Free for ARVO members
Frontiers in ocular gene therapy research
Virtual Conference | Nov. 13 – 14 | ARVO.org/gene-therapy
ARVO



IOVS: Leading clinical and laboratory ophthalmic and vision research

Publishing results from original hypothesis-based clinical and laboratory ophthalmic and vision research studies.

Read Current Issue, September 2024 Volume 65, Issue 11

Most Viewed (30 Days)
Most Cited (5 Years)

- IMI Risk Factors for Myopia OPEN ACCESS
- The Complications of Myopia: A Review and Meta-Analysis OPEN ACCESS
- IMI Prevention of Myopia and Its Progression OPEN ACCESS
- IMI Pathologic Myopia OPEN ACCESS
- IMI Impact of Myopia OPEN ACCESS

Advertisement

Call for Papers (IOVS and TVST): Anti-VEGF Special issue

Featured Articles



MATHEMATICAL AND COMPUTATIONAL OPHTHALMOLOGY SPECIAL ISSUE

Drug Distribution After Intravitreal Injection: A Mathematical Model

OPEN ACCESS

Alessia Ruffini, Alessia Casaliicci, Caterina Cara, C. Ross Ethier, Rodolfo Repetto

This site uses cookies. By continuing to use our website, you are agreeing to our privacy policy. | Accept



OCULA

Histologic and Genomic Analysis of Conjunctival SCC in African and American Cohorts Reveal UV Light and HPV Signatures and High Tumor Mutation Burden

OPEN ACCESS

Frederico O. Gleber-Netto, Priyadharsini Nagarajan, Oded Sagiv, et al.



GENETICS

Levels of the HtrA1 Protein in Serum and Vitreous Humor Are Independent of Genetic Risk for Age-Related Macular Degeneration at the 10q26 Locus

OPEN ACCESS

Brandi L. Williams, Moussa A. Zouache, Nathan A. Seager, et al.

Special Issues



Anti-VEGF (*IOVS* and *TVST*)
Call for papers
Submission deadline:
October 1, 2024



Mathematical and Computational Ophthalmology



Albinism



Ocular Oncology



International Myopia Institute (IMI) White Papers III 2023
Vol. 64, No. 6



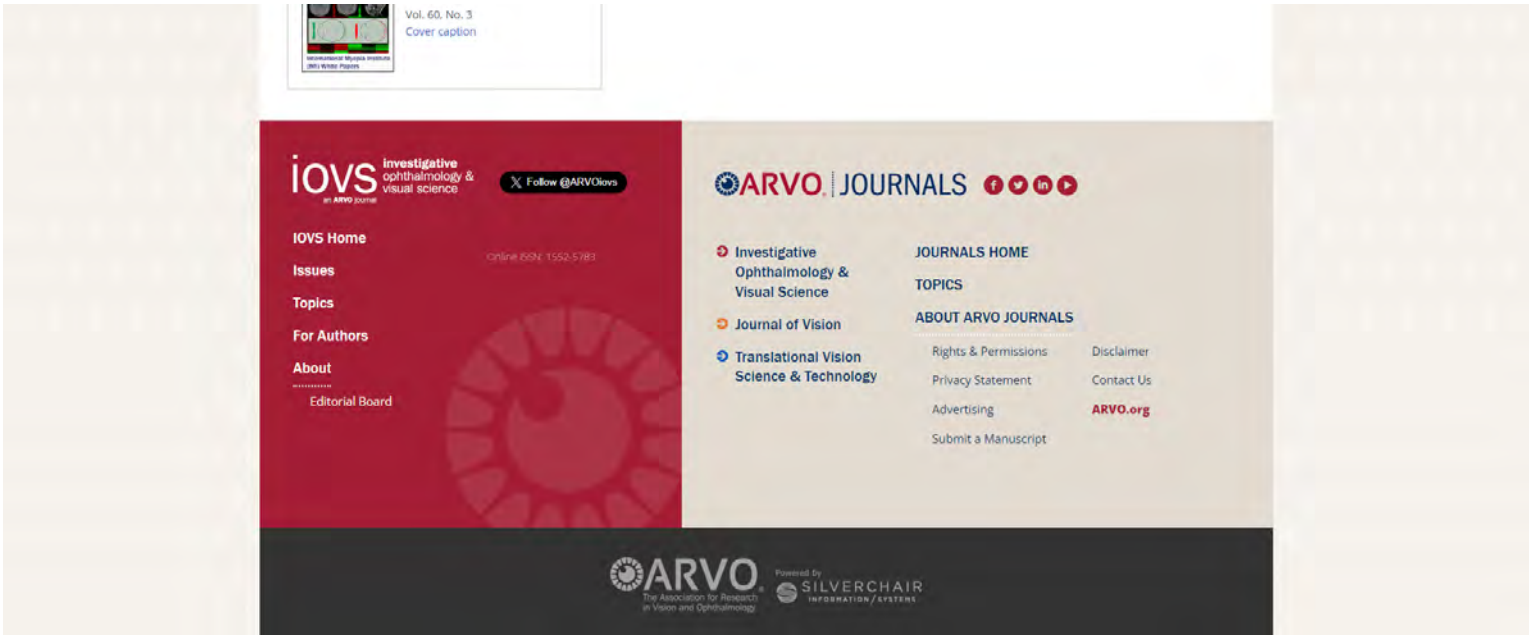
International Myopia Institute (IMI) White Papers II 2021
Vol. 62, No. 5



Focus on Data
Special Series



International Myopia Institute (IMI) White Papers


Vol. 60, No. 3
Cover caption
IOVS investigative ophthalmology & visual science
an ARVO journal
Follow @ARVOiovs
IOVS Home
Issues
Topics
For Authors
About
Editorial Board
ARVO JOURNALS
Investigative Ophthalmology & Visual Science
Journal of Vision
Translational Vision Science & Technology
JOURNALS HOME
TOPICS
ABOUT ARVO JOURNALS
Rights & Permissions
Privacy Statement
Advertising
Submit a Manuscript
Disclaimer
Contact Us
ARVO.org
ARVO
The Association for Research in Vision and Ophthalmology
Powered By
SILVERCHAIR
INFORMATION / SYSTEMS

TVST/IOVS Special Issue Call for Papers
Anti-VEGF
Submission deadline: Oct. 1
tvst iovs



September 2024
Vol: 65, Issue 11
ALERTS

In This Issue

Anatomy and Pathology/Oncology
Biochemistry and Molecular Biology
Clinical and Epidemiologic Research
Cornea
Glaucoma
Immunology and Microbiology
Lens
Multidisciplinary Ophthalmic Imaging
Retina
Retinal Cell Biology
Visual Neuroscience
Visual Psychophysics and Physiological Optics
Review
Erratum

Advertisement

Anatomy and Pathology/Oncology

Administration of Nicotine Can Inhibit Myopic Growth in Animal Models OPEN ACCESS PDF
Kate Thomson; Cindy Karouta; Regan Ashby
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 29. doi:https://doi.org/10.1167/iovs.65.11.29

Biochemistry and Molecular Biology

Metabolic Phenotyping of Healthy and Diseased Human RPE Cells OPEN ACCESS PDF
Saira Rizwan; Beverly Toothman; Bo Li; Abbi L. Engel; Rayne R. Lim; Sheldon Niemberger; Jinyu Lu; Cloe Ratliff; Yinxiao Xiang; Mark Eminhizer; Jennifer R. Chao; Jianhai Du
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 5. doi:https://doi.org/10.1167/iovs.65.11.5

The Effects of STRA6 Regulation of the Circadian Rhythm on Choroidal Neovascularization OPEN ACCESS PDF

This site uses cookies. By continuing to use our website, you are agreeing to our privacy policy. | Accept

Clinical and Epidemiologic Research

Prognostic Impact of Notch1 Intracellular Domain, P63, and c-MYC in Lacrimal Gland Adenoid Cystic Carcinoma OPEN ACCESS PDF
Jiawei Zhao; Michelle D. Williams; Mike Hernandez; Grace Kuang; Hila Goldberg; Janet Fan; Jing Ning; Renata Ferrarotto; Bita Esmaeli
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 4. doi:https://doi.org/10.1167/iovs.65.11.4

Cornea

RNA-Seq Analysis Unraveling Novel Genes and Pathways Influencing Corneal Wound Healing OPEN ACCESS PDF
Rajnish Kumar; Ratnakar Tripathi; Nishant R. Sinha; Rajiv R. Mohan
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 13. doi:https://doi.org/10.1167/iovs.65.11.13

Glaucoma

Long-Term Changes in Lamina Cribrosa Curvature Index After Trabeculectomy in Glaucomatous Eyes OPEN ACCESS PDF
Xiao Shang; Nathanael Urs Haner; Joel-Benjamin Lincke; Valentin Pfeiffer; Pascal Aurel Gubser; Martin Sebastian Zinkernagel; Jan Darius Unterlauft
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 3. doi:https://doi.org/10.1167/iovs.65.11.3

Iris Morphological and Biomechanical Factors Influencing Angle Closure During Pupil Dilation OPEN ACCESS PDF
Royston K. Y. Tan; Gim Yew Ng; Tin A. Tun; Fabian A. Braeu; Monisha E. Nongpiur; Tin Aung; Michaël J. A. Girard
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 7. doi:https://doi.org/10.1167/iovs.65.11.7

Using Multi-Layer Perceptron Driven Diagnosis to Compare Biomarkers for Primary Open Angle Glaucoma OPEN ACCESS PDF
Nicholas Riina; Alon Harris; Brent A. Siesky; Lukas Ritzer; Louis R. Pasquale; James C. Tsai; James Keller; Barbara Wirostko; Julia Arciero; Brendan Fry; George Eckert; Alice Verticchio Vercellin; Gal Antman; Paul A. Sidoti; Giovanna Guidoboni
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 16. doi:https://doi.org/10.1167/iovs.65.11.16

Immunology and Microbiology

In Vivo Visualization of Intravascular Patrolling Immune Cells in the Primate Eye OPEN ACCESS PDF
Drew Ashbery; Hector C. Baez; Rye E. Kanarr; Karteek Kunala; Derek Power; Colin J. Chu; Jesse Schallek; Juliette E. McGregor
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 23. doi:https://doi.org/10.1167/iovs.65.11.23

Lens

Lens Power and Associated Factors in Nonhuman Primate Subjects: A Cross-sectional Study OPEN ACCESS PDF
Yingting Zhu; Rui Xie; Qi Zhang; Yuan Zhang; Guitong Ye; Liangzhi Xu; Simeng Hou; Wei Liu; Zhiwei Huang; Jian Wu; Yehong Zhuo
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 2. doi:https://doi.org/10.1167/iovs.65.11.2

Prospective Cytokine Profiling in Aqueous Humor Reveals a Proinflammatory Microenvironment in Highly Dense Nuclear Cataracts OPEN ACCESS PDF
Catharina Latz; Annika Licht; Alireza Mirshahi; Eicke Latz; Kai Zimmer
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 25. doi:https://doi.org/10.1167/iovs.65.11.25

Altered Cell Clusters and Upregulated Aqp1 in Connexin 50 Knockout Lens Epithelium OPEN ACCESS PDF
Chun-Hong Xia; William Lin; Rachel Li; Xinfang Xing; Guangdu Jack Shang; Haiwei Zhang; Xiaohua Gong
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 27. doi:https://doi.org/10.1167/iovs.65.11.27

Multidisciplinary Ophthalmic Imaging

Quantitative Perfusion-Weighted Magnetic Resonance Imaging in Uveal Melanoma OPEN ACCESS PDF
Lisa Klaassen; Myriam G. Jaarsma-Coes; Marina Marinkovic; Gregorius P. M. Luyten; Coen R. N. Rasch; Teresa A. Ferreira; Jan-Willem M. Beenakker
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 17. doi:https://doi.org/10.1167/iovs.65.11.17

Characterizing Presumed Displaced Retinal Ganglion Cells in the Living Human Retina of Healthy and Glaucomatous Eyes OPEN ACCESS PDF
Mary E. Marte; Kazuhiro Kurokawa; HaeWon Jung; Yan Liu; Marcel T. Bernucci; Brett J. King; Donald T. Miller
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 20. doi:https://doi.org/10.1167/iovs.65.11.20

Plexus-Specific Retinal Capillary Blood Flow Analysis Using Erythrocyte Mediated Angiography and Optical Coherence Tomography Angiography OPEN ACCESS PDF
Victoria Y. Chen; Jessica A. Pottenburgh; Shih-En Chen; Sarah Kim; Lakyn Mayo; Aashka Damani; Marvin Cruz; Ashley Park; Lily Im; Laurence Magder; Osamah J. Saeedi
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 33. doi:https://doi.org/10.1167/iovs.65.11.33

Retina

Changes in Intrinsically Photosensitive Retinal Ganglion Cells, Dopaminergic Amacrine Cells, and Their Connectivity in the Retinas of Lid Suture Myopia OPEN ACCESS PDF
Ying Ling; Yao Wang; Jingjing Ye; Changlin Luan; Ailing Bi; Yu Gu; Xuefeng Shi
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 8. doi:https://doi.org/10.1167/iovs.65.11.8

Enhancing the Retinopathy Of Prematurity Risk Profile Through Placental Evaluation of Maternal and Fetal Vascular Malperfusion OPEN ACCESS PDF
Salma El Emrani; Esther J. S. Jansen; Jelle J. Goeman; Jacqueline U. M. Termote; Enrico Lopriore; Nicoline E. Schalij-Delfos; Lotte E. van der Meeren
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 9. doi:https://doi.org/10.1167/iovs.65.11.9

Intraocular Concentration of Stem Cell Factor/c-KIT and Galectin-1 in Retinal Diseases OPEN ACCESS PDF
Yong Je Choi; Hyeong Min Kim; Tae-Young Na; Kyu Hyung Park; Sang Gyu Park; Se Joon Woo
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 11. doi:https://doi.org/10.1167/iovs.65.11.11

Association of Retinal Nerve Fiber Layer Thinning With Elevated High Density Lipoprotein Cholesterol in UK Biobank OPEN ACCESS PDF
Yiyuan Ma; Yue Wu; Ling Jin; Leyi Hu; Wen Chen; Charlotte Aimee Young; Xinyu Zhang; Danying Zheng; Zhenzhen Liu; Guangming Jin
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 12. doi:https://doi.org/10.1167/iovs.65.11.12

Peripapillary Retinal Nerve Fiber Layer and Macular Ganglion Cell-Inner Plexiform Layer Parameters and Their Associated Factors in Cynomolgus Macaques OPEN ACCESS PDF
Yuan Zhang; Guitong Ye; Kezhe Chen; Shaofen Huang; Rui Xie; Jianqi Chen; Wei Liu; Zhiwei Wang; Ruiyu Luo; Jinan Zhan; Yehong Zhuo; Yiqing Li; Yingting Zhu
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 14. doi:https://doi.org/10.1167/iovs.65.11.14

Aqueous Humor Cytokine Analysis in Age-Related Macular Degeneration After Switching From Aflibercept to Faricimab OPEN ACCESS PDF
Takahito Todoroki; Jun Takeuchi; Hikaru Ota; Yuyako Nakano; Ai Fujita Sajiki; Koichi Nakamura; Hiroki Kaneko; Koji M. Nishiguchi
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 15. doi:https://doi.org/10.1167/iovs.65.11.15

Loss of ON-Pathway Function in Mice Lacking *Lrit3* Decreases Recovery From Lens-Induced Myopia OPEN ACCESS PDF
Baptiste Wilmet; Christelle Michiels; Jingyi Zhang; Jacques Callebert; José Alain Sahel; Serge Picaud; Isabelle Audo; Christina Zeitz
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 18. doi:https://doi.org/10.1167/iovs.65.11.18

A Mathematical Model of Interstitial Fluid Flow and Retinal Tissue Deformation in Macular Edema OPEN ACCESS PDF
Alessia Ruffini; Mariia Dvoriashyna; Andrea Govetto; Mario R. Romano; Rodolfo Repetto
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 19. doi:https://doi.org/10.1167/iovs.65.11.19

Multilayer Retinal Correspondence of the Structural and Vascular Anomalies in Eyes With Early Macular Telangiectasia Type 2 OPEN ACCESS PDF
Valérie Krivosic; Zoe Dobbels; Cedric Duliere; Abir Zureik; Ramin Tadayoni; Alain Gaudric
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 24. doi:https://doi.org/10.1167/iovs.65.11.24

