida Required) Joseph Sowka, OD | 2 | N |
| 11:30am | Conference Adjourns |  |  |

## COURSE NOTES

## COURSE NOTES

## DOWNLOAD Autoimmune Disease of Neuro-ophthalmic Significance: Myasthenia Gravis and Thyroid Eye Disease <br> Len Messner, OD

DOWNLOAD The Neuro-ophthalmology of Multiple Sclerosis
Len Messner, OD

DOWNLOAD Anterior Segment Grand Rounds: Corneas, Cases, and Complexities<br>Joseph Sowka, OD

(Full Slides)
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DOWNLOAD

DOWNLOAD Demodex Diaries
Cecelia Koetting, OD

## DOWNLOAD

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DOWNLOAD

DOWNLOAD DOWNLOAD

DOWNLOAD Prevention of Medical Errors
Joseph Sowka, OD
(Full Slides)
(6x Slides)

DOWNLOAD DOWNLOAD

OCT - Red, Yellow, and Blue Disease What is Real Disease and What is Physiologically Normal?
Greg Caldwell, OD

DOWNLOAD Florida Jurisprudence
Joseph Sowka, OD


## Greg Caldwell, OD, FAAO

Greg Caldwell, OD, is a 1995 graduate of the Pennsylvania College of Optometry. He completed a one-year residency in primary care and ocular disease at The Eye nstitute in Philadelphia Pennsylvania. He is a fellow of the American Academy of Optometry (AAO) and a Diplomate of the American Board of Optometry (ABO).

He currently works in Duncansville and Johnstown, Pennsylvania as an ocular disease consultant. Dr. Caldwell's primary focus is the diagnosis and management of anterior and posterior segment ocular disease and he has been a participant in multiple FDA investigations. Dr. Caldwell has lectured extensively throughout the county and over twelve countries internationally. In 2010 he served as President of the Pennsylvania Optometric Association (POA) and served on the AOA Board of Trustees 2013-2016. He is President of the Blair/Clearfield Association for the Blind.


## Cecelia Koetting, OD, FAAO

Dr. Koetting practices at the MD/OD practice Hines Sight in Denver, CO. Her primary focus is in anterior segment and ocular surface disease, neurooptometry, and peri-operative care. Dr. Koetting is fellow in the American Academy of Optometry, a diplomate of the American Board of Optometry, active member of AOA and has served as both local and state officers in AOA. She was named young Optometrist of the year in 2019 by the state of Virginia, receiving the Vangaurd of the Year Award. Dr. Koetting lectures locally, nationally and internationally at conferences and has written for multiple publications.

## SPEAKERS



## Leonard V. Messner OD, FAAO

Leonard V. Messner is the Vice President for Strategy \& Institutional Advancement at the Illinois College of Optometry. He holds the rank of Professor of Optometry at ICO.

Dr. Messner is the immediate past Chair of the Neuro-ophthalmic Disorders Special Interest Group of the American Academy of Optometry and is currently a member of the steering committee of the Academy's Fellows Doing Research SIG. His predominant area of clinical practice and scholarly activity is the evaluation and management of individuals with neuro-ophthalmic disorders.

In addition to other awards and honors, he is a 24-time recipient of the "Teacher of the Year" award at the Illinois College of Optometry.


## Joseph Sowka, OD, FAAO, Diplomate

Dr. Joseph Sowka is an attending optometric physician at Center for Sight in Sarasota and Venice, Florida, a large medical-surgical practice where he focuses on glaucoma and neuro-ophthalmic disease management. He is the residency education coordinator at Center for Sight. He is also Director of Optometric Business Development for US EYE. He was formerly Professor of Optometry at Nova Southeastern University College of Optometry for 28 years where he served numerous academic and administrative roles. Dr. Sowka is a founding member of both the Optometric Glaucoma Society and Optometric Retina Society. He is also the Founder and former Chair of the Neuro-Ophthalmic Disorders in Optometry Special Interest Group for the American Academy of Optometry. Dr. Sowka is a Glaucoma Diplomate of the American Academy of Optometry. In 2021 and 2022, he was ranked \#4 optometrist in the US by Newsweek magazine "America's Best Eye Doctors" list. In 2023, he was ranked \#1 optometrist in the US Newsweek ratings. He is a partner and co-owner of Optometric Education Consultants.

