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May 5, 2023

OPEN LETTER TO THE OPHTHALMIC AND OPTOMETRIC PRESS

Illegal Marketing of Unapproved Amniotic Fluid Eye Drops

Dry Eye Drugs in a Post-Truth Medical Era

Dear Editors-in-Chief and Editorial Boards:

The Dry Eye Foundation is a 501(c)(3) nonprofit organization serving the ocular surface disease and ocular surface pain patient communities. Our activities include public education about eye drop safety, in particular unapproved biologic eye drops. (1) (2)

On April 10, 2023 the FDA posted a Public Safety Notification on amniotic fluid eye drops. (3) This notification read, in part:

"There are currently no FDA-approved amniotic fluid eye drops to treat, mitigate or cure eye diseases or conditions.... In addition, as these products are not FDA-approved, the agency does not have information about their manufacture, and there are no assurances that the products are safe and effective for any disease or condition."

Two amniotic fluid eye drops have been extensively marketed through eye care trade publications: Regener-Eyes Pro and Regener-Eyes Lite. Both are manufactured by Regenerative Processing Plant LLC and distributed by Regener-Eyes LLC.

Eye care journals such as those you publish contain materials which state the following unapproved indications for these products:

- Blepharitis
- Corneal wounds
- Corneal abrasions
- Dry eye disease (mild, moderate, severe)
- Exposure keratitis
- Filamentary keratitis
- Keratitis
- Limbal Stem Cell Deficiency

- Meibomian gland disease
- Neurotrophic pain (sic)
- Ocular surface issues resulting from surgery
- Post-surgical "issues"
- Punctate epithelial keratitis
- Recurrent corneal erosions
- Sjögrens syndrome
- Stevens-Johnson syndrome
- Post EBK re-epithelialization

Regener-Eyes LLC repeatedly uses full page advertisements to promote their products. Since 2021*, at least 42 full page ads for Regener-Eyes have appeared in at least seven different trade publications. (Attachment A) Two such advertisements were published the same month that the FDA Public Safety Notification was posted.

Regener-Eyes LLC also uses the influence of Key Opinion Leaders to market their products.

- At least 34 Key Opinion Leaders (ophthalmologists and optometrists) authored or were interviewed for articles which mention, discuss or feature Regener-Eyes eye drops. (Attachment B)
- At least 36 such articles have appeared in 12 different journals, of which 26 have been published in the past 24 months. (Attachment B)
- The KOLs include ophthalmologists and optometrists who serve on Regener-Eyes LLC's Clinical Advisory Board. (Attachment C) In a majority of articles there is no clear disclosure of this potential source of bias.
- A White Paper published as a trade journal supplement, and co-authored by a (then) Clinical Advisory Board member and the owner of Regenerative Processing Plant LLC, (Attachment D) was, until recently, a central feature of the company's advertising campaign.

Regener-Eyes LLC has never undergone a single clinical trial and cannot advertise in peer-reviewed clinical journals. Instead, its direct-to-provider marketing efforts found a natural home in the eye care industry trade magazines. Your publications unwittingly provided a veneer of legitimacy and credibility to amniotic fluid eye drops, since full-page advertisements and favorable articles by Key Opinion Leaders are typical marketing channels for FDA approved prescription drugs, and FDA compliant OTC drugs.

Damage to patient-physician relationship

Even prior to the FDA Notification, the Dry Eye Foundation received patient phone calls and emails regarding amniotic fluid eye drops. This was often prompted by the eye drops' high cost and the aggressive telephone marketing tactics of Regener-Eyes LLC, as well as the self-evidently amateurish appearance of the bottle and label. A frequent refrain was that the drops had been recommended by their optometrists or ophthalmologists. Upon learning of the unproven and unapproved status of these products, many patients expressed dismay and distrust of their eye doctor's quality of care and knowledge, as well as concerns about financial conflict of interest.

Your eye care industry publications have therefore, regrettably, harmed the patient-physician relationship by repeatedly promoting Regener-Eyes eye drops to ophthalmologists and optometrists.

^{*}Digital versions are not available earlier than 2021 for several of these publications.