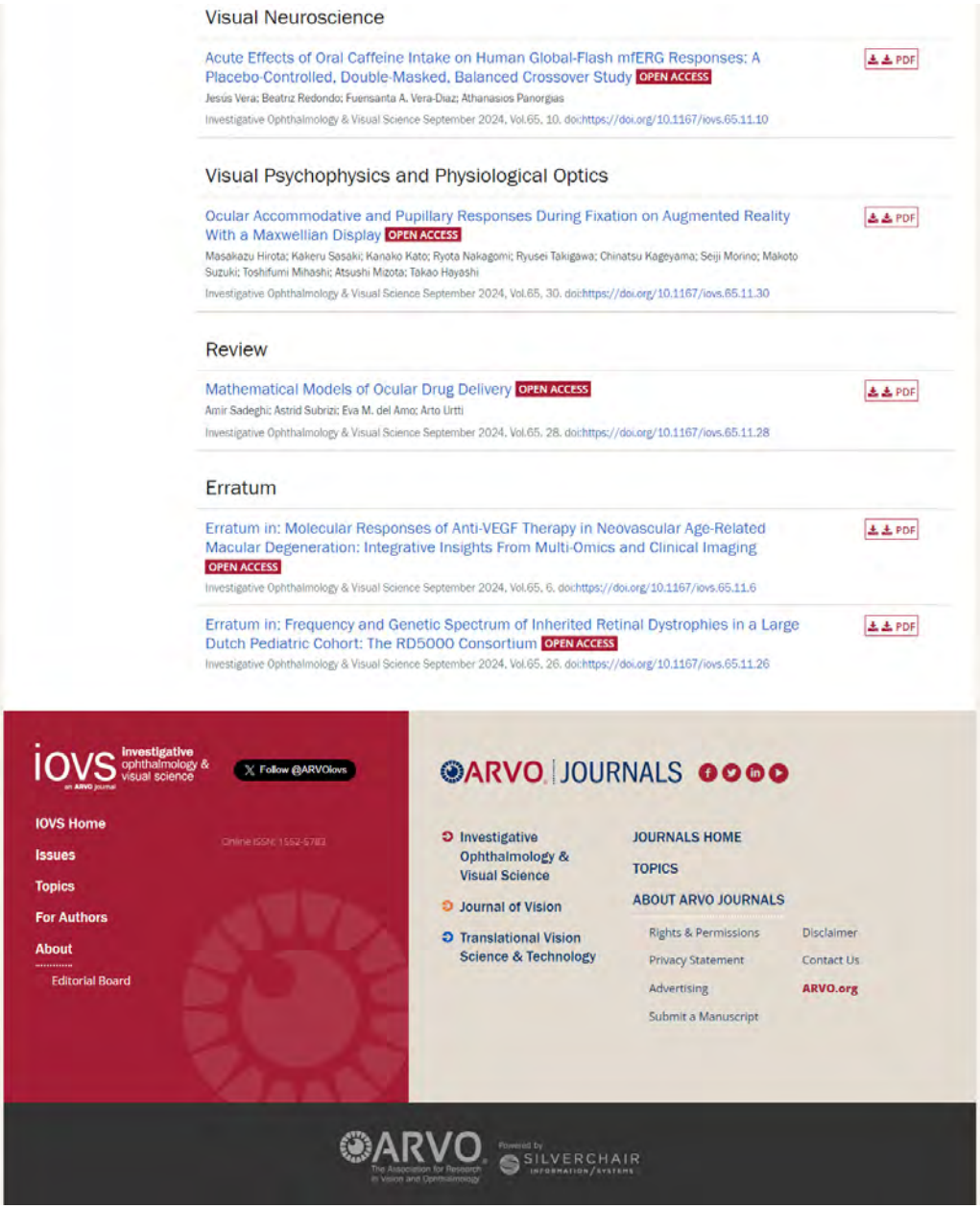
Quantitative Evaluation of Type 1 and Type 2 Choroidal Neovascularization Components Under Treatment With Projection-Resolved OCT Angiography OPEN ACCESS PDF
Kotaro Tsuboi; Qi Sheng You; Jie Wang; Yukun Guo; Christina J. Flaxel; Thomas S. Hwang; David Huang; Yali Jia; Steven T. Bailey
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 32. doi:https://doi.org/10.1167/iovs.65.11.32

Retinal Cell Biology

Knockdown of HSPA13 Inhibits TGFβ1-Induced Epithelial-Mesenchymal Transition of RPE by Suppressing the PI3K/Akt Signaling Pathway OPEN ACCESS PDF
Furong Gao; Mengwen Li; Lilin Zhu; Jiao Li; Jie Xu; Song Jia; Qingjian Ou; Caixia Jin; Haibin Tian; Juan Wang; Jingying Xu; Wei Xu; Guo-Tong Xu; Lixia Lu
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 1. doi:https://doi.org/10.1167/iovs.65.11.1

iPSC-Derived LCHADD Retinal Pigment Epithelial Cells Are Susceptible to Lipid Peroxidation and Rescued by Transfection of a Wildtype AAV-*HADHA* Vector OPEN ACCESS PDF
Tiffany DeVine; Gabriela Elizondo; Garen Gaston; Shannon J. Babcock; Dietrich Matern; Mikhail S. Shchepinov; Mark E. Pennesi; Cary O. Harding; Melanie B. Gillingham
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 22. doi:https://doi.org/10.1167/iovs.65.11.22

Blue Light-Induced Accelerated Formation of Melanolipofuscin-Like Organelles in Japanese Quail RPE Cells: An Electron Microscopic Study OPEN ACCESS PDF
Natalia B. Serejnikova; Natalia N. Trofimova; Marina A. Yakovleva; Alexander E. Dontsov; Pavel P. Zak; Mikhail A. Ostrovsky
Investigative Ophthalmology & Visual Science September 2024, Vol.65, 31. doi:https://doi.org/10.1167/iovs.65.11.31



Visual Neuroscience

Acute Effects of Oral Caffeine Intake on Human Global-Flash mfERG Responses: A Placebo-Controlled, Double-Masked, Balanced Crossover Study OPEN ACCESS

Jesús Vera; Beatriz Redondo; Fuensanta A. Vera-Diaz; Athanasios Panorgias

Investigative Ophthalmology & Visual Science September 2024, Vol.65, 10. doi:https://doi.org/10.1167/iovs.65.11.10

PDF

Visual Psychophysics and Physiological Optics

Ocular Accommodative and Pupillary Responses During Fixation on Augmented Reality With a Maxwellian Display OPEN ACCESS

Masakazu Hirota; Kakeru Sasaki; Kanako Kato; Ryota Nakagomi; Ryusei Takigawa; Chinatsu Kageyama; Seiji Morino; Makoto Suzuki; Toshifumi Mihashi; Atsushi Mizota; Takao Hayashi

Investigative Ophthalmology & Visual Science September 2024, Vol.65, 30. doi:https://doi.org/10.1167/iovs.65.11.30

PDF

Review

Mathematical Models of Ocular Drug Delivery OPEN ACCESS

Amir Sadeghi; Astrid Subrizi; Eva M. del Amo; Arto Urtti

Investigative Ophthalmology & Visual Science September 2024, Vol.65, 28. doi:https://doi.org/10.1167/iovs.65.11.28

PDF

Erratum

Erratum in: Molecular Responses of Anti-VEGF Therapy in Neovascular Age-Related Macular Degeneration: Integrative Insights From Multi-Omics and Clinical Imaging OPEN ACCESS

Investigative Ophthalmology & Visual Science September 2024, Vol.65, 6. doi:https://doi.org/10.1167/iovs.65.11.6

PDF

Erratum in: Frequency and Genetic Spectrum of Inherited Retinal Dystrophies in a Large Dutch Pediatric Cohort: The RD5000 Consortium OPEN ACCESS

Investigative Ophthalmology & Visual Science September 2024, Vol.65, 26. doi:https://doi.org/10.1167/iovs.65.11.26

PDF

IOVS Investigative ophthalmology & visual science

Follow @ARVOiovs

IOVS Home
Issues
Topics
For Authors
About
Editorial Board

Online ISSN: 1552-5783

ARVO JOURNALS

Investigative Ophthalmology & Visual Science
Journal of Vision
Translational Vision Science & Technology

JOURNALS HOME
TOPICS
ABOUT ARVO JOURNALS

Rights & Permissions
Privacy Statement
Advertising
Submit a Manuscript
Disclaimer
Contact Us
ARVO.org

ARVO The Association for Research in Vision and Ophthalmology
Powered by SILVERCHAIR INFORMATION SYSTEMS

Free for ARVO members
Frontiers in ocular gene therapy research
Virtual Conference | Nov. 13 – 14 | ARVO.org/gene-therapy
ARVO



August 2024
Vol: 65, Issue 10

ALERTS

In This Issue

Editorial
Anatomy and Pathology/Oncology
Biochemistry and Molecular Biology
Clinical and Epidemiologic Research
Cornea
Eye Movements, Strabismus, Amblyopia and Neuro-ophthalmology
Genetics
Glaucoma
Lens
Multidisciplinary Ophthalmic Imaging
Physiology and Pharmacology
Retina
Retinal Cell Biology
Visual Neuroscience
Visual Psychophysics and Physiological Optics
Perspective
Letters to the Editor

Advertisement

Editorial

Peer Review in Ophthalmology: A Collaborative Approach to Training the Next Generation of Reviewers OPEN ACCESS PDF
Matilda F. Chan; on behalf of the Council of Vision Editors
Investigative Ophthalmology & Visual Science August 2024, Vol.65, 1. doi:https://doi.org/10.1167/iovs.65.10.1

Anatomy and Pathology/Oncology

This site uses cookies. By continuing to use our website, you are agreeing to our privacy policy. | Accept

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 26. doi:https://doi.org/10.1167/iovs.65.10.26

Optic Nerve Head Morphology and Macula Ganglion Cell Inner Plexiform Layer Thickness in Axially Anisometropic Rhesus Monkeys OPEN ACCESS PDF
Zhihui She; Krista M. Beach; Li-Fang Hung; Lisa A. Ostrin; Earl L. Smith, III; Nimesh B. Patel
Investigative Ophthalmology & Visual Science August 2024, Vol.65, 44. doi:https://doi.org/10.1167/iovs.65.10.44

Biochemistry and Molecular Biology

Functional Characterization of *ABCA4* Missense Variants Aids Variant Interpretation and Phenotype Prediction in Patients With ABCA4-Retinal Dystrophies OPEN ACCESS PDF
Sigrid Aslaksen; Ingvild Aukrust; Laurie Molday; Josephine Prener Holtan; Ragnhild Wivestad Jansson; Siren Berland; Eyvind Rødahl; Cecilie Bredrup; Ragnheiður Bragadóttir; Eirik Bratland; Robert S. Molday; Per Morten Knappskog
Investigative Ophthalmology & Visual Science August 2024, Vol.65, 2. doi:https://doi.org/10.1167/iovs.65.10.2

Agonism of β3-Adrenoceptors Inhibits Pathological Retinal Angiogenesis in the Model of Oxygen-Induced Retinopathy OPEN ACCESS PDF
Alberto Melecchi; Alessio Canovai; Rosario Amato; Massimo Dal Monte; Luca Filippi; Paola Bagnoli; Maurizio Cammalleri
Investigative Ophthalmology & Visual Science August 2024, Vol.65, 34. doi:https://doi.org/10.1167/iovs.65.10.34

Inhibition of Heme Oxygenase 1 Suppresses Growth, Migration, and Invasion, and Regulates Tumor-Infiltrating $CD8^+$ T Cells and in Uveal Melanoma OPEN ACCESS PDF
Chen Hou; Qi Wan; Lirong Xiao; Qing Xiao; Meixia Zhang; Naihong Yan
Investigative Ophthalmology & Visual Science August 2024, Vol.65, 37. doi:https://doi.org/10.1167/iovs.65.10.37

Clinical and Epidemiologic Research

Recurrence in Eyelid Sebaceous Carcinoma: A Multicentric Study of 418 Patients OPEN ACCESS PDF
Mingpeng Xu; Qian Chen; Yingxiu Luo; Peiwei Chai; Xiaoyu He; Hengye Huang; Jia Tan; Juan Ye; Chuandi Zhou
Investigative Ophthalmology & Visual Science August 2024, Vol.65, 4. doi:https://doi.org/10.1167/iovs.65.10.4

Choroidal Vascularity and Axial Length Elongation in Highly Myopic Children: A 2-Year Longitudinal Investigation OPEN ACCESS PDF
Meng Xuan; Decai Wang; Ou Xiao; Xinxing Guo; Jian Zhang; Qiuxia Yin; Wei Wang; Mingguang He; Zhixi Li
Investigative Ophthalmology & Visual Science August 2024, Vol.65, 7. doi:https://doi.org/10.1167/iovs.65.10.7

Localized Evaporative Cooling Explains Observed Ocular Surface-Temperature Patterns OPEN ACCESS PDF
Young Hyun Kim; Joshua Lee; Sarah M. Yi; Meng C. Lin; Clayton J. Radke
Investigative Ophthalmology & Visual Science August 2024, Vol.65, 15. doi:https://doi.org/10.1167/iovs.65.10.15

Choroidal Changes During and After Discontinuing Long-Term 0.01% Atropine Treatment for Myopia Control OPEN ACCESS PDF
Samantha Sze-Yee Lee; Gareth Lingham; Antony Clark; Scott A. Read; David Alonso-Caneiro; David A. Mackey
Investigative Ophthalmology & Visual Science August 2024, Vol.65, 21. doi:https://doi.org/10.1167/iovs.65.10.21

Postmenopausal Hormone Therapy Was Associated With Later Age of Onset Among Glaucoma Cases OPEN ACCESS PDF
Kelleigh Hogan; Xiangqin Cui; Annette Giangiacomo; Andrew J. Feola
Investigative Ophthalmology & Visual Science August 2024, Vol.65, 31. doi:https://doi.org/10.1167/iovs.65.10.31

Association of Age of Menopause and Glaucoma Diagnosis in Female Veterans OPEN ACCESS PDF
Kelleigh Hogan; Xiangqin Cui; Annette Giangiacomo; Andrew J. Feola
Investigative Ophthalmology & Visual Science August 2024, Vol.65, 32. doi:https://doi.org/10.1167/iovs.65.10.32

The Onset and Progression of Myopia Slows in Chinese 15-Year-Old Adolescents Following Vocational Rather Than Academic School Pathways OPEN ACCESS PDF
Yin Hu; Lirong Liao; Ian G. Morgan; Ling Jin; Mingguang He; Xiaohu Ding

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 42. doi:https://doi.org/10.1167/iovs.65.10.42

Long-Term Prediction and Risk Factors for Incident Visual Field Defect in Nonpathologic High Myopia OPEN ACCESS PDF

Cong Li; Yanping Chen; Shaopeng Yang; Ruilin Xiong; Riqian Lu; Zyu Zhu; Shida Chen; Mingguang He; Wei Wang

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 43. doi:https://doi.org/10.1167/iovs.65.10.43

Cornea

Ex Vivo Lenticule Customization for Stromal Lenticule Addition Keratoplasty OPEN ACCESS PDF

Mario Nubile; Jorge L. Alio del Barrio; Luca Cerino; Niccolò Salgari; Mona El Zanfi; Michele Totta; Manuela Lanzini; Leonardo Mastropasqua

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 9. doi:https://doi.org/10.1167/iovs.65.10.9

Fabry Disease Rat Model Develops Age- and Sex-Dependent Anterior Segment Ocular Abnormalities OPEN ACCESS PDF

Madelyn E. Erdman; Sanjay Ch; Amer Mohiuddin; Khalid Al-Kirwi; Molly R. Rasper; Sibabalo Sokupa; Shermaine W. Y. Low; Christine M. B. Skumatz; Vinicius De Stefano; Iris S. Kassem; Shyam S. Chaurasia

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 14. doi:https://doi.org/10.1167/iovs.65.10.14

The Necroptosis Pathway Is Upregulated in the Cornea in Mice With Ocular Graft-Versus-Host Disease OPEN ACCESS PDF

Kazuki Asai; Hyung Keun Lee; Shinri Sato; Eisuke Shimizu; Jaehun Jung; Takahiro Okazaki; Mamoru Ogawa; Shigeto Shimmura; Kazuo Tsubota; Yoko Ogawa; Kazuno Negishi; Masatoshi Hirayama

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 38. doi:https://doi.org/10.1167/iovs.65.10.38

Eye Movements, Strabismus, Amblyopia and Neuro-ophthalmology

Landolt C-Tests With "Fixed" Arcmin Separations Detect Amblyopia But Underestimate Crowding in Moderate-to-Severe Amblyopic Children and Adults OPEN ACCESS PDF

Sarah J. Waugh; Maria Fronius

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 33. doi:https://doi.org/10.1167/iovs.65.10.33

Binocular Visual Deficits at Low to High Spatial Frequency in Intermittent Exotropia After Surgery OPEN ACCESS PDF

Xi Yu; Lili Wei; Yiya Chen; Hanyi Zhang; Huanyun Yu; Jiawei Zhou; Meiping Xu

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 41. doi:https://doi.org/10.1167/iovs.65.10.41

Genetics

Identification of Potential Drug Targets for Myopia Through Mendelian Randomization OPEN ACCESS PDF

Yimin Qin; Chengcheng Lei; Tianfeng Lin; Xiaotong Han; Decai Wang

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 13. doi:https://doi.org/10.1167/iovs.65.10.13

Gene-Environment Interaction Between *CAST* Gene and Eye-Rubbing in the Chinese Keratoconus Cohort Study: A Case-Only Study OPEN ACCESS PDF

Shanshan Yin; Liyan Xu; Kaili Yang; Qi Fan; Yuwei Gu; Chenchen Yin; Yonghao Zang; Yifan Wang; Yi Yuan; Anqi Chang; Chenjiu Pang; Shengwei Ren

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 36. doi:https://doi.org/10.1167/iovs.65.10.36

Frequency and Genetic Spectrum of Inherited Retinal Dystrophies in a Large Dutch Pediatric Cohort: The RD5000 Consortium OPEN ACCESS PDF

Pam A. T. Heutinck; L. Ingeborgh van den Born; Maikel Vermeer; Adriana I. Iglesias Gonzales; Carel B. Hoyng; Jan Willem R. Pott; Hester Y. Kroes; Mary J. van Schooneveld; Camiel J. F. Boon; Maria M. van Genderen; Astrid S. Plomp; Yvonne de Jong-Hesse; Michelle B. van Egmond-Ebbeling; Lies H. Hoefsloot; Arthur A. Bergen; Caroline C. W. Klaver; Magda A. Meester-Smoor; Alberta A. H. J. Thiadens; Virginie J. M. Verhoeven

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 40. doi:https://doi.org/10.1167/iovs.65.10.40

The Systemic Genotype-Phenotype Characterization of *PAX6*-Related Eye Disease in 164 Chinese Families OPEN ACCESS PDF

Yi Jiang; Zhen Yi; Yuxi Zheng; Jiamin Ouyang; Dongwei Guo; Shiqiang Li; Xueshan Xiao; Panfeng Wang; Wenmin Sun; Qingjiong Zhang

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 46. doi:https://doi.org/10.1167/iovs.65.10.46

Glaucoma

GSK3β Inhibitors Inhibit TGFβ Signaling in the Human Trabecular Meshwork OPEN ACCESS PDF

Chenna Kesavulu Sugali; Naga Pradeep Rayana; Jiannong Dai; Devon H. Harvey; Kamesh Dhamodaran; Weiming Mao

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 3. doi:https://doi.org/10.1167/iovs.65.10.3

Activation of the ROCK/MYLK Pathway Affects Complex Molecular and Morphological Changes of the Trabecular Meshwork Associated With Ocular Hypertension OPEN ACCESS PDF

Chia-Chen Hsu; Fang-Pai Lin; Hao-Chen Tseng; Pin Kuan Ho; Yi-Hsun Chen; Yann-Guang Chen; Da-Wen Lu; Yi-Hao Chen; Jian-Liang Chou; Hsin-Chih Chen; Yu Chuan Huang

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 17. doi:https://doi.org/10.1167/iovs.65.10.17

Lens

Biologically Relevant Laminin-511 Moderates the Derivation and Proliferation of Human Lens Epithelial Stem/Progenitor-Like Cells OPEN ACCESS PDF