## UPCOMING 2023 CONFERENCE



## UPCOMING 2024 CONFERENCES



7th Annual Mid-Winter Getaway January 26-28, 2024

Hilton Scottsdale Resort \& Villas 6333 N. Scottsdale Road Scottsdale, AZ

This activity is supported with unrestricted educational grants from Horizon Therapeutics and Sun Ophthalmics .

# UPCOMING 2024 CONFERENCES 

Pittsburgh Primary Eyecare Conference February 17-18, 2024

Doubletree by Hilton Pittsburgh Green Tree 500 Mansfield Avenue Pittsburgh, PA


Barcelona, Spain May 22-24, 2024

## H10 Urquinaona Plaza

 Plaça Urquinaona, 2-08010 Barcelona Barcelona, Spain
## UPCOMING CONFERENCES



> Sunshine State Summer Conference June 7-9, 2024

Disney's Contemporary Resort 4600 World Dr Lake Buena Vista, FL


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 $\mathrm{n}=284$; timolol, $\mathrm{n}=133$ ) and LUNAR (VYZULTA, $\mathrm{n}=278$; timolol, $\mathrm{n}=136$ ). ${ }^{12}$
tMMIT Analytics3, December 2022.
$A E=$ adverse event; IOP=intraocular pressure.

## INDICATION

VYZULTA ${ }^{\oplus}$ (latanoprostene bunod ophthalmic solution), $0.024 \%$ is indicated for the reduction of intraocular pressure (IOP) in patients with open-angle glaucoma or ocular hypertension.

## IMPORTANT SAFETY INFORMATION

- Increased pigmentation of the iris and periorbital tissue (eyelid) can occur. Iris pigmentation is likely to be permanent
- Gradual changes to eyelashes, including increased length, increased thickness, and number of eyelashes, may occur. These changes are usually reversible upon treatment discontinuation
- Use with caution in patients with a history of intraocular inflammation (iritis/uveitis). VYZULTA should generally not be used in patients with active intraocular inflammation
- Macular edema, including cystoid macular edema, has been reported during treatment with prostaglandin analogs. Use with caution in aphakic patients, in pseudophakic patients with a torn posterior lens capsule, or in patients with known risk factors for macular edema
- There have been reports of bacterial keratitis associated with the use of multiple-dose containers of topical ophthalmic products that were inadvertently contaminated by patients
- Contact lenses should be removed prior to the administration of VYZULTA and may be reinserted 15 minutes after administration
- Most common ocular adverse reactions with incidence $\geq 2 \%$ are conjunctival hyperemia (6\%), eye irritation (4\%), eye pain (3\%), and instillation site pain (2\%)


## For more information, please see Brief Summary of full Prescribing Information on adjacent page.

References: 1. Weinreb RN, Scassellati Sforzolini B, Vittitow J, Liebmann J. Latanoprostene bunod $0.024 \%$ versus timolol maleate $0.5 \%$ in subjects with open-angle glaucoma or ocular


 study findings. J Glaucoma. 2018:27(1):7-15.

## BRIEF SUMMARY OF PRESCRIBING INFORMATION

This Briel Summary does not include all the information needed to use VYZULTA safely and effectively. See full Prescribing Information for VYZULTA.