The Dry Eye Foundation urges the Editorial Boards and the publishers of the eye care press to develop policies which prevent the marketing of unapproved or non-compliant drugs in their journals. This would include both paid advertising, and the publication of educational articles that favorably mention these products, either by name or by drug class.

Sincerely,

Sandra Brown MD

Board Member, Medical

Advisor

Rebecca Petris Executive Director Aidan Moore Deputy Executive Director

Recipients

<u>Organization</u>	<u>Name</u>	<u>Title</u>
American Society of Cataract and Refractive Surgery	Elizabeth Yeu, MD	President
EyeWorld	Sumit Garg, MD Julie Schallhorn, MD	Chief Medical Editor Cornea Editor
Modern Optometry	Selina McGee, OD Justin Schweitzer, OD Walter Whitley, OD, MBA	Chief Medical Editors
Ophthalmology Management	Larry E. Patterson, MD	Chief Medical Editor
Ophthalmology Times	David Hutton	Executive Editor
Optometric Management	Jim Thomas April Jasper, OD, FAAO	Editorial Director Chief Optometric Editor
Optometry Times	Gretchyn M. Bailey, NCLC, FAAO	Editor in Chief
Review of Optometric Business	Margery Weinstein	Editor-in-Chief
Review of Optometry; Review of Cornea & Contact Lens	Jack Persico	Editor-in-Chief
Review of Optometry	Paul M. Karpecki, OD	Chief Clinical Editor
Review of Ophthalmology	Walter Bethke Mark H. Bleacher, MD Thomas John, MD	Editor in Chief Chief Medical Editor Editor, Cornea/Anterior Segment

Notes

- (1) Eyedropsafety.org
- (2) Biologicevedrops.org
- (3) FDA 4/10/23 Public Safety Notification on Amniotic Fluid Eyedrops

Attachments

- A: Regener-Eyes advertisements in trade journals
- B: Trade journal articles mentioning, discussing or featuring Regener-Eyes
- C: Regener-Eyes Clinical Advisory Board
- D: EyeWorld White Paper on Regener-eyes

Additional information about Regener-Eyes

- i. Packaging and labeling
- ii. Sales and distribution
- iii. Retail prices
- iv. Regulatory status claims

Attachment A - Advertisements

Full-page advertisements for Regener-Eyes appear in the following publications. (Note: Digital versions are not available earlier than 2021 for several of these publications.)

Publication	2021	2022	2023
Contact Lens Spectrum	May, July		
Ophthalmology Management	April, October, November, December	January, February, April, May, June, August, September, October	April
Ophthalmology Times	February, September		
Optometric Management	July, August, September	February, March, April, May, July, August, September, October	
Review of Ophthalmology	September, November, December	April, June, September, October	
Review of Optometry	March, September, December	February, April, June, September	
Vision Monday	April		

Examples of Regener-Eyes ads







Extinguish it with the only biologic drop.



regenereyes.com | 877-206-0706

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Attachment B - Trade journal articles

Trade journal articles which mention, discuss or feature Regener-Eyes:

- Kristine Brennan; interviewee: Darren Gregory MD (11/2016) <u>Thicker than Water:</u> <u>Autologous Serum</u>. Review of Ophthalmology
- Whitney Hauser, OD (9/2018) <u>Clinical: Dry Eye / Mail-Order Options</u>, Optometric Management
- Elizabeth Yeu, MD (12/2018) <u>Amniotic Derived Therapies Prove Effective in Treating</u>
 Ocular Surface Disease, Ophthalmology Management
- Alison Bozung OD & Paul Hammong OD (8/2019) When Corneal Wounds Won't Heal,
 Review of Optometry
- Peter Hersh, MD, James Loden MD, Luke Rebenitsch MD (4/2020) Therapeutic Refractive Corneal Surgery, Eyeworld
- Michelle Dalton; interviewee: Elizabeth Yeu MD (4/2020) <u>Dry Eye Disease Treatment Options</u>, Ophthalmology Management
- Jill Gallagher; ref. Randall Thomas OD and Ron Melton OD (10/2020) <u>The State of Eye Care Today</u>, Review of Optometry
- Arthur Epstein OD (1/2021) Off the Cuff: Some Secret Sauce, Review of Optometry
- Joe Darrah; interviewee: Cynthia Matossian MD (3/2021) Rx Perspective: A Natural Treatment for Dry Eye, Ophthalmology Management
- Steven Sorkin OD (4/2021) Corneal Dystrophies 101, Modern Optometry
- n/a (4/2021) Industry Insider: Regener-Eyes Bob Colucci, Ophthalmology Management
- Paul Karpecki OD (4/2021) New Options, Front to Back, Review of Optometry
- Ahmad Fahmy OD (5/2021) <u>A New Tool in the Dry Eye Armamentarium</u>, Optometric Management
- Paul Karpecki OD (5/2021) <u>How Getting Dry Eye Right Changes Patient Lives & Easily Adds \$100,000+ Annually</u>, Review of Optometric Business
- Darrell White MD (5/2021) <u>Treating Dry Eye 401: A Master Class in Treating Complex Cases</u>, Ocular Surgery News (5/2021) <u>O.D. Notebook: Maintain Patient Communication</u>, Optometric Management
- Arthur Epstein OD (6/2021) <u>The Essentials: A Master Class in Dry Ey</u>e, Contact Lens Spectrum
- Kambiz Silani OD (7/2021) Focus: Drop-in Moisture, Optometric Management
- Leanne Spiegle (9/2021) <u>Approaches and Methods for Treating Dry Eye: 2021</u>, Review of Ophthalmology
- Steven Sobel OD (11/2021) Ophthalmic Biologics, Modern Optometry
- Paul Karpecki OD (11/2021) <u>Owning OSD: New Treatments can Help Us Keep Up With This Perennial Problem</u>, Review of Optometry
- Alice Epitropoulos MD (1/2022) <u>Treating DED in Contact Lens Patients</u>, Ophthalmology Management

- Mark Tosh; interviewee Kimberly Riordan OD (2/2022) <u>Increasing Incidence of Dry Eye</u> <u>Disease Presents Opportunity for ODs</u>, Vision Monday
- Frederick Ditmars BS, Kimberly Brondeel BS, W. Samuel Fagg MSC PhD, Pamela Theriot OD (3/2022) <u>A Double-Header: Dry Eye and Filamentary Keratitis</u>, Modern Optometry
- Rachel Dandar MD, John Sheppard MD (5/2022) <u>Four Novel Approaches to DED</u> <u>Treatment</u>, Ophthalmology Management
- Jerry Robben OD, Patti Barkey COE (5/2022) <u>How We Built Dry Eye Services That Spurred 20%+ Growth in Annual Revenue</u>, Review of Optometric Business
- C. Randall Harrell MD (5/2022) <u>Bringing Biologics to Eve Health</u>, Ophthalmology Times
- Maria Sampalis OD (5/2022) <u>The Technology Powering My New Dry Eye Center</u>, Review of Optometric Business
- Mahnia Madan OD, Mark Eltis OD (6/2022) <u>From Basics to Biologics: Selecting Drops</u> for Every Dry Eye Patient, Review of Cornea & Contact Lens
- Elise Kramer OD (6/2022) Therapy Options Based on DED Severity, Optometry Times
- Christopher Kuc OD (7/2022) <u>Five Rules of Thumb for Managing the Ocular Surface</u>, Modern Optometry
- Emilie Seitz OD (7/2022) <u>Sjögren Syndrome: Ocular Manifestations of an Underlying</u> <u>Systemic Disease</u>, Modern Optometry
- Arthur Epstein OD (8/2022) <u>A Master Class in Dry Eye Breakthroughs in Understanding and Managing Dry Eye</u>, Contact Lens Spectrum
- Mitchell Jackson MD (8/2022) <u>Spotlight on Dry Eye: Create a Process, Offer Packages,</u> Ophthalmology Times
- Carly Rose OD (11/2022) <u>DED: Developing a 360 Diagnosis and Treatment Plan</u>,
 Optometry Times
- Pam Theriot OD, Lisa Hornick OD (3/2023) <u>Dry Eye Drugs: What's New and What's Next</u>, Review of Optometry
- Catlin Nalley; interviewee James Thimons OD (3/2023) <u>Restrictive Drug Formularies:</u> <u>How to Beat the Odds</u>, Review of Optometry
- Ethan Lindgren BS, Neel Pasricha MD (4/2023) <u>Medical Management of Dry Eye</u> <u>Disease</u>, Ophthalmology Management