Jinyan Li; Jingyu Ma; Yijia Chen; Shuyi Chen; Lixia Luo; Hao Cheng

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 12. doi:https://doi.org/10.1167/iovs.65.10.12

Multidisciplinary Ophthalmic Imaging

Are the Hypo-Reflective Clumps Associated With Age-Related Macular Degeneration in Adaptive Optics Ophthalmoscopy Autofluorescent? OPEN ACCESS PDF

Ysé Borella; Natalie Danielsen; Evelyn M. Markle; Valerie C. Snyder; Daniel M. W. Lee; Min Zhang; Andrew W. Eller; Jay Chhablani; Michel Paques; Ethan A. Rossi

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 28. doi:https://doi.org/10.1167/iovs.65.10.28

Physiology and Pharmacology

Iron Chelator Deferiprone Restores Iron Homeostasis and Inhibits Retinal Neovascularization in Experimental Neovascular Age-Related Macular Degeneration OPEN ACCESS PDF

Yuan Xu; Shiya Huang; Shengmei Zhou; Xin Wang; Mingyan Wei; Xiaodong Chen; Rongrong Zong; Xiang Lin; Shiying Li; Zuguo Liu; Qian Chen

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 5. doi:https://doi.org/10.1167/iovs.65.10.5

Effect of Ambient Lighting on Intraocular Pressure Rhythms in Rats OPEN ACCESS PDF

Christina M. Nicou; Christopher L. Passaglia

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 16. doi:https://doi.org/10.1167/iovs.65.10.16

Altered Functional Responses of the Retina in B6 Albino $Tyr^{c/c}$ Mice OPEN ACCESS PDF

Virginie Chotard; Francesco Trapani; Guilhem Glaziou; Berat Semihcan Sermet; Pierre Yger; Olivier Marre; Alexandra Rebsam

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 39. doi:https://doi.org/10.1167/iovs.65.10.39

Retina

Long-Term Impact of Diabetic Retinopathy on Response to Anti-VEGF Treatment in Neovascular AMD OPEN ACCESS PDF

Giacomo Boscia; Daniela Bacherini; Stela Vujosevic; Maria Oliva Grassi; Enrico Borrelli; Ermete Gianicolo; Luca Landini; Managrazia Pignataro; Giovanni Alessio; Francesco Boscia; Pasquale Viggiano

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 6. doi:https://doi.org/10.1167/iovs.65.10.6

IL-23 Priming Enhances the Neuroprotective Effects of MSC-Derived Exosomes in Treating Retinal Degeneration OPEN ACCESS PDF

Hong Zhou; Yan Liu; Tian Zhou; Ziqi Yang; Biyan Ni; Yang Zhou; Huiyi Xu; Xiaojing Lin; Shiya Lin; Chang He; Xialin Liu

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 8. doi:https://doi.org/10.1167/iovs.65.10.8

Topographic Measurement of the Subretinal Pigment Epithelium Space in Normal Aging and Age-Related Macular Degeneration Using High-Resolution OCT OPEN ACCESS PDF

Jungeun Won; Hiroyuki Takahashi; Stefan B. Ploner; Wenke Karbole; Omar Abu-Qamar; Antonio Yaghy; Anna Marmalidou; Stephanie Kaiser; Yunchan Hwang; Junhong Lin; Andre Witkin; Shilpa Desai; Caroline R. Baumal; Andreas Maier; Christine A. Curcio; Nadia K. Waheed; James G. Fujimoto

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 18. doi:https://doi.org/10.1167/iovs.65.10.18

Effects of Acute High-Altitude Exposure on Morphology and Function of Retinal Ganglion Cell in Mice OPEN ACCESS PDF

Yi Yang; Cong Han; Yi Sun; Xin Zhao; Zhaoqian Chen; Liangtao Zhao; Yuting Li; Wenfang Zhang

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 19. doi:https://doi.org/10.1167/iovs.65.10.19

Differential Capillary and Large Vessel Analysis Improves OCTA Classification of Diabetic Retinopathy OPEN ACCESS PDF

Mansour Abtahi; David Le; Behrouz Ebrahimi; Albert K. Dadzie; Mojtaba Rahimi; Yi-Ting Hsieh; Michael J. Heiferman; Jennifer I. Lim; Xincheng Yao

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 20. doi:https://doi.org/10.1167/iovs.65.10.20

Molecular Responses of Anti-VEGF Therapy in Neovascular Age-Related Macular Degeneration: Integrative Insights From Multi-Omics and Clinical Imaging OPEN ACCESS PDF

Xuenan Zhuang; Miaoling Li; Lan Mi; Xiongze Zhang; Jiaxin Pu; Guiqin He; Liang Zhang; Honghua Yu; Liwei Yao; Hui Chen; Yuying Ji; Chengguo Zuo; Yongyue Su; Yuhong Gan; Xinlei Hao; Yining Zhang; Xuelin Chen; Feng Wen

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 24. doi:https://doi.org/10.1167/iovs.65.10.24

Extent and Topography of Subretinal Drusenoid Deposits Associate With Rod-Mediated Vision in Aging and AMD: ALSTAR2 Baseline OPEN ACCESS PDF

Lukas Goerdt; Mohymna Amjad; Thomas A. Swain; Gerald McGwin; Mark E. Clark; Cynthia Owsley; Kenneth R. Sloan; Christine A. Curcio; Deepayan Kar

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 25. doi:https://doi.org/10.1167/iovs.65.10.25

Cholesterol Accumulation Promotes Photoreceptor Senescence and Retinal Degeneration OPEN ACCESS PDF

Ryo Terao; Brian S. Sohn; Taku Yamamoto; Tae Jun Lee; Jason Colasanti; Charles W. Pfeifer; Joseph B. Lin; Andrea Santeford; Shinobu Yamaguchi; Mitsukuni Yoshida; Rajendra S. Apte

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 29. doi:https://doi.org/10.1167/iovs.65.10.29

Retinal Penetrating Adeno-Associated Virus OPEN ACCESS PDF

Binit Kumar; Manish Mishra; Siobhan Cashman; Rajendra Kumar-Singh

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 30. doi:https://doi.org/10.1167/iovs.65.10.30

Wound Healing in a Porcine Model of Retinal Holes OPEN ACCESS PDF

Madeline Evers Olufsen; Jens Hannibal; Nina Buus Sørensen; Anders Tolstrup Christiansen; Ulrik Christensen; Grazia Pertile; David H. Steel; Steffen Heegaard; Jens Folke Kiilgaard

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 35. doi:https://doi.org/10.1167/iovs.65.10.35

Retinal Cell Biology

Pigment Epithelium-Derived Factor Binding to VEGFR-1 (Flt-1) Increases the Survival of Retinal Neurons OPEN ACCESS PDF

Jie Meng; Xiu Mei Yang; Oliver Scheer; Johannes Lange; Heidi Müller; Susanne Bürger; Sven Rothemund; Ruaa Younis; Jan D. Unterlauft; Wolfram Eichler

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 27. doi:https://doi.org/10.1167/iovs.65.10.27

Visual Neuroscience

Human Electroretinography Shows Little Polarity Specificity Following Full-Field Ramp Adaptation OPEN ACCESS PDF

Shalila T. Freitag; Maren-Christina Lengle; Sascha Klee; Sven P. Heinrich

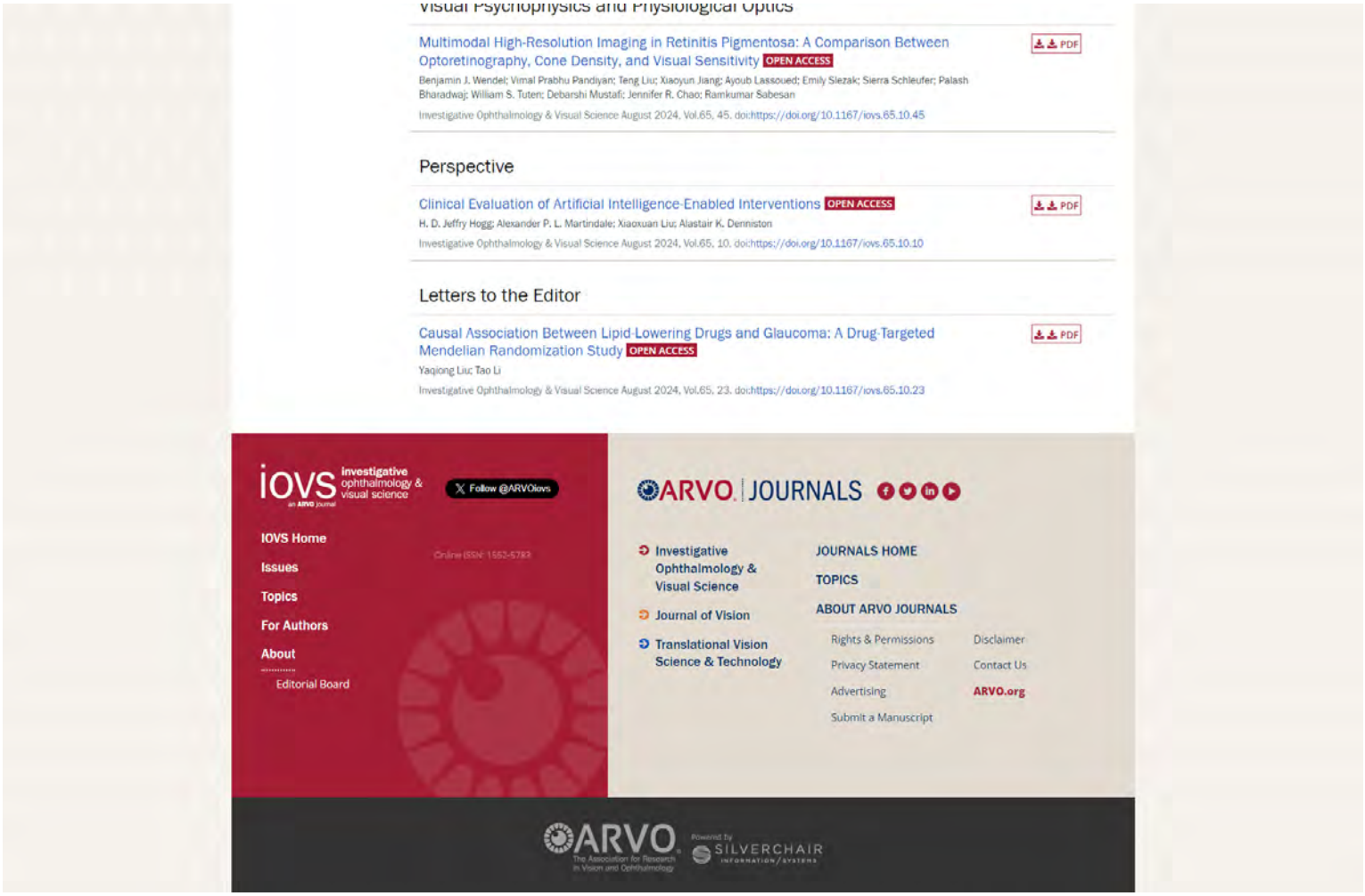
Investigative Ophthalmology & Visual Science August 2024, Vol.65, 11. doi:https://doi.org/10.1167/iovs.65.10.11

Macrophages Modulate Optic Nerve Crush Injury Scar Formation and Retinal Ganglion Cell Function OPEN ACCESS PDF

Yuan Liu; Xiangxiang Liu; Christopher A. Dorizas; Zixuan Hao; Richard K. Lee

Investigative Ophthalmology & Visual Science August 2024, Vol.65, 22. doi:https://doi.org/10.1167/iovs.65.10.22

Visual Psychophysics and Physiological Optics


Visual Psychophysics and Physiological Optics
Multimodal High-Resolution Imaging in Retinitis Pigmentosa: A Comparison Between Optoretinography, Cone Density, and Visual Sensitivity OPEN ACCESS
PDF
Benjamin J. Wendel; Vimal Prabhu Pandiyan; Teng Liu; Xiaoyun Jiang; Ayoub Lassoued; Emily Slezak; Sierra Schleufer; Palash Bharadwaj; William S. Tuten; Debarshi Mustafi; Jennifer R. Chao; Ramkumar Sabesan
Investigative Ophthalmology & Visual Science August 2024, Vol.65, 45. doi:https://doi.org/10.1167/iovs.65.10.45
Perspective
Clinical Evaluation of Artificial Intelligence-Enabled Interventions OPEN ACCESS
PDF
H. D. Jeffry Hogg; Alexander P. L. Martindale; Xiaoxuan Liu; Alastair K. Denniston
Investigative Ophthalmology & Visual Science August 2024, Vol.65, 10. doi:https://doi.org/10.1167/iovs.65.10.10
Letters to the Editor
Causal Association Between Lipid-Lowering Drugs and Glaucoma: A Drug-Targeted Mendelian Randomization Study OPEN ACCESS
PDF
Yaqiong Liu; Tao Li
Investigative Ophthalmology & Visual Science August 2024, Vol.65, 23. doi:https://doi.org/10.1167/iovs.65.10.23
IOVS Investigative ophthalmology & visual science
an ARVO journal
Follow @ARVOiovs
IOVS Home
Issues
Topics
For Authors
About
Editorial Board
Online ISSN: 1552-5783
ARVO JOURNALS
Investigative Ophthalmology & Visual Science
Journal of Vision
Translational Vision Science & Technology
JOURNALS HOME
TOPICS
ABOUT ARVO JOURNALS
Rights & Permissions
Privacy Statement
Advertising
Submit a Manuscript
Disclaimer
Contact Us
ARVO.org
ARVO
The Association for Research in Vision and Ophthalmology
Powered by
SILVERCHAIR
INFORMATION SYSTEMS

Free for ARVO members
Frontiers in ocular gene therapy research
Virtual Conference | Nov. 13 – 14 | ARVO.org/gene-therapy
ARVO



June 2022
Vol: 63, Issue 7

ALERTS

In This Issue
ARVO Annual Meeting Abstract

Advertisement

ARVO Annual Meeting Abstract

Next-Generation Sequencing Panel Results for Inherited Retinal Dystrophy in a Large Pediatric Cohort OPEN ACCESS
Iker Sánchez Navarro; Kimberly Gall; Julie Hathaway; Alicia Scocchia; Kati Kämpjärvi; Johanna Kansakoski; Pernilla von Nandelstadh; Marta Gandia; Sanna Vattulainen-Collanus; Ka-Yan Mak; Mari-Liis Mikk; Laura Sarantaus; Hanna Västinsalo; Inka Saarinen; Sari Tuupanen; Juha Koskenvuo
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1. doi:

Randomized Trial of Treat-and-Extend Intravitreal Aflibercept for Radiation Retinopathy: 1-Year Outcomes OPEN ACCESS
Stephanie Trejo Corona; Cecilia Villanueva Boone; Chelsey Moore; Alex Brown; Jose Munoz; Thomas Aaberg Jr.; Amy C Schefler
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 0001. doi:

A refined amplification-free long-read sequencing method to interrogate *TCF4* triplet repeats associated with Fuchs endothelial corneal dystrophy OPEN ACCESS
Christina Zarouchlioti; Nathaniel Jordan Hafford-Tear; Yu-Chih Tsai; Anita Szabo; Nihar Bhattacharyya; Amanda Sadan; Alison J Hardcastle; Petra Liskova; Nikolas Pontikos; Stephen Tuft; Alice E Davidson
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2. doi:

The retinal toxicity of the pro-inflammatory and amyloidogenic S100A9 proteins OPEN ACCESS
Shiri Zayit-Soudry; Michal Harel; Amanda Qarawani; Rony Ben Zvi Elimelech; Chen Itzkovich; Rami Khoury; Shadi Safuri; Efrat Naaman
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 0002. doi:

Deciphering non-coding genetic variants via integrative single cell multi-omics analysis OPEN ACCESS
Rui Chen; Jun Wang; Xuesen Cheng; Qingnan Liang; Jun Wang; Margaret M DeAngelis; Yumei Li
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3. doi:

Integrating genetics and metabolomics data reveals putative mechanisms for age-related macular degeneration OPEN ACCESS
Xikun Han; Ines Lains; Jun Li; Qibin Qi; Bing Yu; Jessica Lasky-Su; Joan W Miller; Frank Hu; Walter Willett; Stuart MacGregor; Deeba Husain; Liming Liang
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 0003. doi:

Single Nucleus Multi-modal Analysis of the Aging Mouse Retina OPEN ACCESS
Anne Marie Berry; Kelsey Dang; Pooja Biswas; Shikha Pachauri; Ryan Lancione; Manisha Dagar; Donita Garland; Sebastian Preissl; Allen Wang; Radha Ayyagari
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4. doi:

Patterns of gene expression vary among macular tissues and clinical stages of Age-related Macular Degeneration OPEN ACCESS
Charles Zhang; Leah A Owen; John Lillvis; Brian Madow; Akbar Shakoor; Albert T Vitale; Tamim Shaikh; Neena B Haider; Michael Farkas; Lindsay Farrer; Ivana K Kim; Margaret M DeAngelis
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 0004. doi:

Revisiting WGS data reveals previously overlooked structural variants disrupting IRD-associated genes OPEN ACCESS
Suzanne de Bruijn; Kornelia Neveling; Rebekkah J Hitti-Malin; Jordi Corominas; Janine Reurink; Hannie Kremer; Ronald J.E. Pennings; Marcel Nelen; Christian Gilissen; Frans P Cremers; Alexander Hoischen; Susanne Roosing
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 5. doi:

APE1/Ref-1 is highly expressed in murine laser-induced choroidal neovascularization and human neovascular age-related macular degeneration OPEN ACCESS
Anbukkarasi Muniyandi; Gabriella D Hartman; Kristina Day; Xiaoping Qi; Michael Boulton; Mark R Kelley; Timothy William Corson
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 0005. doi:

Retinal Horizontal Cell TDP-43 Pathology in Chronic Traumatic Encephalopathy Patients' Retinas OPEN ACCESS
Jihee Choi; Chiara De Lillo; Vanessa S. Goodwill; David G. Coughlin; Christina J. Sigurdson; Victor E. Alvarez; Annie Hiniker; Ann C. Mckee; Jonathan Lin
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 0006. doi:

Identification of Retinal Cell Types Based on Single-Cell Transcriptomics OPEN ACCESS
Yeganeh Madadi; Jian Sun; hao Chen; Robert W. Williams; Siamak Yousefi
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 6. doi:

Single-nucleus multi-modal analysis of MFRP associated retinal degeneration OPEN ACCESS
Shikha Pachauri; Kelsey Dang; Pooja Biswas; Anil Kumar Chekuri; Manisha Dagar; Anne Marie Berry; Berzhan Kurmanov; Ryan Lancione; Donita Garland; Sebastian Preissl; Allen Wang; Radha Ayyagari
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 7. doi:

Prion Deposits Preferentially Accumulate in the Retinal Outer Plexiform Layer in Patients with Sporadic Creutzfeldt-Jakob Disease (sCJD) OPEN ACCESS

Chiara De Lillo; Jihee Choi; Vanessa S. Goodwill; Ian Dryden; Ana Arcia Franchini; Christina J. Sigurdson; Jonathan Lin

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 0007. doi:

Chronic intraocular pressure elevation alters cerebrovascular reactivity in the visual cortex and basal forebrain OPEN ACCESS

Russell Chan; Yixi Xue; Ji Won Bang; Muneeb A Faiq; Thajunnisa Sajitha; Royce Lee; Peiying Liu; Christopher Leung; Gadi Wollstein; Joel S Schuman; Kevin C. Chan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 8. doi:

Glaucoma-associated human Optineurin mutations increase transmitophagy in the *Xenopus laevis* tadpole optic nerve OPEN ACCESS

Yaeram Jeong; Nicholas Marsh-Armstrong

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 9. doi:

Retinal *ex vivo* live imaging indicates microglia interaction with synaptic sites in experimental glaucoma OPEN ACCESS

Tonatiuh Garcia Ruiz; Alfred K Yu; Jeanette Hyer; Luca Della Santina; Yvonne Ou

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 10. doi:

APOE4 impairs the response of neurodegenerative microglia and prevents neuronal loss in glaucoma OPEN ACCESS

Milica Margeta; Kristen M Pitts; Oleg Butovsky

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 11. doi:

Restoration of mitochondrial axonal transport by adaptor supplementation prevents neurodegeneration and rescues visual function in glaucoma OPEN ACCESS

Heberto Quintero; Yukihiro Shiga; Nicolas A Belforte; Luis Alarcon-Martinez; Sana El Hajji; Deborah Villafranca-Baughman; Florence Dotigny; Adriana Di Polo

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 12. doi:

Early neuroinflammatory responses in the visual pathway in a feline inherited glaucoma model OPEN ACCESS

Kazuya Oikawa; Julie Kiland; Virginia Mathu; Odalys Torne; Gillian J McLellan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 13. doi:

Induced ablation of scleral TGF-β signaling in mutant mice increases susceptibility to IOP-induced optic nerve damage OPEN ACCESS

Magdalena Schneider; Andrea E. Dillinger; Ernst R. Tamm

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 14. doi:

Function and therapeutic potential of glutaredoxin (Grx) system in the lens OPEN ACCESS

Hongli Wu; Kayla Green; Yang Liu; Jinmin Zhang; Yu Yu; Kevin Lal; My-Lien Au

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 15. doi:

Mapping the universe of Eph and ephrin transcripts in adult mouse lenses OPEN ACCESS

Subashree Murugan; Catherine Cheng

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 16. doi:

α-Crystallin chaperone mimetic small molecules as a paradigm for cataract prevention by inhibition of lens γ-crystallin aggregation OPEN ACCESS

Vincent M Monnier; Sidra Islam; Michael Do; Brett Frank; Samuel G Wheeler; Xingjun Fan; Kirsten J Lampi; David R Sell

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 17. doi:

Topical instillation of Metformin Prevents Oxidative Stress-Induced Eye Lens Opacity Through Induction of AMPK-Nrf2-Mediated Antioxidant Pathway OPEN ACCESS

Dhirendra P Singh; Bhavana Chhunchha; Ronald R krueger; Eri Kubo

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 18. doi:

Functional interaction between connexin 46 and periaxin in cataractogenesis OPEN ACCESS

Xiaohua Gong; Vasantha Rao; Chun-hong Xia

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 19. doi:

Dysregulation of Autophagy Occurs During Congenital Cataract Development in CRYβA1/A3-ΔG91 Mice. OPEN ACCESS

Akosua Konadu Boateng; Roy Joseph; Om P Srivastava

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 20. doi:

A PCO Predictive In Vitro Model to Examine the Role of Fibronectin and IOL Surface Property on PCO formation OPEN ACCESS

Liping Tang; Joyita Roy; Arjun Jaitli; Amjad Chatila

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 21. doi:

PAX6-positive microglia evolve locally in hiPSC-derived ocular organoids OPEN ACCESS

Nobuhiko Shiraki; Kazuichi Maruyama; Ryuhei Hayashi; Susumu Sakimoto; Kohji Nishida

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 22. doi:

Augmentation of Protective Microglia Restricts Outer Retinal Degeneration and Preserves Vision OPEN ACCESS

Chen Yu; Eleonora M Lad; Alan Proia; Daniel R Saban

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 23. doi:

Senescent Macrophage Lead to Age Related Macular Degeneration-Like Phenotype in an *in vitro* 3D RPE/Choroid Model OPEN ACCESS

Russell Quinn; Eric Nguyen; Tea Soon Park; Congxiao Zhang; Amir Ali; Rishabh Hirday; Devika Bose; Robert N Fariss; Marc Ferrer; Kapil Bharti

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 24. doi:

CCR2+ monocytes critically contribute to subretinal fibrosis at the chronic stage of the disease. OPEN ACCESS

Manon SZCZEPAN; Maria Llonian-Salvador; Matthias Mack; Mei Chen; Heping Xu

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 25. doi:

Single cell RNA sequencing reveals a subtype of pro-angiogenic classical monocyte-derived macrophages during experimental choroidal neovascularization OPEN ACCESS

Jeremy Lavine; Steven Droho; Carla M Cuda; Harris Perlman

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 26. doi:

MMP9 associated with choroidal neovascularization in AMD is expressed in human immune cells OPEN ACCESS

Elliott H Sohn; Chunhua Jiao; Andrew P Voigt; Todd E Scheetz; Robert F Mullins

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 27. doi:

CCL26 expression is elevated in the retinal pigment epithelium in atrophic AMD OPEN ACCESS

Rashmi Dubey; Sushil Kumar Dubey; kyung sik jung; Kabhilan Mohan; Mark Ellsworth Kleinman

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 28. doi:

Race, Ethnicity, and Sex Differences in Retinal Detachment Repairs: A US Claims-Based Analysis OPEN ACCESS

Amee D Azad; Ahmad Al Moujahed; Daniel Vail; Darius M Moshfeghi; Natalia Callaway

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 29. doi:

Imaging Predictors of Functional Outcomes Following Rhegmatogenous Retinal Detachment Repair OPEN ACCESS

Wei Wei Lee; Rajeev Hemant Muni

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 30. doi:

Acute traction retinal detachment (stage 4) in retinopathy of prematurity: outcomes of endoscopic vitrectomy in 99 consecutive cases. OPEN ACCESS

Sui Chien Wong; James Wawrzynski; Damien Yeo; Robert H Henderson; Chetan K Patel

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 31. doi:

A Retrospective Audit of Large Macular Hole Repair Techniques: ILM Peel vs ILM Flap. OPEN ACCESS

Megan Caitlin Quinn; David Yorston

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 32. doi:

Predicting visual improvement after macular hole surgery: a combined model using deep learning and clinical features OPEN ACCESS

Alexandre Lachance; Mathieu Godbout; Fares Antaki; Mélanie Hébert; Serge Bourgault; Mathieu Caissie; Éric Tourville; Audrey Durand; Ali Dirani

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 33. doi:

Surgical outcomes of scleral buckling for rhegmatogenous retinal detachment using the NGENUITY three-dimensional visualization system with a guarded light pipe OPEN ACCESS

John Miller; Jared Sokol; Cassie Ann Ludwig; Grace Baldwin

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 34. doi:

Three Dimensional Digitally-Enabled Intraoperative OCT Compared with Conventional Microscope-Integrated Intraoperative OCT in Vitreoretinal Surgery: A Post Hoc Analysis of the DISCOVER St... OPEN ACCESS

Katherine Talcott; Austen Knapp; Sunil K Srivastava; Aleksandra V Rachitskaya; Sumit Sharma; Rishi P Singh; Alex Yuan; Jamie Reese; Justis P Ehlers

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 35. doi:

Generation of a compound heterozygous ABCA4 phenotype in a Stargardt rat model for the G1961E mutation OPEN ACCESS

Therese Cronin; Lyse Libeau; Joanna Demilly; Séverine Remy; Mikaël Croyal; Ignacio Anegon; Oumeya Adjali

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 36. doi:

Safety and efficacy of fovea-involving half-dose photodynamic therapy for chronic central serous chorioretinopathy OPEN ACCESS

Helena Margaret Anthonia Feenstra; Roselie M.H. Diederen; Martine J.C.M. Lamme; Sascha Fauser; Susan M. Downes; Reinier O. Schlingemann; Carel C B Hoyng; Elon H.C. van Dijk; Camiel J F Boon

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 37. doi:

ALK-001 (C20-D3-Vitamin A) slows the growth of atrophic lesions in *ABCA4*-related Stargardt Disease: Results of a Phase 2 placebo-controlled clinical trial (TEASE study) OPEN ACCESS

Hendrik P Scholl; Gabrielle DeBartolomeo; Ilyas Washington; Leonide Saad

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 38. doi:

Transcriptome analysis of the human choroid qualifies endothelial androgen responses as a disease driver for Central Serous Chorioretinopathy OPEN ACCESS

Steffen Emil Künzel; Sandrine Helene Künzel; Dominik Pascal Frentzel; Dominika Pohlmann; Lynn Zur Bonsen; Oliver Zeitz; Antonia M. Joussen; Alexandre Dubrac

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 39. doi:

Zebrafish models of Stargardt Disease reveal RPE and cone photoreceptor defects that suggest mechanisms of disease OPEN ACCESS

Abbie M Jensen; John Willoughby

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 40. doi:

Single-molecule Molecular Inversion Probes allow cost-effective targeted sequencing of all genes and loci associated with macular diseases. OPEN ACCESS

Rebekkah J Hitti-Malin; Susanne Roosing; Claire-Marie Dhaenens; Anneke I Den Hollander; GJane Farrar; Daan Panneman; Erica G.M Boonen; Laura de Rooij; Mariana Guimaraes Ramos; Maartje van de Vorst; Bart de Koning; Christian Gilissen; Alexander Hoischen; Frans P Cremers

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 41. doi:

The Sensitivity and Specificity of FLIO (Fluorescence Lifetime Imaging Ophthalmoscopy) when Imaging Patients with MacTel OPEN ACCESS

Lydia Sauer; Alexandra Vitale; Paul S Bernstein

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 42. doi:

Receptive field diversity in the primate foveal retina OPEN ACCESS

Sara S Patterson; Tyler Godat; Qiang Yang; William Merigan; David R Williams

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 43. doi:

In vivo calcium imaging reveals L/M opponent ganglion cells consistent with single cone receptive field centers at the macaque foveal center OPEN ACCESS

Tyler Godat; Nicolas P. Cottaris; Sara S Patterson; Kendall Kohout; Keith Parkins; Qiang Yang; Jennifer M. Strazzeri; Juliette E McGregor; David H Brainard; William Merigan; David R Williams

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 44. doi:

Synaptic inputs to macaque intrinsically-photosensitive ganglion cells OPEN ACCESS

David W Marshak; Sara S Patterson; James Kuchenbecker; Joel Yearick; Emma Yang; Judith Ogilvie; Andrea Bordt; Jay Neitz
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 45. doi:

Functional diversity of intrinsically photosensitive retinal ganglion cells in the mouse retina. OPEN ACCESS
Benjamin Sivyer; Michael Berry
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 46. doi:

Asymmetries in the vertical optokinetic reflex result from disproportionate excitation to complementary ON direction-selective retinal ganglion cell types OPEN ACCESS
Scott C Harris; Felice A Dunn
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 47. doi:

A Retinal Representation of Environmental Illumination within the Master Circadian Clock OPEN ACCESS
Philippe Morquette; Michael Tri Hoang Do
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 48. doi:

The role of the vLGN in non-image-forming visual behaviors and its underlying circuit organization OPEN ACCESS
Corinne Beier; Ze Zhang; Martina Thurman; Samer Hattar
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 49. doi:

Accommodative Behavior during Multifocal Soft Contact Lens Wear Can Predict Myopia Progression in Children OPEN ACCESS
Xiaoying Zhu; Zachary Zlatin; Harrison Feng; David Troilo
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 403. doi:

Dynamic OFF stimulation reduces perceived saturation of red color, similarly in myopes and emmetropes OPEN ACCESS
Frank Schaeffel; Barbara Swiatczak
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 404. doi:

Changes in visual function in eyes with myopic traction maculopathy over 1 year OPEN ACCESS
Qiu Ying Wong; Yee Shan Dan; Chloe S.Q. Chua; Marcus Ang; Quan V Hoang; Chee Wai Wong
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 405. doi:

Axial length changes induced by positive defocus correlate with changes in choroidal blood flow OPEN ACCESS
Barbara Swiatczak; Giacomo Calzetti; Frank Schaeffel
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 406. doi:

Scleral Crosslinking Using Genipin Can Compromise Retinal Structure and Function in Tree Shrew Eyes OPEN ACCESS
Mustapha El Hamdaoui; Alexander Miles Levy; Aaron Stuber; Christopher A Girkin; Timothy Kraft; Brian C Samuels; Rafael Grytz
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 407. doi:

TWO-YEAR EFFECTIVENESS OF A NOVEL MYOPIA MANAGEMENT SPECTACLE LENS WITH FULL-TIME WEARERS OPEN ACCESS
Joe Rappon; Jay Neitz; Maureen Neitz; Carol Chung; Thomas Walter Chalberg
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 408. doi:

The role of Notch 3 in maintaining retinal vascular stability during aging OPEN ACCESS
Michael O'Hare; Joseph Arboleda-Velasquez
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 409. doi:

Elevated Vitreous Retinol Binding Protein 3 Concentrations Are Associated with Decreased Vitreous Inflammatory Cytokines, VEGF, and Progression of Diabetic Retinopathy OPEN ACCESS
Ward Fickweiler; Hyunseok Park; Kyoungmin Park; Tanvi Chokshi; Margalit Mitzner; Devon Robinson; Tahani Boumenna; Yumi Zaitsu; John Gautier; I-Hsien Wu; Jerry Cavallerano; Lloyd Paul Aiello; Jennifer K Sun; George King
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 410. doi:

miRNA 9 regulates endothelial to mesenchymal transition in the retina in diabetes OPEN ACCESS
Subrata Chakrabarti; Eric Wang; biao Feng
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 411. doi:

Single-nuclei RNA sequencing of the diabetic mouse retina reveals novel insights into the pathophysiology of early diabetic retinal disease OPEN ACCESS
Mira Menon Sachdeva; Sung-Ung Kang; Shinwon Ha; Dongsan Kim; Kelcy Audra Klein; Fatih Akkentli; Valina L Dawson; Ted M Dawson
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 412. doi:

The Role of the STING/Type I IFN Signaling Pathway in Diabetic Retinopathy OPEN ACCESS
Haitao Liu; Anastasia Strizhakova; Stacey L Hose; Chao Huang; Pamela Strassburger; Gabriella Widmer; Alan D Proia; Eleonora Lad; Peter Westenskow; Nikolaos Mitrousis; Derrick Feenstra; Debasish Sinha
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 413. doi:

LRG1-driven phenotypic switch in pericytes is an early event in diabetic retinopathy OPEN ACCESS
Giulia De Rossi; Marlene E Da Vitoria Lobo; John Greenwood; Stephen E Moss
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 414. doi:

REDD1 promotes diabetes-induced retinal inflammation by sustaining GSK3β-dependent NF-κB activation OPEN ACCESS
Michael D. Dennis; Siddharth Sunilkumar; Allyson Toro; Christopher McCurry; William Miller
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 415. doi:

Adoptive Transfer of Plasmacytoid Dendritic Cells Promotes Allograft Survival in a Murine Allogeneic Corneal Transplantation OPEN ACCESS
Fangfang Qiu; Brendan Kenyon; Cecilia Chao; Deshea L Harris; Olivia esteireiro; Pedram Hamrah
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 416. doi:

Effect of sCD83 on direct allosensitization after corneal transplantation OPEN ACCESS
Alfrun Patricia Schönberg; Katrin Peckert-Maier; Karina Hadrian; Matthias Hamdorf; Claus Cursiefen; Elisabeth Zinser; Felix Bock

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 417. doi:

An Acquired Immunostimulatory Function by Type-1 CD103^{+} Dendritic Cells Promotes Alloimmunity in High-risk Corneal Transplantation OPEN ACCESS

Tomas Blanco; Hayate Nakagawa; Aytan Musayeva; Hamid Alemi; Thomas H Dohlman; Yihe Chen; Sunil Chauhan; Jia Yin; Reza Dana

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 418. doi:

Galectin-3 modulates monocyte infiltration in the injured cornea by inducing sialyl Lewis^{X} expression OPEN ACCESS

Dina Abusamra; Marina Anastasiou; Noorjahan A Panjwani; Pilar Alcaide; Pablo Argueso

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 419. doi:

Nerve Associated Macrophages in the Cornea are Maintained by IL-34 and are Involved in Mechanosensation OPEN ACCESS

Sejiro Littleton; Chen Yu; Daniel R Saban

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 420. doi:

Trigeminal Ganglia Sensory Neurons Alter the Expression of Vascular Adhesion Molecules on Endothelial Cells in a Neuropeptide-dependent Fashion OPEN ACCESS

Pedram Hamrah; Victor G. Sendra; Deshea L Harris; Sudan Puri; Takefumi Yamaguchi

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 421. doi:

Ocular surface mast cells delay regression of pathological corneal blood vessels OPEN ACCESS

WonKyung Cho; Elsayed Elbassiony; Yilin Guan; Aastha Singh; Sharad Mittal; Sunil Chauhan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 422. doi:

Biomarkers from clinic deployable, multiplex, diagnostic test stratifies ocular surface disease and sub-clinical inflammation in patients. OPEN ACCESS

Sailie Shirodkar; Rohit Shetty; Archana Padmanabhan Nair; Pooja Khamar; Swaminathan Sethu; Arkasubhra Ghosh

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 423. doi:

Age-Dependent Perception of Ocular Pain and its Differential Impact on Quality of Life Dimensions OPEN ACCESS

Leyla Mirzaee; Matteo Posarelli; Pedram Hamrah

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 424. doi:

Risk Factors for Meibomian Gland Morphology Changes in Children Aged 4 to <18 years OPEN ACCESS

Manisha Parikh; Yi Pang; Lindsay Sicks

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 425. doi:

Ocular Surface Sphingomyelinases, Meibum and Tear Sphingolipids, and Clinical Parameters of Meibomian Gland Dysfunction OPEN ACCESS

Victor Sanchez; Anat Galor; Katherine Jensen; Koushik Mondal; Nawajes A Mandal

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 426. doi:

The effect of finasteride on dry eye disease OPEN ACCESS

Brian Jonathan Nguyen; Elana Meer; Angela S Gupta; Gao Jinpeng; Gui-Shuang Ying; Vatinee Y Bunya; Ilaria Macchi; Mina Massaro-Giordano

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 427. doi:

The Relationship Between adherence to a Mediterranean Diet and Dry Eye Disease OPEN ACCESS

Morten Schjerven Magno; Emily Moschowits; Marie Wangen Beining; Christopher J Hammond; Tor Utheim; Jelle Vehof

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 428. doi:

Phase 2 Study of the Efficacy and Safety of Recombinant Human Nerve Growth Factor (rhNGF) in Patients with Moderate-to-Severe Dry Eye OPEN ACCESS

Melissa Toyos; David Wirta; John Goosey; Sherif El-Harazi; Flavio Mantelli

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 429. doi:

Targeting Cholesterol Homeostasis Improves Recovery In Experimental Optic Neuritis OPEN ACCESS

Cheyanne Godwin; Lin Cheng; Jeffrey Anders; Benjamin Elwood; Randy H Kardon; Oliver W Gramlich

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 430. doi:

Novel Autoantibody Models of NMOSD and MOGAD Optic Neuritis Demonstrate Distinct Clinicopathologic Features OPEN ACCESS

Oliver W Gramlich; Cheyanne Godwin; Benjamin Elwood; Jeffrey Anders; Randy H Kardon; Jeffrey L Bennett

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 431. doi:

The Incidence and Characteristics of Charles Bonnet Syndrome in a Large Cohort of Leber's Hereditary Optic Neuropathy Patients OPEN ACCESS

Hong-An Nguyen; Mohammad Kreimei; Eisi Mollanji; Lissa Poincenot; Rustum Karanjia

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 432. doi:

Long-term efficacy and safety of idebenone in patients with LHON in the subacute/dynamic phase: Results from the LEROS study OPEN ACCESS

Thomas Klopstock; Livia Tomasso; Xavier Llòria

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 433. doi:

The phase III REFLECT trial: efficacy of bilateral gene therapy for Leber hereditary optic neuropathy (LHON) is maintained 2 years post administration OPEN ACCESS

Patrick Yu-Wai-Man; Nancy Newman; Prem S Subramanian; Mark Moster; An-Guor Wang; Sean Donahue; Bart Leroy; Valeno Carelli; Valerie Biousse; Catherine Vignal-Clermont; Alfredo A Sadun; Gema Fernandez; Elizabeth Fortin; Rudrani Banik; Magali Taiel; Jose Alain Sahel

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 434. doi:

3D Structural Analysis of the Optic Nerve Head to Robustly Discriminate Between Optic Disc Drusen and Papilledema OPEN ACCESS

Michael J A Girard; Satish Kumar Panda; Tin Aung Tun; Raymond Najjar; Tin Aung; Alexandre Thiery; Steffen Hamann; Clare Louise Fraser; Dan Milea

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 435. doi:

Quantifying Spatial Patterns of OCT Total Retinal Thickness (TRT) in Papilledema Over Time using a Deep Learning Variational AutoEncoder OPEN ACCESS

Wang Jui-Kai; Mona K Garvin; Mark J Kupersmith; Randy H Kardon

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 436. doi:

Intraoperative Intravitreal Bevacizumab Prolongs Survival of Trabeculectomy Blebs at 12 months: The Avastin in Trabeculectomy Study OPEN ACCESS

Jamie Craig; Sean Mullany; John Landers

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 437. doi:

Comparison of acetylsalicylic acid and mitomycin C in Tenon's capsule fibroblasts: distinct effects on cytokine-induced myofibroblast activity and implications for glaucoma surgery. OPEN ACCESS

Anastasiya Vinokurtseva; James Jacob Armstrong; Erica Li; Hong Liu; Cindy Hutnik

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 438. doi:

The effect of amniotic membrane transplantation on trabeculectomy in patients with pseudoexfoliation glaucoma OPEN ACCESS

Jiwoong Lee; Tae Yeon Kim; Hwa Yeong Kim; Sang Woo Moon

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 439. doi:

High concentration of adrenaline blocks key cell cycle genes and exhibits potent antifibrotic and vasoconstrictor effects in glaucoma surgery OPEN ACCESS

Cynthia Yu-Wai-Man; Kai Xin Thong; Petru Andriesei; Jia Ng; Pirro G Hysi

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 440. doi:

A New Model for Glaucoma Filtering Surgery in Mice OPEN ACCESS

Jan Tode; Maximilian Binter; Esther Molinski; Stephanie Hempel; Miriam Heider; Carsten Framme; Heiko Fuchs; Philipp Luedtke

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 441. doi:

Preclinical evaluation of RTC-1119, a surface eroding intracameral implant composed entirely of a latanoprost acid prodrug, for long-term intraocular pressure control OPEN ACCESS

Ike Ahmed; Kyle Battiston; Shadi Taghavi; Hans Fischer; Emily Baldwin; Matthew Statham; Jonathan Day; Adam Daley; Ben Muirhead; Emily Anne Hicks; Jennifer Jing Yuan Tian; Heather Sheardown; Ian Parrag; Wendy Naimark

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 442. doi:

Magnetically actuated glaucoma drainage device for regulating intraocular pressure after implantation OPEN ACCESS

Inês C.F. Pereira; Hans M. Wyss; Henny J Beckers; Jaap M.J. den Toonder

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 443. doi:

Effect of Supine Position on Episcleral Venous Pressure in Normal Human Eyes using a Portable Electronic Episcleral Venomanometer OPEN ACCESS

Arash Kazemi; Arthur J Sit

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 444. doi:

Trabecular meshwork exosomes and the extracellular matrix OPEN ACCESS

Fiona S McDonnell; Bre'Ida J Riddick; Haven Roberts; Nikolai P Skiba; Daniel W Stamer

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 445. doi:

Characterization of *Loxl1*-knockout-induced elastosis in mice with different genetic backgrounds OPEN ACCESS

Maria Fernanda Suarez; Heather Schmitt; Kristyn Hake; Megan Kuhn; TeddiJo Watkins; Michael H Elliott; Michael A Hauser; Daniel W Stamer

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 446. doi:

Pharmacokinetics of a Hydrogel-based Nepafenac Intracanalicular Insert in Canines OPEN ACCESS

Oktay Uzun; Ankita Desai; Sarijani Ray; Chintan Patel; Charles D Blizzard; Peter K Jarrett; Michael Goldstein

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 447. doi:

Physiological variations in intraocular pressure: mathematical modeling outputs versus clinical data from patients with glaucoma and healthy controls OPEN ACCESS

Maggie Lin; Alon Harris; Giovanna Guidoboni; Damien Coll; Roberto Nunez; Alice Verticchio; Brent A Siesky; Marcela Szopos

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 448. doi:

Mechanistic actions of baicalein in human trabecular meshwork cells OPEN ACCESS

Hoi-lam Li; Sze Wan Shan; Daniel W Stamer; Henry Ho-lung Chan; Chi-ho To; Thomas Chuen Lam; Chi-wai Do

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 449. doi:

Findings on visual photosensitivity in two phase 1/2 clinical trials of subretinal gene therapy with AGTC-401 and AGTC-402 for *CNGB3* and *CNGA3* achromatopsia OPEN ACCESS

Rachel M Huckfeldt; Jason Comander; Mark E Pennesi; Paul Yang; Andreas Lauer; Robert Sisk; Edward Averbukh; Eyal Banin; Ninel Z Gregori; Janet L Davis; Byron L Lam; Christine Nichols Kay; Jessica Ijams Wolfing Morgan; Joseph Carroll; Bright Senyo Ashimatey; Matthew Feinsod

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 450. doi:

PERCEIVE study report: Real-world safety and effectiveness of voretigene neparvovec OPEN ACCESS

M Dominik Fischer; Rainer Maier; Andrea Suhner; Daniel Stiehl; Christina Fasser; Bart P Leroy

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 451. doi:

Neural plasticity of the human visual system reflects treatment effect in gene therapy for Achromatopsia OPEN ACCESS

Immanuel Philipp Seitz; Michael Erb; Thomas Ethofer; Andriani Rina; Georgios Kelins; M Dominik Fischer; Karl-Ulrich Bartz Schmidt

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 452. doi:

Long-term safety and efficacy of sepofarsen in a Ph1b/2 INSIGHT extension trial in *CEP290*-associated Leber congenital amaurosis (LCA10) OPEN ACCESS

Stephen R Russell; Arlene V Drack; Artur V Cideciyan; Samuel G. Jacobson; Bart P Leroy; Caroline Van Cauwenbergh; Michael Schwartz; Aniz Girach

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 453. doi:

Long-term follow up of gene therapy for *NPHP5*-LCA in a canine model shows restoration of photoreceptor function and vision for > 5 years OPEN ACCESS

William A Beltran; Artur V Cideciyan; Ana Ripolles-Garcia; Valerie L Dufour; Yu Sato; Alexa Gray; Malgorzata Swider; Sanford L Boye; William W Hauswirth; Samuel G. Jacobson; Gustavo D Aguirre

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 454. doi:

Worldwide multicenter ocular imaging study (EyeConic) to identify patients eligible for cone-based optogenetics therapy OPEN ACCESS

Lucas Janeschitz-Kriegl; Giacomo Calzetti; Michel Michaelides; Jose Alain Sahel; Zoltán Nagy; Katarina Stingl; Jin Zi-Bing; Jacque L Duncan; Eyal Banin; Byron L Lam; Michalis Georgiou; Boris Rosin; Viktória Szabo; Potyra Rosa; Bence György; Hendrik P Scholl

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 455. doi:

Classification and growth rate of retinal atrophy after voretigene neparvovec-rzyl for RPE65-mediated retinal dystrophy OPEN ACCESS

Nikhil Bommakanti; Benjamin Young; Robert Sisk; Audina M. Berrocal; Jacque L Duncan; Benjamin Bakall; Marc Mathias; Aaron Nagiel; Cagri G Besirli

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 456. doi:

CFAP418 functions in membrane lipid homeostasis through binding phosphatidic acid and cardiolipin during photoreceptor ciliogenesis OPEN ACCESS

Jun Yang; Anna Clark; Dongmei Yu; Daniel Zhu; Grace Neswanger

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 457. doi:

Pharmacological Lowering Of Ceramide Buildup In *AdipoR1*$^{-/-}$ Mice Increases Photoreceptor Survival And Improves Vision OPEN ACCESS

Dominik Lewandowski; Andrzej Foik; Roman Smidak; Elliot H Choi; Jianye Zhang; Thanh Hoang; Aleksander Tworak; Susie Suh; Zhiqian Dong; Antonio F.M. Pinto; Emily Tom; Seth Blackshaw; David Lyon; Dorota Skowronska-Krawczyk; Marcin Tabaka; Krzysztof Palczewski

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 458. doi:

Anti-ceramide immunotherapy for diabetic retinopathy OPEN ACCESS

Tim Florian Dorweiler; Peter Nolan; Richard N. Kolesnick; Julia V Busik

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 459. doi:

The interplay of luminance and genetics in the retinopathy induced by the dominant RPE65 mutation OPEN ACCESS

Wenjing Wu; Yusuke Takahashi; Xiang Ma; Gennadiy P Moiseyev; Jian-Xing Ma

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 460. doi:

Characterization of retinal architecture in a systemic HL/EL double knockout mouse model OPEN ACCESS

Rohini M Nair; Ying Song; Brent A Bell; Kevin Zhang; Daniel J Rader; Joshua L Dunaief; Venkata R M Chavali

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 461. doi:

Cell Autonomous Lipid Handling Defects in Stargardt iPS Cell-Derived Retinal Pigment Epithelium Cells OPEN ACCESS

Mitra Farnoodian-Tedrick; Devika Bose; Indumathi Mariappan; Maria M Campos; Rafael Villasmil; Kapil Bharti

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 462. doi:

Identification of disease associated endpoints in a mouse model exhibiting AMD-like pathology with age. OPEN ACCESS

Mayur Choudhary; Goldis Malek

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 463. doi:

Thrombospondin-1 p.R1034 missense alleles cause congenital glaucoma with variable expressivity by inducing extracellular protein aggregation OPEN ACCESS

Haojie Fu; Owen Siggs; Lachlan Knight; Sandra E Staffieri; Jonathan B Ruddle; Amy E Birsner; Edward Ryan Collantes; Jamie Craig; Janey L Wiggs; Robert J D'Amato

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 805. doi:

Loss of cathepsin K function in trabecular meshwork induces actin polymerization and apoptosis OPEN ACCESS

Padmanabhan P Pattabiraman; Avinash Soundararajan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 806. doi:

Age-related functional vision loss in Sphingosine-1-phosphate receptor 3 knockout mouse OPEN ACCESS

Sanjoy K Bhattacharya; Varun Krishnan; Sean D Meehan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 807. doi:

AI-based Clinical Assessment of Optic Nerve Head Robustness from 3D Optical Coherence Tomography Imaging OPEN ACCESS

Fabian Albert Braeu; Thanadet Chuangsuwanich; Tin A. Tun; Alexandre Thiery; George Barbastathis; Tin Aung; Michael J A Girard

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 808. doi:

Upregulated YAP activity and histone acetylation modulate glaucomatous trabecular meshwork cell dysfunction OPEN ACCESS

Haiyan Li; Daniel W Stamer; Preethi S Ganapathy; Samuel Herberg

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 809. doi:

Glaucomatous stressors drive Schlemm's canal cell pathobiology via elevated YAP activity OPEN ACCESS

Samuel Herberg; Haiyan Li; Megan Kuhn; William Daniel Stamer; Preethi S Ganapathy

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 810. doi:

A novel method to determine axon-level IOP-induced insult OPEN ACCESS

Manik Bansal; Fuqiang Zhong; Yi Hua; Bingrui Wang; Juan Reynaud; Brad Fortune; Ian Sigal

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 811. doi:

Presence and development of diabetic retinopathy in the Danish Registry of Diabetic Retinopathy. OPEN ACCESS

Jakob Grauslund; Frederik Pedersen; Nis Andersen; Jens Andresen; Toke Bek; Morten la Cour; Sebastian Dinesen; Javad Hajari; Kurt Højlund; Caroline Laugesen; Ryo Kawasaki; Søren Møller; Katja Schielke; Anne Thykjær; Lonny Stokholm

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 812. doi:

Predicting progression to proliferative diabetic retinopathy OPEN ACCESS

Cathy Sun; Yian Guo; Sean Yonamine

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 813. doi:

Characterising individuals with retinopathy from retinal image grading data in UK Biobank OPEN ACCESS

Alasdair Warwick; Barbra Hamill; Katie Curran; Anthony Khawaja; Andrew J Lotery; Paul Foster; Konstantinos Balaskas; Michael Joseph Quinn; Savita Madhusudhan; Alan Sproule; Sophie Leach; Daniela Florea; Muldrew Alyson; Laura Cushley; Graham

Young; Tunde Peto

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 814. doi:

Thickness of ten retinal layers from macular optical coherence tomography (OCT) volume scans in participants with and without diabetes and their relationship with glucose metabolism OPEN ACCESS

Yangjiani Li; Franziska G. Rauscher; Mengyu Wang; Mohammad Eslami; Jennifer K Sun; Konstantina Sampani; Kerstin Wirkner; Markus Loeffler; Michael Stumvoll; Joachim Thiery; Anke Tönjes; Christoph Engel; Toralf Kirsten; Thomas Ebert; Tobias Elze

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 815. doi:

Development of a New Patient-Reported Outcome Instrument to Assess Diabetic Retinopathy Treatment Experiences OPEN ACCESS

Diana V Do; Steven Sherman; Adele Levine; Patrick Marquis; Christopher Hartford; Rohini Rao; Diana Rofail

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 816. doi:

Diabetic Retinopathy and Chronic Kidney Disease: Associations and Comorbidities in a Large Diabetic Population: The Tongren Health Care Study OPEN ACCESS

Ya Xing Wang; Can Can Xue; Li Qin Gao; Chun Zhang; Dong Ning Chen; Jost Jonas

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 817. doi:

Transition probabilities of diabetic retinopathy and death in an Asian population with diabetes OPEN ACCESS

Charumathi Sabanayagam; Feng He; Haslina Hamzah; Tien Yin Wong; Ching-Yu Cheng; Gavin Tan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 818. doi:

Selective autophagy regulates limbal epithelial differentiation via controlling Notch1 protein degradation OPEN ACCESS

Han Peng; Nihal Kaplan; Min Liu; Wending Yang; Robert M Lavker

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 819. doi:

Comparative stromal cell therapy for corneal scarring with corneal stromal stem cells versus keratocytes OPEN ACCESS

Vishal Jhanji; Mithun Santra; Gary Hin-Fai Yam

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 820. doi:

Elimination of senescent cells protects against angiogenesis and corneal opacity at the ocular surface of old mice OPEN ACCESS

Koji Kitazawa; Kohsaku Numa; Pierre-Yves Desprez; Chie Sotozono; Judith Campisi

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 821. doi:

Stimulation of Trigeminal Ganglion Neurons by Capsaicin Affects Corneal Leukocyte Migration Via Alterations in Neuropeptide Expression OPEN ACCESS

Sudan Pun; Brendan Kenyon; Victor G. Sendra; Deshea L Harris; Pedram Hamrah

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 822. doi:

Novel PAX6 variants and their roles in corneal epithelial regulation and homeostasis OPEN ACCESS

Vinay Kumar Pulimamidi; Savitri Maddileti; Indumathi Mariappan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 823. doi:

A single cell transcriptome analysis unravels the heterogeneity of primary cultured human corneal endothelial cells OPEN ACCESS