## VYZULTA ${ }^{\text {® }}$ (latanoprostene bunod ophthalmic solution), $0.024 \%$, for topical

ophthalmic use.
Initial U.S. Approval: 2017

## 1 INDICATIONS AND USAGE

WZULTA ${ }^{\oplus}$ (latanoprostene bunod ophthalmic solution) $0.024 \%$ is indicated for the reduction of intraocular pressure ( 10 P ) in patients with open-angle glaucoma or ocular hypertension.

## 4 CONTRAINDICATIONS

None

## 5 WARNINGS AND PRECAUTIONS <br> \subsection*{5.1 Pigmentation}

VYZULIA (latanoprostene bunod ophthalmic solution), $0.024 \%$ may cause changes to pigmented tissues. The most frequently reported changes with prostaglandin analogs have been increased pigmentation of the inis and periorbital tissue (eyelid).
Pigmentation is expected to increase as long as latanoprostene bunod ophthalmic solution is administered. The pigmentation change is due to increased melanin content in the melanocytes rather than to an increase in the number of melanocytes, After discontinuation of WZUULTA, pigmentation of the iris is likely to be permanent, while pigmentation of the periorbital tissue and eyelash changes are likely to be reversible in most patients. Patients who receive prostaglandin analogs, induding WYZULTA, should be informed of the possibility of increased pigmentation, including permanent changes. The long-term effects of increased pigmentation are not known.
Iris color change may not be noticeable for several months to years. Typically, the brown pigmentation around the pupil spreads concentrically towards the peniphery of the inis and the entire ins or parts of the ins become more brownish. Neither nevi nor freckles of the ins appear to be affected by treatment. While treatment with WZULTA ${ }^{\oplus}$ (latanoprostene bunod ophthalmic solution), $0.024 \%$ can be continued in patients who develop noticeably increased ins pigmentation, these patients should be examined regularly [see Patient Counseing Information (17) in full Prescribing information].

## 52 Eyelash Changes

WYZULTA may gradually change eyelashes and vellus hair in the treated eye. These changes include increased length, thickness, and the number of lashes or hairs. Eyelash changes are usually reversible upon discontinuation of treatment.

### 5.3 Intraocular Inflammation

WZUULTA should be used with caution in patients with a history of intraocular inflammation (intis/weitis) and should generally not be used in patients with active intraocular inflammation as it may exacerbate this condition.

## 5.A Macular Edema

Macular edema, including cystoid macular edema, has been reported during treatment with prostaglandin analogs. WZULTA should be used with caution in aphakic patients, in pseudophakic patients with a torn posterior lens capsule, or in patients with known risk factors for macular edema

### 5.5 Bacterial Keratitis

There have been reports of bacterial keratitis associated with the use of multiple-dose containers of topical ophthalmic products. These containers had been inadvertently contaminated by patients who, in most cases, had a concurrent comeal disease or a disruption of the ocular epithelial surface.

### 5.6 Use with Contact Lens

Contact lenses should be removed prior to the administration of WZULTA because this product contains benzalkonium chloride. Lenses may be reinserted 15 minutes after administration.

## 6 ADVERSE REACTIONS

The following adverse reactions are described in the Wamings and Precautions section: pigmentation (5.1), eyelash changes (5.2), intraocular inflammation (5.3), macular edema (5.4), bacterial keratitis (5.5), use with contact lens (5.6).

### 6.1 Clinical Trials Experience

Because dinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in practice.
IYZULTA was evaluated in 811 patients in 2 controlled clinical trials of up to 12 months duration. The most common ocular adverse reactions observed in patients treated with latanoprostene bunod were; conjunctival hyperemia ( $6 \%$ ), eye irritation $(4 \%)$, eye pain ( $3 \%$ ), and instillation site pain ( $2 \%$ ). Approximately $0.6 \%$ of patients discontinued therapy due to ocular adverse reactions including ocular hyperemia, conjunctival irritation, eye irritation, eye pain, conjunctival edema, vision blurred, punctate keratitis and foreign body sensation.