Attachment C - Clinical Advisory Board

Source: regenereyes.com/clinical-advisory-board/ as of May 5, 2023



HOME

LIS V OLIPI

RODUCTS FOR EYE CARE PROFESSIONAL

FOR PATIENTS ~

CONTAC

Clinical Advisory Board

Ophthalmologists







Bennett Romanoff, MD



Sandra Cremers, MD

Optometrists



Paul M. Karpecki, OD, FAAO



Arthur Epstein, OD, FAAO



Walt Whitley, OD, FAAO



Ahmad M. Fahmy, O.D., FAAO, Dipl., ABO



Walter Choate, OD, FAAO



James Thimons, OD, FAA

Attachment D: White Paper

Marguerite McDonald MD, Carl Randall Harrell MD (7/2021) <u>Therapeutic Potential of Regener-Eyes Ophthalmic Solution in the Treatment of Dry Eye Disease</u>, Eyeworld Supplement

Excerpt:

"Regener-Eyes is an engineered biological product derived from human placental-based biomaterials, manufactured under current Good Manufacturing Practices (cGMP), regulated and reviewed by the Food and Drug Administration (FDA). Regener-Eyes incorporates Regenerative Processing Plant's (RPP) proprietary patented sterilization process to provide for a safe, sterile product for clinical use."

Conclusion:

"Regener-Eyes® drops are a topical therapy for DED; they are an engineered biological product. The drops contain a large number of anti-inflammatory and trophic factors that attenuate the detrimental immune response in the eye and protect the epithelial cells of the ocular surface from injury and inflammation.1,9,12–13,15 Topical administration of Regener-Eyes® may suppress ongoing ocular inflammation, may improve meibomian gland function, and may enhance the restoration of the ocular surface barrier in DED patients, without causing treatment-related adverse events.1,13 Due to its potent immunosuppressive and regenerative properties, Regener-Eyes® should be considered as a powerful new therapeutic option in the management of DED."

EYEWORLD WHITE PAPER

Therapeutic potential of Regener-Eyes* Ophthalmic Solution in the treatment of dry eye disease

by Marguerite McDonald, MD, clinical professor of ophthalmology, NYU Langone Medical Center, New York, New York; Chinical professor of ophthalmology, Tulane University Health Sciences Center, New Orleans, Louisiana; connea/catract/refractive surgeon and director of the dry eye center of excellence, OclU Vision, Oceanside, New York; and Carl Randall Harrell, MD, Regenerative Processing Plant, Palm Harbor, Florida

Abstrac

Do yee disease (DED) is a common and multifactorial disease of the oculor surface characterized by a deficiency in quality and/ or quantity of the tear fluid. A detrimental immune response has an important role in the development and progression of DED. Dr. Hornell recently developed Regener-Eyes* (generic name "derived-Multiple Allageneic Profesis Paracrials Eignaling (de MAPSPI)", an ophthalmic solution that contains a large number of immunoregulatory factors that are capable of penetrating the oculor surface and to efficiently attenuate the detrimental immune response in the eye, promoting repair and regeneration of injured issue. Regener-Eyes* efficiently alleviated EDP related symptoms (dryness, grittiness, scratchiness, scratchiness, scratchiness, scritchiness, scritchi

Sponsored by Regener-Eyes'

Introduction

Dry eye disease (DED) is a common and multifactorial inflammatory disease of the ocular surface characterized by a deficiency in quality and/ or quantity of the tear fluid. The multifactorial nature of DED involves several interrelated underlying pathologies, including the loss of homeostasis, instability and hypercosmolarity of the tears, and chronic eye inflammation that leads to the neurosensory dysfunction and visual disturbance. Accordingly, DED is usually manifested by dryness, grittiness, scratchiness, soreness, irritation, burning, watering, foreign body sensation, eye fatigue, and reduced functional visual acuity. Significantly impaired performance of vision dependent daily activities (reading, writing, driving) often diminishes the quality of life of DED patients.²