Pere Català; Nathalie Groen; Rudy M.M.A. Nuijts; Vanessa L.S. LaPointe; Mor M. Dickman

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 824. doi:

Wnt signaling pathway in the human limbus: a comprehensive mapping by single mRNA detection OPEN ACCESS

Clemence Bonnet; Maxime Ruiz; Sheyla Gonzalez; Chi-Hong Tseng; Jean-Louis Bourges; Francine F Behar-Cohen; Sophie Xiaohui Deng

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 825. doi:

Assessment of Alternative Tests for the ICD-10 Glaucoma Severity Score OPEN ACCESS

Ari Leshno; Emmanouil (Manos) Tsamis; Noga Harizman; Qing Wang; Sol La Bruna; Anvit Rai; Carlos G DeMoraes; George A Cioffi; Jeffrey M Liebmann; Donald C Hood

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 826. doi:

Association Between Macular OCT/OCTA Parameters and Visual Acuity in Glaucoma OPEN ACCESS

Jo-Hsuan Wu; Sasan Moghimi; Takashi Nishida; Vahid Mohammadzadeh; Alireza Kamalipour; Linda M Zangwill; Robert N Weinreb

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 827. doi:

Structural and Functional Assessment of Glaucoma Progression in Patients with Boston Keratoprosthesis Type 1 OPEN ACCESS

Alexandra Castillejos; Chhavi Saini; James Chodosh; Lucy Q. Shen

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 828. doi:

Predicting Deep Perimetric Defects from Retinal Nerve Fiber Layer (RNFL) Reflectance at the Optic Disc OPEN ACCESS

William H Swanson; Muhammed Saad M Alluwimi; Rizwan Malik; Brett King

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 829. doi:

Longitudinal changes in structural and functional measurements along the glaucoma severity spectrum OPEN ACCESS

Maria de los Angeles Ramos Cadena; Gadi Wollstein; TingFang Lee; Jiyuan Hu; Fabio Lavinsky; Ian Conner; Joel S Schuman

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 830. doi:

An automated, structure-function method for detecting progression of glaucoma OPEN ACCESS

Emmanouil (Manos) Tsamis; Sol La Bruna; Ari Leshno; Anvit Rai; George A Cioffi; Jeffrey M Liebmann; Carlos G DeMoraes; Donald C Hood

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 831. doi:

Combining OCT and OCT-Angiography Longitudinal Measurements for the Prediction of Visual Field Progression in Glaucoma with Artificial Intelligence OPEN ACCESS

Alireza Kamalipour; Sasan Moghimi; Pooya Khosravi; Vahid Mohammadzadeh; Takashi Nishida; Eleonora Micheletti; Jo-Hsuan Wu; Golnoush Mahmoudinezhad; Mark Christopher; Linda Zangwill; Tara Javidi; Robert N Weinreb

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 832. doi:

Canonical and non-canonical EphA2 signaling in the lens OPEN ACCESS
Catherine Cheng
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 833. doi:

Non-muscle myosin IIA regulates lens epithelial cell alignment during fiber cell differentiation OPEN ACCESS
Sadia Tamanna Islam; Catherine Cheng; Justin Parreno; Velia M Fowler
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 834. doi:

Vitreous exposure increases global chromatin accessibility in cis-regulatory elements in lens epithelial explants as they undergo fiber cell differentiation OPEN ACCESS
Anil Upreti; Jared Austin Tangeman; Brad D. Wagner; Tycho Jupiter Jaquish; Raye Palko; Cameron Gantz; Michael L Robinson
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 835. doi:

Sumoylated Pax6 Regulates Lens Stalk Regression During Lens Development OPEN ACCESS
David W Li; Jialing Fu; Fangyuan Liu; Shuyu Zheng; Yan Wang; Jingmiao Wang; yuan xiao; Jiawen Xiang; Yuwen Gan; Xingmiao Liang
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 836. doi:

ROLE OF CHROMATIN AND DNA METHYLATION IN MOUSE LENS DIFFERENTIATION OPEN ACCESS
Ales Cvekl; William Chang; Yilin Zhao; Qing Xie; Masako Suzuki; Deyou Zheng
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 837. doi:

Gene Silencing by DNA Methylation Predicts Chromatin Regions and Transcription Factors Required for Lens Differentiation OPEN ACCESS
Joshua Disatham; Lisa A Brennan; Xiaodong Jiao; Zhiwei Ma; James F Hejtmancik; Marc Kantorow
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 838. doi:

High-throughput single-cell RNA sequencing of the developing lens OPEN ACCESS
Deepti Anand; Atul Kakrana; Rosanne Skinner; Clark Bloomer; Irfan Saadi; Salil Anil Lachke
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 839. doi:

Hazard perception in bioptic drivers OPEN ACCESS
Rebecca A Deffler; San-San Cooley; Thomas W Raasch; Bradley E Dougherty
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 840. doi:

Hazard Warning Modalities and Timing Thresholds for Drivers with Impaired Contrast Sensitivity OPEN ACCESS
Jing Xu; Abbie Hutton; Alex R Bowers
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 841. doi:

Fall-related longitudinal changes in gait among glaucoma patients OPEN ACCESS
José Gustavo Vargas; Aleksandra Mihailovic; Pradeep Y Ramulu
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 842. doi:

Relation Between Real-World Home Physical Activities and Cadence with Home Environment in Glaucoma Patients. OPEN ACCESS
Seema Banerjee; Aleksandra Mihailovic; Pradeep Y Ramulu
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 843. doi:

Effect of low light levels and target contrast on stepping accuracy in older adults with age-related macular degeneration OPEN ACCESS
Mahesh Kumar Dev; Alex A Black; Damian Cuda; Joanne M Wood
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 844. doi:

Pilot testing of a pedestrian collision detection test for field expansion devices OPEN ACCESS
Alex R Bowers; Alex D Hwang; Jae-Hyun Jung; Sailaja Manda; Sandhya Shekar; Eli Peli
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 845. doi:

Head Scanning of Patients with Homonymous Hemianopia at Street Crossings OPEN ACCESS
Shrinivas Pundlik; Ayush Kumar; Eli Peli; Kevin Houston; Gang Luo
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 846. doi:

Phase-based optoretinography with clinical-grade OCT using tissue velocity OPEN ACCESS
Kari V Vienola; Robert J Zawadzki; Ravi S Jonnal
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 847. doi:

Deep-learning Embedding of Fluorescence Lifetime Imaging Ophthalmoscopy (FLIO) for Macular Telangiectasia Type 2 and Age-Related Macular Degeneration OPEN ACCESS
Julia Owen; Lydia Sauer; Paul S Bernstein; Cecilia S Lee; Aaron Y Lee
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 849. doi:

Federated Deep Learning for Classifying Glaucomatous Optic Neuropathy from Optical Coherence Tomography Volumetric Scans: A Privacy-preserving Multi-national Study OPEN ACCESS
Anran RAN; Xi Wang; Poemen P Chan; Noel C Chan; Oi Man Mandy Wong; Hon-Wah Yung; Robert T. Chang; Suria S. Mannil; Yih Chung Tham; Ching-Yu Cheng; Pheng-Ann Heng; Clement C. Tham; Carol Yim-lui Cheung
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 850. doi:

Dynamic OCT with retinal pigment epithelium-choroid tissue ex-vivo OPEN ACCESS
Yoko Miura; Tabea Kohlfaerber; Noriko Kubota; Martin Ahrens; Mario Pieper; Peter König; Gereon Hüttmann; Hinnerk Schulz-Hildebrandt
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 851. doi:

Segmentation-Free OCT-Volume-Based Deep Learning Model Improves Point-Wise Visual Field Threshold Estimation OPEN ACCESS
Zhiqi Chen; Eitan Shemuelian; Lei Zheng; Gadi Wollstein; Yao Wang; Hiroshi Ishikawa; Joel S Schuman
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 852. doi:

Volumetric evaluation of choroidal depigmentation in the eyes with Vogt–Koyanagi–Harada disease using polarization-sensitive OCT OPEN ACCESS
Masahiro Miura; Shuichi Makita; Yoshiaki Yasuno; Shinnosuke Azuma; Toshihiro Mino; Tatsuo Yamaguchi; Takuya Iwasaki; Rei Nemoto; Hiroyuki Shimizu; Hiroshi Goto
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 853. doi:

Transcriptome analysis of AMD-like pathology in aged BALB/c mice following systemic neonatal murine cytomegalovirus infection OPEN ACCESS

Ming Zhang; Jinxian Xu; Xinyan Zhang; Brendan Marshall

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 854. doi:

Lipid peroxidation and iron accumulation induced ferroptosis in bacterial endophthalmitis OPEN ACCESS

ZEESHAN AHMAD; Sukhvinder Singh; Xavier Walker; Robert Wright; Ashok Kumar

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 855. doi:

Immune profile in patients with COVID-19 associated rhino-orbital-cerebral mucormycosis OPEN ACCESS

Bhavya Gorimanipalli; Archana Padmanabhan Nair; Rohit Shetty; Sanjay Mahajan; Sushma Ananthakrishna; Anjali Kiran; Moupia Goswami; Varshitha Hemanth Vasanthapuram; Raksha Rao; Gairik Kundu; Ajay Krishna Murthy; Gagan Dudeja; Roshmi Gupta; Swaminathan Sethu; Arkasubhra Ghosh

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 856. doi:

Single cell transcriptional profiling of murine conjunctival immune cells reveals distinct populations expressing homeostatic and regulatory genes. OPEN ACCESS

Jahan Alam; Ghasem Yazdanpanah; Nicholas Borcherding; Rinki Ratnapriya; Cintia S De Paiva; De-Quan Li; Stephen C Pflugfelder

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 857. doi:

Characterization and proteome profiling of extracellular vesicles in a murine model of *Pseudomonas aeruginosa* endophthalmitis OPEN ACCESS

Dhanwini Rudraprasad; Aravind Kumar Rengan; Milind Neelkanth Naik; Joveeta Joseph Ruben

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 858. doi:

Host factors related to SARS-CoV2 infection in the human eye and prophylaxis thereof OPEN ACCESS

Sharon DSouza; Vishnu Suresh Babu; Trailokyanath Panigrahi; Rohit Shetty; Pooja Khamar; Poornachandra B; Swaminathan Sethu; Arkasubhra Ghosh

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 859. doi:

Role of macrophage sub-populations in ocular HSV-1 infection. OPEN ACCESS

Ujaldeep Jagg; Harry Matundan; Homayon Ghiasi

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 860. doi:

Nuclear localized HDAC4 increases retinal ganglion cell survival after optic nerve crush injury OPEN ACCESS

Ying Zhu; Jinliang Li; Minjuan Bian; Xin Xia; Michael Nahmou; Catalina Sun; Jeffrey L Goldberg; Michael Kapiloff

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 861. doi:

Spp1 drives retinal ganglion cell resiliency in glaucomatous neuropathy OPEN ACCESS

Mengya Zhao; Kenichi Toma; Benyam Kinde; Yang Hu; Ying Han; Xin Duan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 862. doi:

Retinal ganglion cell specific deletion of arginase-2 preserves visual function after optic nerve crush OPEN ACCESS

Syed Adeel Zaidi; zhimin Xu; Tahira Lemtalsi; Abdelrahman Fouda; R. William Caldwell; Ruth B Caldwell

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 863. doi:

REV-ERBα regulates retinal function and protects against retinal degeneration in experimental retinitis pigmentosa OPEN ACCESS

Felix Yemanyi; Chi-Hsiu Liu; Shuo Huang; Kiran Bora; Meenakshi Maurya; Alexandra K. Blomfield; Zhongjie Fu; James Akula; Jing Chen

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 864. doi:

Intranasally Administered Insulin Reaches the Retina and Choriocapillaris in Rats OPEN ACCESS

Sally Ong; Jenna Rae Gustafson; Joanne Konstantopoulos; Suzanne Craft; Rebecca M Sappington

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 865. doi:

Retinal ganglion cell resilience to injury indicated by cytoplasmic [Ca^{2+}] levels OPEN ACCESS

Sean McCracken; Philip Williams

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 866. doi:

Dissecting transcriptional networks that regulate retinal ganglion cell survival and axon regeneration after optic nerve injury OPEN ACCESS

Kimberly A Wong; Tanisha Martheswaran; John Msaddi; Derek Stuart Welsbie; Larry Benowitz

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 867. doi:

Metabolic ecosystems exist between retina and RPE *in vivo* OPEN ACCESS

Daniel Hass; Elizabeth Giering; Celia Bisbach; James B Hurley

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 868. doi:

Peroxisomal β-oxidation deficiency in RPE leads to progressive RPE dedifferentiation and retinal degeneration OPEN ACCESS

Sai Kocherlakota; Yannick Das; Danielle Swinkels; Debasish Sinha; Frédéric Vaz; Marc Fransen; Myriam Baes

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 869. doi:

The serine biosynthetic enzyme, PHGDH, is essential for retinal health OPEN ACCESS

Marin Gantner; Regis Fallon; Yoichiro Ideguchi; Caleb Bates; Michal Handzlik; Martina Wallace; Christian Metallo; Martin Friedlander

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 870. doi:

Three-dimensional reconstruction of human retinal pigment epithelium (RPE) permits a novel view of the RPE – photoreceptor outer segment (OS) interface OPEN ACCESS

Andreas Pollreisz; Aleksandra Sedova; Maximilian Lindell; Zachary Arsenault; Orin Packer; Deepayan Kar; Yeon Jin Kim; Kenneth R Sloan; Ursula Schmidt-Erfurth; Mike Marsh; Christine A Curcio; Dennis M Dacey

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 871. doi:

Transmembrane protein 135 regulates lipid metabolism in mouse eyecup OPEN ACCESS

Akihiro Ikeda; Michael Landowski; Vijesh Bhute; Tetsuya Takimoto; Samuel Grindel; Pawan K Shahi; Bikash R Pattnaik; Sakae Ikeda

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 872. doi:

Dimethyl fumarate blocks TNFα-driven inflammation and metabolic rewiring in retinal pigment epithelial cells OPEN ACCESS

Daisy Y Shu; Tessa C. Fitch; Scott I. Frank; Erik Russell Butcher; Margarete Karg; Siwei Cai; Rishi Shah; Deviprasad Gollapalli; Magali Saint-Geniez

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 873. doi:

Dysregulation of Tricarboxylic Acid (TCA) Cycle Activity and Lipid Metabolism in Preclinical Models of Retinitis Pigmentosa OPEN ACCESS

Katherine J. Wert; Ashley Rowe; Ruth Gordillo

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 874. doi:

Individualized mesopic and dark-adapted fundus-controlled perimetry: Longitudinal changes in retinal sensitivity at the border of geographic atrophy. OPEN ACCESS

Monika Fleckenstein; Leon Alexander von der Emde; Frank G Holz; Steffen Schmitz-Valckenberg; Maximilian Pfau

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 875. doi:

Investigation of intermediate AMD with MAIA microperimetry metrics by the PINNACLE Consortium OPEN ACCESS

Philipp Anders; Ghislaine L Traber; Ahmed M Hagag; Sophie Riedl; Lars Fritsche; Daniel Rueckert; Ursula Schmidt-Erfurth; Sobha Sivaprasad; Andrew J Lotery; Hendrik P Scholl

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 876. doi:

Optical Coherence Tomography (OCT) Features Associated with Three-Year Changes in Microperimetry Sensitivity in Age-related Macular Degeneration (AMD) OPEN ACCESS

Gregory Tsougranis; Kevin Milton Mendez; Ines Lains; Archana Nigalye; Raviv Katz; Thomas Koch; Jessica Lasky-Su; Ivana K Kim; Demetrios G. Vavvas; John B Miller; Joan W Miller; Deeba Husain

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 877. doi:

A Conceptual Framework for Visual Function Impairment from Normal Aging to Early and Intermediate AMD: ALSTAR2 Cross-sectional Results OPEN ACCESS

Cynthia Owsley; Thomas A. Swain; Gerald McGwin; Mark Clark; Jason Crosson; Christine A Curcio

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 878. doi:

Mesopic and Scotopic Light Sensitivity Loss Associated with Intraretinal Hyperreflective Foci in Age-related Macular Degeneration OPEN ACCESS

Xiaolin Wang; Yuhua Zhang; Srinivas R Sadda; David Sarraf; Michael S Ip; Giulia Corradetti; Ruixue Liu; Shin Kadomoto; Sujin Hoshi

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 879. doi:

Comparison of visual function in structurally defined sub-phenotypes of intermediate AMD: A MACUSTAR study report OPEN ACCESS

Hannah M P Dunbar; Marlene Sassmannshausen; Charlotte Behning; Sarah Thiele; Alison Binns; Bethany Elora Higgins; Jan Henrik Terheyden; Adnan Tufail; Sergio Leal; Nadia Zakana; Frank G Holz; Matthias C Schmid; Robert P Finger; David P. Crabb; Steffen Schmitz-Valckenberg; Ulrich F O Luhmann

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 880. doi:

Cross-Sectional Study Comparing Cone Function in Participants with Intermediate Age-Related Macular Degeneration (iAMD) and in Participants with iAMD and Non-Foveal Nascent Geographic Atr... OPEN ACCESS

Karl G Csaky

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 881. doi:

Fixation Stability for Emmetropic and Myopic Patients as a Function of the Target's Frequency Content OPEN ACCESS

Pablo De Gracia; Azra Wazir; Zachary Goodman; Emily Ong

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 882. doi:

Effect of Stimuli Depth on Static and Dynamic Accommodation Responses in Young Children OPEN ACCESS

Kristen L Kerber; Ashutosh Jnawali; Fuensanta A Vera-Diaz

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 883. doi:

Two-years evolution of two-dimensional peripheral refraction in children OPEN ACCESS

Zhenghua Lin; Weizhong Lan; Longbo Wen; Zhiwei Luo; Zhikuan Yang; Pablo Artal

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 884. doi:

Effect of Peripheral Optical Quality in Accommodation Responses of Young Children OPEN ACCESS

Fuensanta A Vera-Diaz; Ashutosh Jnawali; Kristen L Kerber; Peter J Bex

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 885. doi:

Localized peripheral choroidal response to signed defocus with and without native aberration OPEN ACCESS

Dibyendu Pusti; Geunyoung Yoon

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 886. doi:

The diurnal relationship of axial length and choroidal thickness in winter and summer. OPEN ACCESS

Nickolai Nilsen; Hilde Rogeberg Pedersen; Lene A. Hagen; J.Gilson Stuart; Rigmor C Baraas