## 8 USE IN SPECIFIC POPULATIONS

### 8.1 Pregnancy

Risk Summary
There are no available human data for the use of VYZULTA during pregnancy to inform any drug associated risks.
Latanoprostene bunod has caused miscarriages, abortion, and fetal harm in rabbits. Latanoprostene bunod was shown to be abortifacient and teratogenic when administered intravenously ( M ) to pregnant rabbits at exposures $\geq 0.28$ times the cinical dose. Doses $\geq 20 \mu \mathrm{~g} / \mathrm{kg} /$ day ( 23 times the clinical dose) produced $100 \%$ embryofetal lethality. Structural abnomalities observed in rabbit fetuses included anomalies of the great vessels and aortic arch vessels, domed head, sternebral and vertebral skeletal anomalies, limb hyperextension
and malrotation, abdominal distension and edema Latanoprostene bunod was not teratogenic in the rat when administered V at $150 \mathrm{mcg} / \mathrm{kg} /$ day ( 87 times the clinical dose) [see Data].
The background risk of major birth defects and miscarnage for the indicated population is unknown. However, the background risk in the U.S. general populabon of major birth defects is 2 to $4 \%$, and of miscamiage is 15 to $20 \%$, of clinically recognized pregnancies.
Data
Animal Data
Embryofetal studies were conducted in pregnant rabbits administered latanoprostene bunod daily by intratenous injection on gestation days 7 through 19 , to target the period of organogenesis. The doses administered ranged from 0.24 to $80 \mathrm{mcg} / \mathrm{kg} / \mathrm{day}$. Abortion occurred at doses $\geq 0.24 \mathrm{mog} / \mathrm{kg} / \mathrm{day}$ latanoprostene bunod ( 0.28 times the clinical dose, on a body surface area basis, assuming $100 \%$ absorption). Embryofetal lethality (resorption) was increased in latanoprostene bunod treatment groups, as evidenced by increases in early resorptions at doses $\geq 0.24 \mathrm{mcg} / \mathrm{kg} /$ day and late resorptions at doses $\geq 6 \mathrm{mog} / \mathrm{kg} /$ day (approximately 7 times the clinical dose). No fetuses survived in any rabbit pregnancy at doses of $20 \mathrm{mcg} / \mathrm{kg} /$ day ( 23 times the clinical dose) or greater. Latanoprostene bunod produced structural abnormalities at doses $20.24 \mathrm{mcg} / \mathrm{kg} / \mathrm{day}$ ( 0.28 times the clinical dose). Malformations included anomalies of stemum, coarctation of the aorta with pulmonary trunk dilation, retroesophageal subclavian artery with absent brachiocephalic artery, domed head, forepaw hyperextension and hindlimb malrotation, abdominal distention/edema, and missing/fused caudal vertebrae.
An embryofetal study was conducted in pregnant rats administered latanoprostene bunod daily by intravenous injection on gestation days 7 through 17, to target the penod of organogenesis. The doses administered ranged from 150 to $1500 \mathrm{mcg} / \mathrm{kg} /$ day. Maternal toxicity was produced at $1500 \mathrm{mcg} / \mathrm{kg} /$ day ( 870 times the clinical dose, on a body surface area basis, assuming $100 \%$ absorption), as evidenced by reduced maternal weight gain. Embryofetal lethality (resorption and fetal death) and structural anomalies were produced at doses $\geq 300 \mathrm{mog} / \mathrm{kg} /$ day ( 174 times the cinical dose). Malformations induded anomalies of the stemum, domed head, forepaw hyperextension and hindlimb malrotation, vertebral anomalies and delayed ossification of distal limb bones. A no observed adverse effect level (NOAEL) was established at $150 \mathrm{mcg} / \mathrm{kg} / \mathrm{day}$ ( 87 times the clinical dose) in this study.