A detrimental immune response has played a crucially important role in the development and progression of DED. Accordingly, DED-related symptoms are often observed in patients who suffer from chronic inflammatory and systemic auto-immune diseases (Sjögren's syndrome, rheumatoid arthritis, systemic lupus erythematosus).³⁷ Considering the important role of inflammation in DED development, the main treatment strategy has shifted from hydration and lubrication of the dry ocular surface to the immunoregulation-based therapeutic approach, which is designed to break the victious cycle of chronic inflammation in the

eye.3-6 The administration of immunosuppressive eye drops has the potential to attenuate the on-going inflammation, resulting in the alleviation, as the well-developed protective mechanisms of the ocular surface ensure their rapid clearance from the pre-corneal tear film, thus limiting ocular penetration of the drug.8 Therefore, there is a large unmet need for the development and clinical use of eye drops containing immunomodulatory factors that are able to bypass the ocular surface barrier and reach the target cells of the ocular surface and lacrimal system.8

ocular surface and lacrimal system;
In line with these findings, Dr. Harrell recently developed Regener-Eyes® (generic name
'derived-Muliple Allogeneic Proteins Paracrine
Signaling [d-MAPPS]"), an ophthalmic solution
that contains a large number of immunoregulatory factors that are capable of penetrating the
ocular surface to efficiently attenuate the eyedetrimental immune response, which may help to
promote the repair and regeneration of damaged
corneal tissue." Herein, we described in detail the
molecular mechanisms and signaling pathways
that are responsible for the immunomodulatory
effects of Regener-Eyes®, escloring the therapeutic potential of Regener-Eyes® in the treatment of
DED

Molecular mechanisms responsible for beneficial effects of Regener-Eyes® in DED treatment

Although Regener-Eyes® is acellular, it contains proteins, cytokines in addition to the water, glucose, lactates and electrolytes, and placental-derived biomaterials, which produce a large

number of bioactive factors (lipids, proteins, enzymes, cyrokines, chemokines, immunoregulatory proteins, trophic and growth factors), as well as microRNAs (miRNAs), which, due to their trophic and antimicrobial properties, support normal fetal growth and offer protection against pathogens and toxins. ¹⁰ Additionally, these placental biomaterials contain AFMSC-Sourced exosomes (AFMSC-Exos), nano-sized extracellular vesicles that are enriched with AFMSC-derived immunosuppressive molecules and growth factors. ²⁰⁻³¹ Due to their nano-sized dimensions and lipid envelope, AFMSC-Exos avoid biological barriers, and easily penetrate through the lipid-containing cell membranes of the ocular surface through direct fusion with the plasma membrane, thereby delivering their content to the cytosol of target cells. ²⁰⁻³²

Regener-Eyes* is an engineered biological product derived from human placental-based biomaterials, manufactured under current Good Manufacturing Practices (GGMP), regulated and reviewed by the Food and Drug Administration (FDA).* Regener-Eyes* incorporates Regenerative Processing Plant's (RPP) proprietary patented sterilization process to provide for a safe, sterile product for clinical use.* Regener-Eyes* is entiched with AFMSC-Exos containing AFMSC-derived immunoregulatory, angio-modulatory and trophic factors capable of bypassing biological barriers to efficiently attenuate ongoing inflammation, promoting enhanced tissue repair and regeneration.* Specifically, Regener-Eyes* contains interleukin 1 receptor antagonist (IL-1Ra), soluble receptors of tumor necrosis factor alpha