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 887. doi:

Internal optics failed to compensate for increased corneal astigmatism in myopic children over a 2-year period OPEN ACCESS

Tsz Wing Leung; Rachel Ka-man Chun; Yuet-ting Li; Chi-ho To; Chea-Su Kee

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 888. doi:

Safety, efficacy and delivery of multiple nucleoside analogs via drug encapsulated carbon (DECON) based sustained drug release platform. OPEN ACCESS

Tejabhiram Yadavalli; Joshua Ames; David Wu; Benjamin Ramirez; Navya Bellamkonda; Deepak Shukla

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1093. doi:

Comparison of topical Nomacopan, a dual Complement and leukotriene LTB4 inhibitor, with dexamethasone in downregulating experimental allergic conjunctival disease (EAC) OPEN ACCESS

Virginia L Calder; Malihe Eskandarpour; Miles Nunn; Wynne Weston-Davies

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1094. doi:

Adenosine treatment ameliorates bacterial endophthalmitis by promoting antimicrobial activity and inhibiting inflammatory milieu OPEN ACCESS

Sukhvinder Singh; ZEESHAN AHMAD; Susmita Das; Ashok Kumar

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1095. doi:

Carbohydrate restriction preserves visual acuity and motor function in a mouse model of autoimmune demyelination OPEN ACCESS

Scott Matthew Plafker; Katarzyna Zyla-Jackson; Dorothy Walton; Kendra Plafker; Susan Kovats; Richard Steve Brush; Martin-Paul Gameli Agbaga

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1096. doi:

Systemic Administration of Acazicolcept (ALPN-101), a Dual ICOS/CD28 Antagonist, Suppresses Ocular Inflammation in Rat Experimental Autoimmune Uveitis OPEN ACCESS

Kathryn L Pepple; Katherine Lewis; Leslie Wilson; Lawrence Evans; Stacey Dillon

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1097. doi:

The role of antiseptic prophylaxis before intravitreal injections: a novel ocular spray containing Biosecur citrus extract for the reduction of preoperative microbial load OPEN ACCESS

Lorenzo Ferro Desideri; Giuseppe Giannaccare; Chiara Del Noce; Davide Camposampiero; Diego Ponzin; Marco Pellegrini; Vincenzo Scorcia; Carlo Enrico Traverso; Aldo Vagge

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1098. doi:

Reduced tear Thrombospondin-1/Matrix Metalloproteinase 9 ratio can aid diagnosing Sjögren's syndrome related ocular surface inflammation. OPEN ACCESS

Sharmila Masli; Esen K Akpek

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1099. doi:

Emmetropization is Associated with a Modified Inflammatory Response in the Eye OPEN ACCESS

Jody A Summers; Diana Soriano; Elizabeth Martinez

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1100. doi:

Effects of the spectral energy distribution of ambient lighting on L-, M- and S-cone abundancies and emmetropization in the chicken OPEN ACCESS

Sandra Gisbert Martinez; Siegfried Wahl; Frank Schaeffel

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1101. doi:

Blue Light Rearing Does Not Affect *In Vivo* Retinal Function in Infant Rhesus Monkeys OPEN ACCESS

Linjiang Lou; Laura J Frishman; Krista M Beach; Li-Fang Hung; Zhihui She; Earl L Smith; Lisa A Ostrin

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1102. doi:

Form deprivation (FD) and exogenous all-trans retinoic acid (atRA) result in similar myopigenesis and scleral phenotypes in mice OPEN ACCESS

Dillon Brown; Michael Kowalski; Quinn Paulus; Jianshi Yu; Praveen Kumar; Maureen A Kane; Jay Patel; C Ross Ethier; Machelle T Pardue

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1103. doi:

Differences in mRNA to Protein Expression Levels in a Spontaneous Myopia Guinea-Pig Model OPEN ACCESS

Liqin Jiang; Quan V Hoang; Joanna M. Fianza Busoy; Minni Chua; Noel A Brennan; Veluchamy A. BARATHI

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1104. doi:

High Myopia Induced by Bilateral Form Deprivation Is Highly Synchronized in Both Eyes of Chickens: a pilot study OPEN ACCESS

Byung Soo Kang; Tsz Wing Leung; Sonal Aswin Vyas; Chea-Su Kee

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1105. doi:

Optogenetics in the clinic: safety and efficacy updates on the phase 1/2 clinical trial PIONEER OPEN ACCESS

Jose Alain Sahel; Isabelle S Audo; Elise Boulanger-Scemama; Chloé Pagot; Angelo Arleo; Joseph N Martel; Simona Degli Esposti; Alexandre Delaux; Jean-Baptiste de Saint Aubert; Caroline de Montleau; Emmanuel Gutman; Jens Duebel; Serge Picaud; Deniz Dalkara; Magali Taiel; Botond Roska

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1106. doi:

Successful late-stage disease treatment of P23H human RHO (hRHO) using ARCUS nuclease gene editing in a pig model of Autosomal Dominant Retinitis Pigmentosa (adRP) OPEN ACCESS

Archana Jalligampala; Jennifer M. Noel; Olivia Noelle Jacobs; Alec Lynn Bradley; Wei Wang; Maha Haleem Jabbar; Nazarul Hasan; Joseph Prestigiacomo; Jeff Smith; Victor Bartsevich; Kristi Viles; Derek Jantz; Maureen Ann McCall

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1107. doi:

Gene augmentation therapy restores vision in a *CaBP4*-mutant canine model of cone-rod synaptic disorder OPEN ACCESS

Billie Beckwith-Cohen; Paige A Winkler; Laurence M Occelli; Kelian Sun; Fabiano Montiani-Ferreira; Luis Felipe Marinho; Amy Lee; Maciej Parys; vilma Yuzbasiyan-Gurkan; William W Hauswirth; Simon Petersen-Jones

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1108. doi:

Intravitreal Cerliponase alfa for the treatment of *CLN2* type Batten Disease related retinal dystrophy: A first in man report of ocular enzyme replacement OPEN ACCESS

James Wawrzynski; Paul Gissen; Richard Bowman; Rebecca Bower; Chin Gan; Louise Harding; Amanda Mortensen; Dorothy Thompson; Robert Henderson

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1109. doi:

Development of Dual-PCDH15 AAV Gene Therapy for Usher Syndrome Type 1F Blindness and Deafness OPEN ACCESS

Maryna Ivanchenko; Daniel Hathaway; Eric Mulhall; Mantian Wang; Alex Klein; Yaqiao Li; Bence György; David Corey

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1110. doi:

STK-002, an Antisense Oligonucleotide (ASO) for the Treatment of Autosomal Dominant Optic Atrophy (ADOA), is Taken Up by Retinal Ganglion Cells (RGC) and Upregulates OPA-1 Protein Express... OPEN ACCESS

Karen Anderson; Aditya Venkatesh; Taylor McKenty; Deidre Slate; Qian Lin; Shobha Ravipaty; Sarah Jacobson; Anne Christiansen; Radhia Benmohamed; Jeff Hoger; Gene Liau

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1111. doi:

Gene therapy rescues photoreceptor function, morphology and survival in a pre-clinical model of *CDHR1*-associated retinal degeneration OPEN ACCESS

Imran H Yusuf; Michelle E. McClements; Robert E MacLaren; Peter Charbel Issa

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1112. doi:

Exploring the survival of transplanted hiPSC-derived photoreceptors in the 13-lined ground squirrel OPEN ACCESS

Ching Tzu Yu; Sangeetha Kandoi; Ramesh Periasamy; Hannah M Follett; Phyllis Summerfelt; Chloe Guillaume; Owen Bowie; Nicole Manfredonia; Dana Merriman; Thomas B Connor; Daniel M Lipinski; Joseph Carroll; Deepak A Lamba

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1113. doi:

Gene therapy rescues cone function in rhesus macaques with *PDE6C* cone disorder OPEN ACCESS

Ala Moshiri; Tawfik Issa; Antonio Lopez; Sangwan Park; Jeffrey Rogers; Rui Chen; Eliza Bliss-Moreau; Sara M Thomasy; Tim Stout

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1114. doi:

Donor-host interactions support incorporation, polarization and maturation of human photoreceptors transplanted into a cone-degeneration mouse model OPEN ACCESS

Karen Tessmer; Sylvia Jane Gasparini; Miriam Reh; Stephanie Wieneke; Madalena Carido; Manuela Völkner; Oliver Borsch; Anka Swiersy; Marta Zuzic; Olivier Goureau; Thomas Kurth; Volker Busskamp; Günther Zeck; Mike O Karl; Marius Ader

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1115. doi:

Increasing the amount of template favors HDR mediated DSB repair in photoreceptors in vivo following AAV mediated gene transfer OPEN ACCESS

Knut Stieger; Michelle Knapp; David Götzmann; Annabella Janise-Libawski; Bettina Gill; Bärbel Fuhler; Tobias Wimmer; Brigitte Müller

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1116. doi:

Masking the "eat me" signal drastically increases the short-term survival of donor human retinal ganglion cells after xenotransplantation OPEN ACCESS

Monichan Hayes Phay; Sophia Grace Bauer; Petr Y Baranov

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1117. doi:

Stem cell transplantation for treatment of retinal ganglion cell loss in Glaucoma OPEN ACCESS

Venkata R M Chavali; Vrathasha Vrathasha; Jie He; Yingrui Liu; Sergei S Nikonov; Brent A Bell; Katherine E. Uyhazi

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1118. doi:

Intercellular material transfer following retinal ganglion cell transplantation OPEN ACCESS

Kevin Yang Zhang; Erika Antuanette Aguzzi; Arumugam Nagalingam; Casey Keuthan; Xiaoli Chang; Donald J Zack; Thomas Vincent Johnson

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1119. doi:

Histatin Improves Corneal Wound Healing in a Rabbit Model of Surgical Keratectomy OPEN ACCESS

James Burke; Rozemarijn S Verhoeven; Rhett Schiffman

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1120. doi:

Wnt Signaling Regulates Cornea Wound Healing OPEN ACCESS

Wentao Liang; Jian-Xing Ma

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1121. doi:

Dual epigenetic regulation of *WNT5A* in diabetic corneal epithelial wound healing OPEN ACCESS

Ruchi Shah; Tanya M Spektor; Vasu Punj; Hui Ding; Rameshwar Patil; Sue Turjman; Sean Ghiam; Steven T Chun; Cynthia Amador; Dan J Weisenberger; Yaron S Rabinowitz; Ezra Maguen; Mehrnoosh Saghizadeh; Julia Y Ljubimova; Andrei A Kramerov; Alexander V Ljubimov

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1122. doi:

Mast cells augment neutrophil activation and their secretion of tissue-damaging factor OPEN ACCESS

Elsayed Elbasiony; WonKyung Cho; Yilin Guan; Aastha Singh; Sharad Mittal; Sunil Chauhan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1123. doi:

IGFBP-3 regulates metabolic activity and mitochondrial morphology through a biphasic response in corneal epithelial cells during hyperosmolar stress OPEN ACCESS

Whitney I Stuard; Melis Kabaalioğlu Guner; Danielle M Robertson

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1124. doi:

Glycogene expression profile of human limbal epithelial cells with distinct clonogenic potential. OPEN ACCESS

Pablo Argueso; Damien Guindolet; Ashley M. Woodward; Eric Gabison

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1125. doi:

Delineating goblet cell metaplasia in a murine model of limbal stem cell deficiency OPEN ACCESS

Nick Di Girolamo; Richard Zhang; Elvis Pandzic; Mingxia Sun; Vivien Jane Coulson-Thomas; mijeong Park

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1126. doi:

PIEZO1 and PIEZO2 pathogenic variants identified in primary congenital glaucoma OPEN ACCESS

Terri L Young; Kristina Whisenhunt; Sean Martin; Stuart Tompson

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1127. doi:

Characterization of unequivocal haplotypes that encode the 20q13 modifier for variable ages-at-onset of primary open-angle glaucoma OPEN ACCESS

Vincent Raymond; Pascal Belleau; Stéphane Dubois; Sylvie Desjardins; Rose Arseneault; Patrick Laplante; Eric Shink; Jean-Louis Anctil; Gilles Côté; Marcel Amyot; Michael A. Walter

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1128. doi:

Cross-Ancestry Glaucoma Genetic Risk Score in Hispanic Veterans in the Million Veteran Program OPEN ACCESS

Andrea R Waksmunski; Tyler Kinzy; Lauren A Cruz; Cari L Nealon; Christopher W Halladay; Scott A Anthony; Paul B Greenberg; Jack M Sullivan; Wen-Chih Wu; Sudha K Iyengar; Dana C Crawford; Neal Peachey; Jessica Cooke Bailey

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1129. doi:

A zebrafish model system for studying the ANGPT/TIE2 pathway and glaucoma OPEN ACCESS

Shi Song Rong; Anna Larson; Janey L Wiggs

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1130. doi:

Multi-Allelic Interactions of Glaucoma and Anterior Segment Dysgenesis-Associated Genes in the Pathogenesis of Primary Congenital Glaucoma OPEN ACCESS

Inderjeet Kaur; Rohit C Khanna; Hemant Khanna; Subhabrata Chakrabarti

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1131. doi:

Integrating gene regulation and single cell expression with genetic associations identifies genes and cell types contributing to primary open angle glaucoma risk and intraocular pressure OPEN ACCESS

Ayellet Vered Segre; Andrew R Hamel; Jiali Wang; John Rouhana; Tavé van Zyl; Wenjun Yan; Alexi mcadams; Aboozar Monavarfeshani; Qingnan Liang; Rui Chen; Joshua R. Sanes; Janey L Wiggs

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1132. doi:

Genetic correlations between smoking- and glaucoma-related traits OPEN ACCESS

Jessica H. Tran; Kelsey V. Stuart; Clara Cousins; Pirro G Hysi; Anthony P Khawaja; Ron Do; Shantanu Bafna; Jae Kang; Jiali Wang; Stuart MacGregor; Janey L Wiggs; Louis R Pasquale

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1133. doi:

Targeting NMNAT2 for neuroprotection in glaucoma OPEN ACCESS

Pete A Williams; James R Tribble; Melissa Jóe; Andrea Brancale; Carmine Varricchio; Michael Coleman; Jonathan Gilley; Andrea Loreto; Craig Wheelock; Gauti Johannesson

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1134. doi:

NMNAT2 and NAD^+ are Downregulated in Glaucomatous RGCs and Overexpression of NMNAT2 Rescues Glaucomatous Neurodegeneration OPEN ACCESS

Dong Liu; Fang Fang; Pei Zhuang; Xue Feng; Pingting Liu; Haoliang Huang; Liang Li; Wei Chen; Liang Liu; Yang Sun; Haowen Jiang; Jiangbin Ye; Yang Hu

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1135. doi:

Neuroprotection of SARM1 Inhibition in Traumatic and Glaucomatous but not in EAE Optic Neuropathies OPEN ACCESS

Pingting Liu; Haoliang Huang; Wei Chen; Fang Fang; Liang Li; Xue Feng; Liang Liu; Dong Liu; Roopa Dalal; Yang Sun; Karen Ling; Frank Rigo; Yang Hu

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1136. doi:

Insulin promotes RGC dendrite regeneration through ribosomal protein S6 kinase activation leading to restoration of neuronal function in glaucoma OPEN ACCESS

Sana El Hajjr; Nicolas A Belforte; Yukihiro Shiga; Florence Dotigny; Adriana Di Polo

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1137. doi:

Intraocular sustained release of EPO-R76E mitigates glaucoma pathogenesis by activating the NRF2/ARE pathway in a mouse model of glaucoma OPEN ACCESS

Tonia S Rex; Sarah Naguib; Jon Backstrom; Carlisle DeJulius; Elisabeth Artis; Craig Duvall

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1138. doi:

Electric Fields Direct Full-Length Optic Nerve Regeneration and Partial Restoration of Visual Function OPEN ACCESS

Micalla Peng; Phillip Lam; Manjunath Machnoor; Javad Paknahad; Ege Iseri; Xiecheng Shao; Mahnaz Shahidi; Biju Thomas; Gianluca Lazzi; Kimberly Gokoffski

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1139. doi:

Improving integration of transplanted human stem cell derived retinal ganglion cells OPEN ACCESS

Erika Antuanette Aguzzi; Kevin Yang Zhang; Arumugam Nagalingam; Xiaoli Chang; Donald J Zack; Thomas Vincent Johnson

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1140. doi:

Extensive autophagy and unique nuclear excisosome formation from mitochondria characterize organelle degradation in lenses from Galago (bush baby) monkeys OPEN ACCESS

M Joseph Costello; Kurt O Gilliland; Kevin Schey

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1141. doi:

Endoplasmic reticulum stress enhances lens fibrosis through PERK-mediated autophagy OPEN ACCESS

Xiaoran Wang; Shan Huang; Yizhi Liu

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1142. doi:

Mitotic Activation of Quiescent Lens Epithelial Cells Repairs UVB-Induced Capsular Cataracts OPEN ACCESS

Zongbo WEI; Caili Hao; Xingjun Fan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1143. doi:

TGFβ overcomes FGF-induced transinhibition of EGFR in lens cells to facilitate fibrotic posterior capsule opacification OPEN ACCESS

Linda Musil

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1144. doi:

Differential gene expression by human lens epithelial cells in post vitrectomy cataract vs. steroid induced cataract revealed by RNA sequencing OPEN ACCESS

Michael Dong; Jaynish Shah; Lyndell L Lim; Tiffany Khong; Andrew Spencer; Anthony John Hall

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1145. doi:

Lipid peroxidation induces ferroptosis in the lens epithelium OPEN ACCESS

Xingjun Fan; Zongbo Wei; Caili Hao; Jingru Huangfu; Ramkumar Srinivasagan; Xiang Zhang

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1146. doi:

Metformin-mediated suppression of EMT in lens epithelial cells OPEN ACCESS

J. Mark Petrash; Biehuoy Shieh; Michelle Pedler

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1147. doi:

Risk of Diabetic Retinopathy (DR) Progression in Patients during 1 year of Semaglutide use OPEN ACCESS

Blake Cooper; Kellie Howe; Amelia Cooper; Matthew de la Paz

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1148. doi:

The influence of ultra-wide field fluorescein angiography on the diagnosis and management of diabetic retinopathy OPEN ACCESS