### 8.2 Lactation

Pisk Summary
There are no data on the presence of VYZULTA in human milk, the effects on the breastfed infant, or the effects on milk production. The developmental and health benefils of breastfeeding should be considered, along with the mother's clinical need for IYZUIITA, and any potential adverse effects on the breastfed infant from VYZULIA.

### 8.4 Pediatric Use

Use in pediatric patients aged 16 years and younger is not recommended because of potential safety concems related to increased pigmentation following long-term chronic use.

### 8.5 Geriatric Use

No overall clinical differences in safety or effectiveness have been observed between elderty and other adult patients.

## 13 NONCLINICAL TOXICOLOGY

### 13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

Latanoprostene bunod was not mutagenic in bacteria and did not induce micronuclei formation in the in vivo rat bone marrow micronucleus assay. Chromosomal aberrations were observed in vitro with human lymphocytes in the absence of metabolic activation.
Latanoprostene bunod has not been tested for carcinogenic activity in long-term animal studies. Latanoprost acid is a main metabolite of latanoprostene bunod. Exposure of rats and mice to latanoprost acid, resulting from oral dosing with latanoprost in lifetime rodent bioassays, was not carcinogenic.
Fertility studies have not been conducted with latanoprostene bunod. The potential to impact fertility can be partially characterized by exposure to latanoprost acid, a common metabolite of both latanoprostene bunod and latanoprost. Latanoprost acid has not been found to have any effect on male or Female fertility in animal studies.

### 13.2 Animal Toxicology and/or Pharmacology

A 9-month toxicology study administered topical ocular doses of latanoprostene bunod to one eye of cynomolgus monkeys: control (vehicle only), one drop of $0.024 \%$ bid, one drop of $0.04 \%$ bid and two drops of $0.04 \%$ per dose, bid. The systemic exposures are equivalent to 4.2 -fold, 7.9 -fold, and 13.5 -fold the clinical dose, respectively, on a body surface area basis (assuming $100 \%$ absorption). Microscopic evaluation of the lungs after 9 months observed pleural/subpleural chronic fibrosis/inflammation in the $0.04 \%$ dose male groups, with increasing incidence and severity compared to controls. Lung toxicity was not observed at the $0.024 \%$ dose.
U.S. Patent Numbers: $7,273,946 ; 7,629,345 ; 7,910,767 ; 8,058,467$.

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## See the TEPEZZA Difference

TEPEZZA decreases proptosis, diplopia, and the signs and symptoms of Thyroid Eye Disease (TED), without concomitant steroids (vs placebo at Week 24) ${ }^{1-4}$


Proptosis:
19 mm OD, 20.5 mm OS $^{5}$

AT WEEK 21


Proptosis:
17 mm OD, 18 mm OS $^{5}$

Actual Patient. Individual results may vary.

TEPEZZA met its primary endpoint vs placebo in 2 randomized, placebo-controlled trials ( $P<0.001$ ), defined as proptosis responder rate at Week 24 (percentage of patients with $\geq 2-\mathrm{mm}$ reduction in proptosis in the study eye from baseline). ${ }^{1-3}$

Photos provided with permission from Raymond Douglas, MD, PhD.
OD, oculus dexter; OS, oculus sinister.

## Learn more at TEPEZZAhcp.com

## INDICATION

TEPEZZA is indicated for the treatment of Thyroid Eye Disease.

## IMPORTANT SAFETY INFORMATION

## Warnings and Precautions

Infusion Reactions: TEPEZZA may cause infusion reactions. Infusion reactions have been reported in approximately $4 \%$ of patients treated with TEPEZZA. Reported infusion reactions have usually been mild or moderate in severity. Signs and symptoms may include transient increases in blood pressure, feeling hot, tachycardia, dyspnea, headache, and muscular pain. Infusion reactions may occur during an infusion or within 1.5 hours after an infusion. In patients who experience an infusion reaction, consideration should be given to premedicating with an antihistamine, antipyretic, or corticosteroid and/or administering all subsequent infusions at a slower infusion rate.