continued on page 3

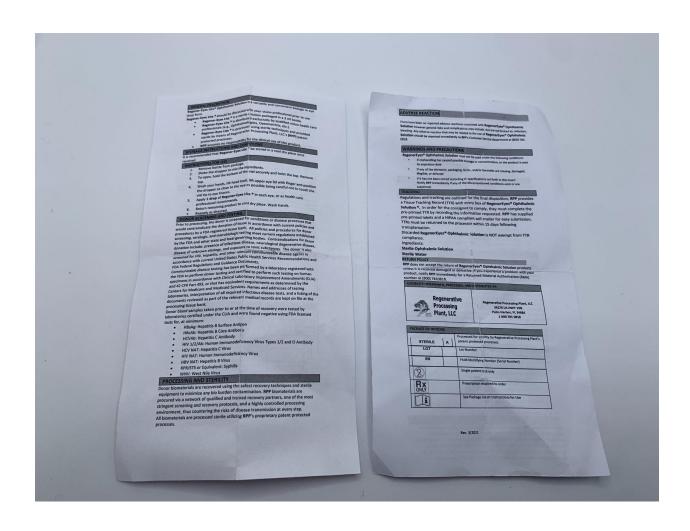
Additional Information

i. Regener-Eyes packaging and labeling

Package of Regener-Eyes purchased by Dry Eye Foundation in April 2022





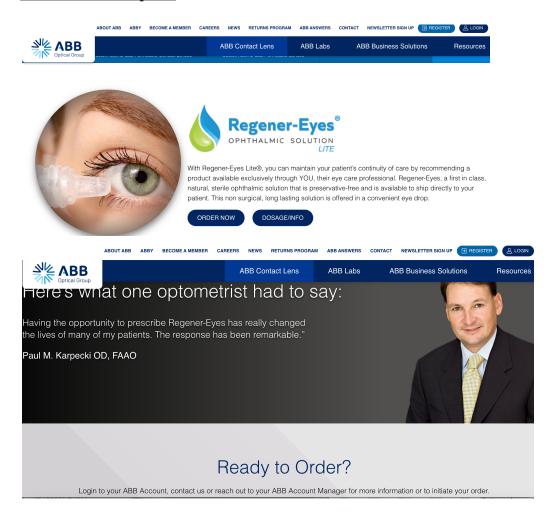


Package of Regener-Eyes, purchased by Dry Eye Foundation in February 2023: For bottle, watch: https://youtu.be/onMQAYlmmLc (Tip: Turn up volume.)