## Preexisting Inflammatory Bowel Disease:

 TEPEZZA may cause an exacerbation of preexisting inflammatory bowel disease (IBD). Monitor patients with IBD for flare of disease. If IBD exacerbation is suspected, consider discontinuation of TEPEZZA.Hyperglycemia: Increased blood glucose or hyperglycemia may occur in patients treated with TEPEZZA. In clinical trials, 10\% of patients (two-thirds of whom had preexisting diabetes or impaired glucose tolerance) experienced hyperglycemia. Hyperglycemic events should be managed with medications for glycemic control, if necessary. Monitor patients for elevated blood glucose and symptoms of hyperglycemia while on treatment with TEPEZZA. Patients with preexisting diabetes should be under appropriate glycemic control before receiving TEPEZZA.

## Adverse Reactions

The most common adverse reactions (incidence $\geq 5 \%$ and greater than placebo) are muscle spasm, nausea, alopecia, diarrhea, fatigue, hyperglycemia, hearing impairment, dysgeusia, headache, and dry skin.

References: 1. TEPEZZA (teprotumumab-trbw) [prescribing information] Horizon. 2. Douglas RS, Kahaly GJ, Patel A, et al. Teprotumumab for the treatment of active thyroid eye disease. N Engl J Med. 2020;382(4): 341-352. 3. Smith TJ, Kahaly GJ, Ezra DG, et al. Teprotumumab for thyroid-associated ophthalmopathy. N Engl J Med. 2017;376(18):1748-1761. 4. Smith TJ, Kahaly GJ, Ezra DG, et al. Teprotumumab for thyroidassociated ophthalmopathy. N Engl J Med. 2017;376(18) (suppl):1748-1761. https://www.nejm.org/doi/suppl/10.1056/ NEJMoa1614949/suppl_file/nejmoa1614949_appendix.pdf. 5. Data on File. Horizon, December 2020.


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## Relies

Over-the-counter iVIZIA ${ }^{\circledast}$ lubricant eye drops deliver a unique combination of immediate and long-lasting relief and ocular surface protection in a preservative-free formulation.

- Advanced formulation offers a combination of povidone (active), hyaluronic acid (HA), and trehalose
- HA and trehalose increased tear film thickness for up to 240 minutes
$\Longrightarrow$ Proprietary, multi-dose bottle

Chronic Dry Eye Patient Usage Study ${ }^{\dagger}$ :

Up to
8 hours of relief as well as improved comfort during computer work, reading, and driving

## 84\%

of users reported iVIZIA worked better than their previous eye drops ${ }^{1}$

Recommend iVIZIA and request samples by visiting iVIZIA.com/ECP.

## SILVER INDUSTRY PARTNERS

## RABIN CONE CONTRAST' EARLY DISEASE DETECTION \& MANAGEMENT

The Rabin Cone Contrast ${ }^{\text {TM }}$ is a quantifiable assessment of cone \& visual pathway function It provides a more complete understanding of disease progression allowing for earlier diagnosis \& treatment


## Reimbursable with CPT Code 92283

## EARLY DETECTION Diabetic Eye Disease | AMD | Glaucoma | High-Risk Medication Damage



## Advanced Testing <br> Identifies damage not yet recognized by structural tests <br> Demonstrates improvement with therapy <br> Identifies patients needing more care



Simple to Use
Automated, self-test requires little to no training
2-3 minutes per eye
Well tolerated by patients


## Easy to Interpret

Color-coded graphs indicate normal, suspect and abnormal
Test scores by cone type
Progression reports display advancement alerts

Reliable
Co-developed by Innova Systems \& US Air Force
Over 21 clinical trials
Ranked \#1 color vision test by US Army

Simple to Bill
CPT Code 92283 reimbursable
ICD-10 Codes span AMD, diabetic retinopathy, glaucoma, high-risk meds Quick ROI

## Diabetic Eye Disease | AMD | Glaucoma | High-Risk Meds

## HOW IT WORKS

- Using precise calibration, colored letters measure each cone type independently
- Colors are desaturated down to normal color thresholds
- Similar to the visual field, a rapid staircase method keeps test times to 2-3 minutes per eye
- Provides a more complete insight into disease severity \& progression over using structural tests alone


## SAMPLE REPORT

- Establish baseline
- Compare test scores to normal, suspect, abnormal
- Look for progression alerts



## CONE CONTRAST TECHNOLOGY



Color vision is one of earliest biomarkers of the most common eye diseases. It is dependent on both cone cells and supporting layers of the retina. Damage to any part of the macula or visual pathway affects color perception.

Using patented cone contrast technology, the Rabin Cone Contrast ${ }^{\text {mM }}$ test isolates cone function by type providing a quantitative assessment of color vision loss and its underlying cause. Patent Nos: US 9,883,794; US 10,799,108.

Enhance decision making | Drive more medical patients | Increase revenue


Evolve your practice.

Become a Provider at www.neurolens.com

## Preventative Medicine



## Measure your patients' Skin Carotenoid Score

Today's patients are seeking preventative care. Be one of the 1st providers to offer it with the Pharmanex ${ }^{\ominus}$ Biophotonic Scanner, the new standard for carotenoid and macular pigment measurement.


# Stop by our table to see how you score, Doc. 

Join us on Saturday, August 19th at $1: 30 \mathrm{pm}$ for a free workshop on how to implement this product and others into your business.

$$
\Theta P H \wedge R M \wedge N E X
$$

Join us on Saturday, August 19th at $1: 30 \mathrm{pm}$ for a free workshop on how to implement this technology into your business.

Help your patients get beautiful, luscious lashes, with results starting in just 4 weeks!

Are your patients getting their eyelash growth serum from you, or someone else who has no knowledge of the eyes, ingredients or potential side effects? Do your patients a favor and help them get the newest, prostaglandin free \& BAK free eyelash and brow serum that's clinically proven to double lash length in 12 weeks!

BEFORE USE


WEEK 12


# InflammaDry MMP-9 Test 



## Have confidence in your diagnosis



According to the 2017 TFOS DEWS II Report, dry eye is a multifactorial disease of the ocular surface characterized by a loss of homeostasis of the tear film, and accompanied by ocular symptoms, in whichtear film instability and hyperosmolarity, ocular surface inflammation and damage, and neurosensory abnormalities play etiological roles. ${ }^{1}$

The lack of correlation between clinical signs and symptoms of dry eye disease makes diagnosing and treating patients a challenge. Often times, inflammation is present before the clinical signs of dry eye. ${ }^{2}$

InflammaDry is the first rapid, in-office, CLIA-waived test that detects elevated levels of MMP-9, an inflammatory marker that is consistently elevated in the tears of patients with dry eye disease. Other dry eye tests only measure tear production and stability. InflammaDry accurately identifies patients with dry eye, allowing for optimal treatment methods and better patient quality of life.

## Clinical benefits

- Presurgical measurements are more accurate and postsurgical outcomes are improved by identifying and treating patients with dry eye. ${ }^{3}$
- Reduce postsurgical complications, such as corneal wound healing, by identifying dry eye prior to surgery. ${ }^{1}$
- Therapeutic treatment of dry eye improves patient quality of life. ${ }^{4}$


## Fast and accurate

- Result in as soon as 10 minutes.
- Higher positive and negative agreement than other dry eye tests.


## Easy and convenient

- The disposable test, requires just 4 easy steps.
- No additional equipment is needed to administer or interpret.