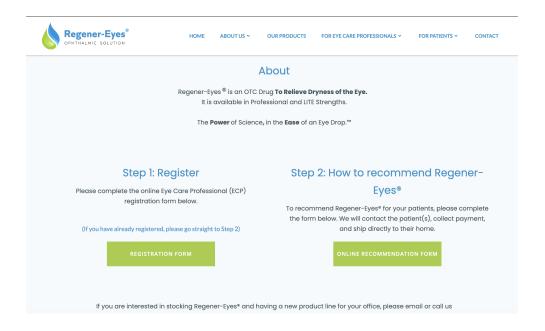


ii. Regener-Eyes distribution and sales

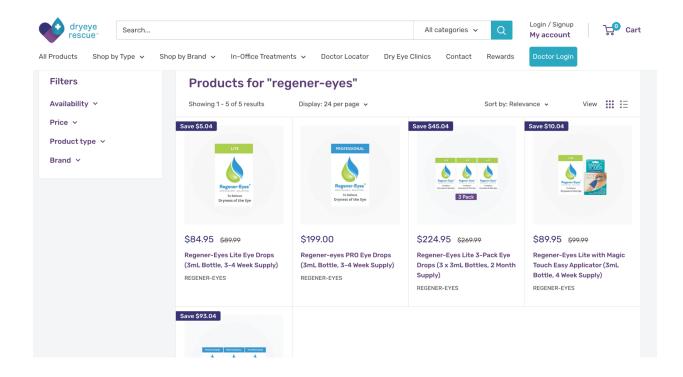
Distributor ABB Optical

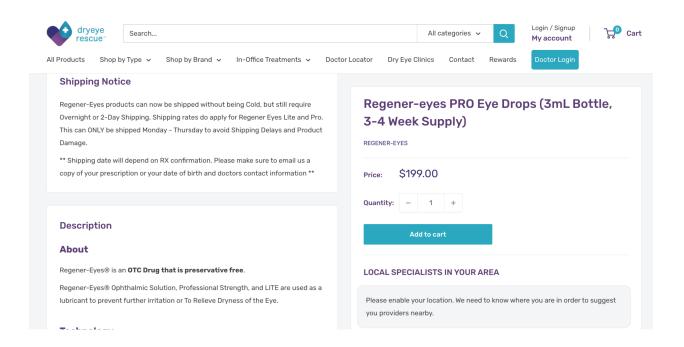


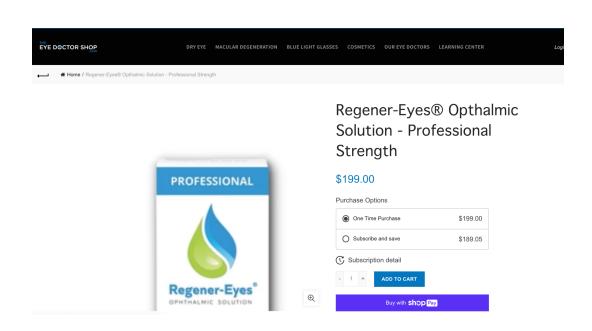
Physician Regener-Eyes referral process/portal



E-commerce Regener-Eyes sales









4



SHOP BY BRAND

SHOP BY SKIN TYPE OR CONDITION

AFSTHETIC SERVICES

PRODUCTS

SPECIALS

E-GIFT CARDS

Home ☐ Shop By Brand ☐ Regener-Eyes® Professional Strength Eye Drop



Regener-Eyes® Professional Strength Eye Drop

Be the first to review this product

Earn 1 point for writing a review for this product

Regener-Eyes® is a Safe and Effective, preservative-free option To Relieve Dryness of the Eye. Its patented technology is trademarked and formulated under the principle to "follow the science" which is the single most important standard of the company. Regener-Eyes truly is The Power of Science, in the Ease of an Eye Drop.™ Regener-Eyes' patented technology assists the tear film layer by increasing lubrication and hydration which promotes homeostasis of the corneal surface and helps slow down the cycle of dry eyes.



\$170.00

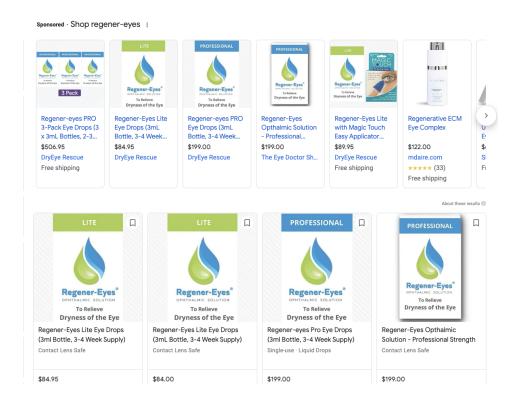
Patient Certification *

 \bigcirc I certify that Dr. Kuriachan or another eye care provider has recommended this product for me.



iii. Regener-Eyes retail prices

\$84.00 to \$199.00 for 3mL bottle



iv. Regener-Eyes' regulatory status claims (examples)

Regener-Eyes Press Release 5/1/2023:

<u>Regener-Eyes® Announces New Peer Reviewed Scientific White Paper on Regener-Eyes an</u>
<u>Ophthalmic Solution to Relieve Dryness of the Eye</u>

(Note: This press release was issued three weeks after the <u>FDA Public Safety Communication</u> on Amniotic Fluid Eyedrops.)

"Regener-Eyes is... in full compliance with all FDA regulations"

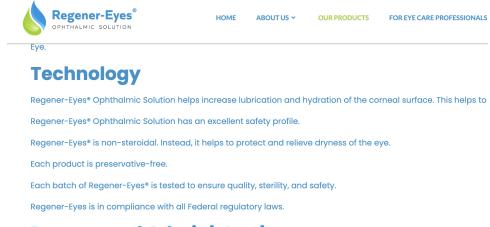


TAMPA, Fla., May 1, 2023 /PRNewswire/ -- Regener-Eyes® is regulated as an OTC drug product that is registered and in full compliance with all FDA regulations. The Regener-Eyes® family is excited to announce that our Founder, CEO, and Chief Medical Officer, C. Randall Harrell, M.D., has just published a peer-reviewed scientific white paper on Regener-Eyes®, an ophthalmic solution To Relieve Dryness of the Eye.

Regener-Eves website

"Regener-Eyes is in compliance with all Federal regulatory laws"

https://www.regenereyes.com/our-products/ as of May 5, 2023



Dosage and Administration

Regener-Eyes exhibitor profile

American Academy of Optometry event page, October 2022

"Regener-Eyes is in compliance with all Federal regulatory laws"