## 4-step procedure


80.3\% Positive\% Agreement
$\mathbf{9 8 \%}$ Positive \% Agreement
A multicenter clinical study demonstrated the following range of performance from site to site or between sites: Positive \% Agreement, $66 \%$ to $97 \%$ and Negative \% Agreement, $97 \%$ to $98 \%$. At 2 sites, Negative \% Agreement could not be calculated because there were no subjects without dry eye. Refer to the Package Insert for additional performance claims.

[^0][^1]
# The Life-changing Role of the Eye Care Professional 

## Finding early ocular signs of Fabry disease

Early stroke

Heart failure

Kidney failure

Premature death

## Fabry disease is a progressive and often life-threatening disorderl,2

- It is multisystemic and impacts essential organs such as the kidney, heart, and brain ${ }^{1 / 2}$
- It affects men, women, and children
- Undiagnosed and unmanaged, Fabry disease can reduce life expectancy by $\mathbf{1 5 - 2 0}$ years ${ }^{3}$


## Corneal whorling (verticillata) is one of the earliest and most common signs of Fabry disease ${ }^{1,5,6}$

- Bilateral, whorl-like pattern of powdery, white, yellow, or cream-colored corneal epithelial deposits emanating from a single vortex ${ }^{6,7}$
- Be sure to rule out medications that can cause corneal whorling with long-term use, including amiodarone and chloroquine ${ }^{1,6}$


15-year diagnostic delay from symptom onse ${ }^{8}$

Seen in $\mathbf{~ 8 0 \%}$ of patients with Fabry disease ${ }^{5}$

> Identification of early ocular signs can help lead to timely diagnosis and management ${ }^{6}$

- Corneal whorling can be detected with a routine silt lamp exam ${ }^{6}$
- Diagnosis of Fabry disease is confirmed by a simple enzyme assay for males and genetic testing for females ${ }^{5}$
- Fabry disease affects families: For every index patient diagnosed, an average of $\mathbf{5}$ additional family members may be identified ${ }^{\circ}$



# HYDROEYE 

SOFTGELS

## With GLA: <br> the dry eye omega

# BUY 1 CASE, GET 1 CASE FREE 

With a first-time purchase of HydroEye during the meeting*

VISIT THE SCIENCEBASED HEALTH BOOTH FOR DETAILS


Effective


Easy to Swallow


No Smell or Taste


Satisfaction Guaranteed

"HydroEye is my
nutraceutical of choice for addressing patients' dry eye needs. The clinical evidence showing improvement in signs and symptoms of dry eye makes this an easy discussion with patients. My patients are getting the relief they want and I'm giving them a product I trust."

Selina McGee, OD, FAAO

"I have personally seen clinical and inflammation biomarker (MMP9) improvements in Dry Eye patients who took the nutritional supplement HydroEye as a solo agent (patients who got too busy to begin the other recommended approaches)."

Laura Periman, MD


[^0]:    To order, contactyour QuidelOrtho Account Manager, call Customer Service at 800.874 .1517 , or visit quideleyehealth.com/inflammadry

    InflammaDry - 20-Test Kit: Catalog \#RPS-ID-20-U
    External Controls: Catalog \#RPS-DESTD

[^1]:    ${ }^{\text {² }}$ Nelson JD, Craig JP, Akpek EK, etal. TFOS DEWS III Introduction.
    Ocul Surf. 2017;15(3):269-275. do:10.1016/.|tos.2017.05.005
    ${ }^{2}$ Sambursky R,O'BrienTP. MMP-9 and the perioperative management of LASIK surgery. Curt Opin Ophthalmol. 2011;22(4):294-303. dot:10.1097/|Cu.0b013e32834787bb
    ${ }^{3}$ Shtein RM. Post-LASIK dry eye. Expert Rev Ophthalmol. 2011;6(5):575-582. do:10.1586/eop.11.56.
    "Schiffman RM, Walt JG, Jacobsen G, etal. Utilly assessmentamnong patients with dry eye disease.
    Ophthalmology.2003;110(7):1412-1419. do:10:1016/S0161-6420(03)00462-7