Tala Al-Khaled; Nicole K Scripsema; Rawan Allozi Rupnow; Aziz A Khanifar; Thanos Papakostas; Christina Y. Weng; Ronald C Gentile; J. Peter Campbell; Jessica Lee; Felix Y. Chau; William F Mieler; Meenakashi Gupta; Amani A Fawzi; Judy E Kim; Jennifer I Lim; Robison Vernon Paul Chan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1149. doi:

Role of cytoskeletal dynamics in neutrophil activation and cytotoxicity toward retinal endothelial cells in early diabetic retinopathy OPEN ACCESS
Mahesh Agarwal; Sathishkumar Chandrakumar; Irene Santiago Tierno; Kaustabh Ghosh
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1150. doi:

Three Year Outcomes from the PALADIN Phase IV Study: Predictive Value of Prior Steroid Challenge and Intraocular Pressure Outcomes OPEN ACCESS
Christopher Fuller
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1151. doi:

Suprachoroidal Delivery of RGX-314 for Diabetic Retinopathy: The Phase II ALTITUDE™ Study OPEN ACCESS
Dilsher Singh Dhoot
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1152. doi:

Engagement of Patients with Diabetic Retinopathy by Telehealth Extenders Improves Follow Up OPEN ACCESS
Rachel Munzar; Claudia Lasalle; Shiyoung Roh; David J Ramsey
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1153. doi:

Prediction of proliferative diabetic retinopathy (PDR) from nonproliferative diabetic retinopathy (NPDR) using real-world (RW) electronic health record (EHR) data OPEN ACCESS
Amy Shrader Babiuch; Qi Yang; Dimitrios Damopoulos; Shemra Rizzo; Carolina C S Valentim; Anna K Wu; Fethallah Benmansour; Jennifer Luu; Aneesha Kalur; Resya Sastry; Amogh Iyer; Justin Muste; Galin Spicer; Daniela Ferrara; Rishi P Singh
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1154. doi:

Grayscale Retinal Vessel Maps Are Associated with Self-Reported Race: Implications for Artificial Intelligence Models OPEN ACCESS
Aaron S Coyner; Praveer Singh; James Brown; Susan Ostmo; Robison Vernon Paul Chan; Michael F Chiang; Jayashree Kalpathy-Cramer; J. Peter Campbell
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1155. doi:

Contrastive learning improves representation and transferability of diabetic retinopathy classification models OPEN ACCESS
Minhaj Nur Alam; Theodore Leng; Joelle Hallak; Daniel Rubin
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1156. doi:

Predictors for Non-Diagnostic Images in Real World Deployment of Artificial Intelligence Assisted Diabetic Retinopathy Screening OPEN ACCESS
Benjamin L Shou; Kesavan Venkatesh; Chang Chen; Ronel Ghidey; Tim Lee; Jiangxia Wang; Alvin Liu
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1157. doi:

A Comparison of OCT Angiography Non-Perfusion Area Measurements Made With a Rules-Based Approach and Artificial Intelligence OPEN ACCESS
Tristan Hormel; Jie Wang; Yukun Guo; Thomas S Hwang; David Huang; Yali Jia
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1158. doi:

Accuracy of Integrated Artificial Intelligence (AI) Grading at the Point of Care (POC) Using Handheld Retinal Imaging in a Community-Based Diabetic Retinopathy (DR) Screening Program (DRS... OPEN ACCESS
Recivall Salongcay; Lizzie Anne Aquino; Claude Michael Salva; Glenn Paulo Alog; Kaye Locaylocay; Aileen Viguilla Saunar; Cris Martin P. Jacoba; Jennifer K Sun; Lloyd P Aiello; Tunde Peto; Paolo S Silva
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1159. doi:

Five-year Incidence of Arterial Hypertension Predicted by Retinal Vessel Analysis: The Tongren Cohort Study OPEN ACCESS
Cancan Xue; Cai Li; Dong Ning Chen; Chun Zhang; Ji Cong Zhang; Jost Jonas; Ya Xing Wang
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1160. doi:

Eye2Gene: prediction of causal inherited retinal disease gene from multimodal imaging using AI OPEN ACCESS
NIKOLAS PONTIKOS; William Woof; Peter Krawitz; Gavin Arno; Kristina Hess; Malena Daich Varela; Bart Liefers; Thales Guimaraes; Mital Shah; Savita Madhusudhan; Susan M. Downes; Konstantinos Balaskas; Omar Abdul Rahman Mahroo; Frank G Holz; Michel Michaelides; Andrew R Webster
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1161. doi:

Light-sheet imaging of large-scale neural population activity in the retina. OPEN ACCESS
Suva Roy; Depeng Wang; Marija Rudzite; Miranda Scalabrino; Yiyang Gong; Alexander Sher; Greg Field
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1162. doi:

Unusual properties of novel ganglion cell and amacrine cell types in macaque and human retina OPEN ACCESS
Alexandra Kling; Eric Wu; Sam Cooler; Colleen Rhoades; Nora Brackbill; Alan Litke; Alexander Sher; EJ Chichilnisky
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1163. doi:

Dual patch-clamp recording of synaptic transmission between morphologically and physiologically characterized cone bipolar cell types and a diffused ganglion cell in wholemount mouse reti... OPEN ACCESS
Yao Xue; Seunghoon Lee; Jimmy Zhou
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1164. doi:

Non-classical center-surround antagonism in the retina controls spatial and temporal filtering in scotopic light OPEN ACCESS
Norianne Ingram; Fred Rieke
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1165. doi:

Campana cells relay both rod- and cone-mediated visual signals to multiple RGC types OPEN ACCESS
Ning Tian; Brent K Young; Ping Wang
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1166. doi:

Neuronal firing between retinal ganglion cells and coupled amacrine cells in the mouse retina OPEN ACCESS
Qin Wang; Chung Him So; Feng Pan
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1167. doi:

Complex non-tumor retinal ganglion cell-glial interrelationships in neurofibromatosis-optic pathway glioma (NF1-ORG) mice OPEN ACCESS

pathway ghrelin (NF-1 or G) mice OPEN ACCESS
Steven F Stasheff; Francisco Nadal-Nicolas; Wei Li; Yuan Zhu
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1168. doi:

BAP1 immunohistochemistry in post-brachytherapy uveal melanoma OPEN ACCESS
Maya Eiger-Moscovich; Carol L. Shields; Ralph C. Eagle Jr.; Tatyana Milman
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1456. doi:

The clinical applicabillity of IHC staining for BAP1 for prognostication of uveal melanoma OPEN ACCESS
Jens F Kiilgaard; Carsten Faber; Mette Marie Bagger; Steffen Heegaard; David Scheie
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1457. doi:

Potential of aqueous humor as a liquid biopsy for uveal melanoma OPEN ACCESS
Deborah Im; Chen-Ching Peng; Liya Xu; Mary Elizabeth Kim; Dejerianne Ostrow; Venkata Yellapantula; Moiz Bootwalla; Jaclyn A Biegel; Xiaowu Gai; Peter Kuhn; James Hicks; Jesse L Berry
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1458. doi:

In vivo intraocular biomarkers in uveal melanoma: an aqueous humor proteomic study. OPEN ACCESS
Giulia Midena; Raffaele Parrozzani; Marisa Bruno; Graziana Esposito; Alessandra Micera; Edoardo Midena
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1459. doi:

Targeting Bromodomain of Brg-1 in Uveal Melanoma Cells with Small Molecule PFI-3: A Possible Novel Therapy OPEN ACCESS
Matthew W Wilson; Emily Louie; Chuanhe Yang; Yinan Wang; Lawrence M Pfeffer
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1460. doi:

Imipridones target mitochondrial oxidative phosphorylation effectors in uveal melanoma to control growth OPEN ACCESS
Chandrani Chattopadhyay; Fatima S. Khan; Rajat Bhattacharya; Jason Roszik; Elizabeth A. Grimm
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1461. doi:

The role of early growth response-1 in uveal melanoma viability and treatment resistance to MEK inhibition OPEN ACCESS
Lauren A Dalvin; Cynthia Andrews-Pfannkoch; Jose S Pulido; David R Miley; Samantha Adams
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1462. doi:

Transient Receptor Potential Nociceptors are Required for Contact Lens-Associated Corneal Parainflammation OPEN ACCESS
ANANYA DATTA; Justin Lee; Hart Homeman; David J Evans; Suzanne M J Fleiszig
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1463. doi:

Myopia control effect of small back optic zone diameter orthokeratology lenses over two years OPEN ACCESS
Biyue Guo; Sin Wan Cheung; Randy Kojima; Pauline Cho
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1464. doi:

Antimicrobial efficacy of novel Ultraviolet- C device against microorganisms related to Contact lens keratitis. OPEN ACCESS
SRIKANTH DUMPATI; Sunil Shah; Shehzad Naroo; Debarun Dutta
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1466. doi:

Protection Against Localized Corneal Hyperosmolarity Spikes with Soft-Contact-Lens Wear OPEN ACCESS
Young Hyun Kim; Meng C Lin; CHENG-CHUN PENG; Clayton J Radke
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1467. doi:

Developing a novel *in vitro* eye model using 3D bioprinting for drug delivery studies OPEN ACCESS
Chau-Minh Phan; Wulff David; Piyush Garg; Lyndon William Jones
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1468. doi:

Intraocular Pressures Changes at the Central Cornea and Sclera during 5 hours of Scleral Lens Wear OPEN ACCESS
Vivien Tse; Taras Litvin; Lisa Chung; Yixiu Zhou; Ying Han; Meng C Lin
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1469. doi:

Synthetic Matrices with Customizable Cell-Matrix Interfaces Enhance Retinal Organoid Culture OPEN ACCESS
Daniel Balikov; Brian Basinski; Ariella Shikanov; Rajesh Rao
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1470. doi:

Achromatopsia Retinal Organoid Transcriptomes Reveal Increased Gliosis and Dysregulation of Unfolded Protein Response OPEN ACCESS
Monica Diaz-Aguilar; Jihee Choi; Hyejung Min; Eun-Jin Lee; Julia M.D. Grandjean; Heike Kroeger; R. Luke Wiseman; Jonathan Lin
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1471. doi:

CRISPR -Cas9-mediated gene correction in Induced Pluripotent Stem Cells derived from Oculocutaneous Albinism Type 2 patients rescues pigmentation defect in Retinal Pigment Epithelium OPEN ACCESS
Arnold Leigh; Tyler Pfister; Aman George; Ruchi Sharma; Mones Abu-Asab; Kapil Bharti; Brian Patrick Brooks
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1472. doi:

Complement dysregulation in an iPSC-RPE model with CFH/FHL-1 haploinsufficiency. OPEN ACCESS
Rayne Lim; Sharlene Shirali; Jessica Rowlan; Abbi Engel; Marcos Nazario; Jianhai Du; Maureen Neitz; Jay Neitz; Jennifer R Chao
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1473. doi:

Generation of choroid and RPE cells from iPSC with CFH knockout for modeling of AMD OPEN ACCESS
Tea Soon Park; Russell Quinn; Rishabh Hirday; Amir Ali; Eric Nguyen; Devika Bose; Ruchi Sharma; Kapil Bharti
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1474. doi:

Autophagy Dysfunction Represses mTORC1 Signaling Resulting in Neurodegeneration of Retinal Ganglion Cells in Glaucoma OPEN ACCESS
Kang-Chieh Huang; Cátia Gomes; Yukihiro Shiga; Kirstin VanderWall; Sailee Sham Lavekar; Clarisse Fligor; Jade Harkin; Adriana Di Polo; Jason S Meyer

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1475. doi:

Modeling autosomal dominant retinitis pigmentosa associated with copy number variants in rhodopsin and rescue using Photoregulin3 in patient-specific retinal organoids OPEN ACCESS

Sangeetha Kandoi; Cassandra Martinez; Kevin A Xu Chen; Brian Mansfield; Jacque L Duncan; Deepak A Lamba

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1476. doi:

Revealing spectral cone types from structural differences as obtained by AO-OCT imaging in human subjects OPEN ACCESS

Qiuzhi Ji; Davin Miller; Marcel Bernucci; Yan Liu; James Crowell; Donald Thomas Miller

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1477. doi:

Optogenetic stimulation and calcium imaging of single ganglion cells in the living macaque fovea OPEN ACCESS

Peter Murphy; Juliette E McGregor; Zhengyang Xu; William Merigan; David R Williams

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1478. doi:

Combining adaptive optics with erythrocyte mediated angiography reveals preferential sites of erythrocyte stasis within the choriocapillaris OPEN ACCESS

Joanne Li; Andrew J. Bower; Jessica Pottenburgh; Victoria Chen; Laryssa Huryn; Osamah Saeedi; Johnny Tam

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1479. doi:

Pilot investigation of multimodal and multiscale retinal imaging technology developed by a trans-European multidisciplinary consortium OPEN ACCESS

Kiyoko Gocho; Nicolas Lefaudeux; Claudia Valdes; Jordi Andilla; Muhammad Faizan Shirazi; Florian Schwarzhans; Konstantinos Ntatsis; Luisa Sanchez Brea; Danilo Andrade De Jesus; Marie Elise Wistrup Torm; Christina Eckmann-Hansen; Abdullah Amini; Kate Grieve; Pablo Loza-Alvarez; Michael Pircher; Michel Paques

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1480. doi:

Evaluation of the double-pass wavefront in model and human eyes OPEN ACCESS

Vyas Akondi; Xiaojing Huang; Alfredo Dubra

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1481. doi:

Phase imaging in the inner retina OPEN ACCESS

Mircea Mujat; Ankit Patel; John Grimble; Nicusor Iftimia

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1482. doi:

In vivo recumbent photoreceptor imaging using the first handheld adaptive optics optical coherence tomography probe OPEN ACCESS

Kristen Hagan; Jongwan Park; Theodore DuBose; Somayyeh Soltanian-Zadeh; Gar Waterman; Al-Hafeez Dhalla; Anthony N Kuo; Ryan McNabb; Joseph Izatt; Sina Farsiu

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1483. doi:

The Endothelin Receptor Antagonist Macitentan Acts through both Vascular and Cellular Mechanisms to Promote Neuroprotection of Retinal Ganglion Cells in Rodents. OPEN ACCESS

Raghu R Krishnamoorthy; Bindu Kodati; Sai H Chavala; Wei Zhang; Dorota Luiza Stankowska

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1484. doi:

2-Fluoro-N-(2-(5-hydroxy-1H-indol-3-yl)ethyl)nicotinamide (HIFN) protects against vision loss from closed-globe ocular trauma by activating tropomyosin-related kinase B (TrkB) OPEN ACCESS

Shweta Modgil; Christopher L Walker; Frank E McDonald; P. Michael Iuvone

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1485. doi:

Baicalein Alleviates Microglia-mediated Neuroinflammation and Neurodegeneration in Mouse Retina OPEN ACCESS

Li PAN; Kin-Sang Cho; Dongfeng Chen; Chi-wai Do

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1486. doi:

Constitutively active Ras promotes protection and axon regeneration in retinal ganglion cells after optic nerve injury OPEN ACCESS

Naoki Kiyota; Kazuhiko Namekata; Xiaoli Guo; Atsuko Kimura; Toru Nakazawa; Takayuki Harada

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1487. doi:

Role of DNA Methylation in RGC Death during Glaucoma Progression OPEN ACCESS

Shahid Husain; Sudha Singh; Wendy Guzman

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1488. doi:

Biomarkers for Alzheimer's Disease & Chronic Traumatic Encephalopathy in Postmortem Vitreous Humor Correlate with Pathological Diagnosis and Cortical Brain Tissue OPEN ACCESS

Viha Vig; Fatima Tuz-Zahra; Yorghos Tripodis; Jia Xu; Weiming Xia; Goayuan Meng; Thor D. Stein; Manju L Subramanian

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1489. doi:

Ethambutol-induced optic atrophy: a mitochondrial fission neuropathy mediated by NO? OPEN ACCESS

Lin Cheng; Hanna Shevalye; Gregory Schmidt; Jessica Skeie; Mark A Greiner; Markus H Kuehn

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1490. doi:

Adenosine receptor 2A-mediated HIF signaling enhances endothelial-to-mesenchymal transition (EndMT) and promotes subretinal fibrosis OPEN ACCESS

Qiuhua Yang; Qian Ma; Xiaoxiao Mao; Akrit Sodhi; Ruth B Caldwell; Yuqing Huo

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1491. doi:

Efficacy of iRGD-Targeted Fusogenic Nanoparticle Delivering VEGF-siRNA to a Rabbit Model of Retinal Angiogenesis OPEN ACCESS

William R Freeman; Joel F Grondek; Kristyn Huffman; Melina Cavichini Cordeiro; Alexandra Warter; Fritz Gerald P Kalaw; Lingyun Cheng; Ella Jyoon Lee; Ruhan Fan; Michael J Sailor

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1492. doi:

Rhesus macaques with soft drusen share susceptibility genes with age-related macular degeneration in humans. OPEN ACCESS

Glenn Yiu; Jun Wang; Yumei Li; Kevin Choy; Sina Farsiu; Leon Huynh; Karolina Paulina Roszak; Ala Moshiri; Sara M Thomasy; Rui Chen

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1493. doi:

Metabo-endotypes of Age-related Macular Degeneration OPEN ACCESS

Kevin Milton Mendez; Ines Lains; rachel kelly; John B Miller; Demetrios G. Vavvas; Ivana K Kim; Joan W Miller; Liming Liang; Jessica A Lasky-Su; Deeba Husain

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1494. doi:

Genetic variants in *ANO2* may be predictive for treatment response to anti-VEGF in neovascular age-related macular degeneration OPEN ACCESS

Robyn H Guymer; Rufino Silva; Mercedeh Ghadessi; Sergio Leal; Isabella Gashaw; Amy Damask; Charles Paulding; Kay D. Rittenhouse

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1495. doi:

Assessing vitreous cortex hyalocyte morphology and dynamics in the living human eye OPEN ACCESS

Richard B Rosen; Oscar Otero-Marquez; Justin V Migacz; Sofia Ahsanuddin; Kara Rickford; Brian Murillo; Rebecca Zhou; Lily Spellman; Rishard Weitz; Alfredo Dubra; Toco Yuen Ping Chui

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1496. doi:

Suprachoroidal Delivery of RGX-314 Gene Therapy for Neovascular AMD: The Phase II AAVIATE™ Study OPEN ACCESS

Arshad M. Khanani

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1497. doi:

Development and validation of prognostic models to increase power of clinical trials for geographic atrophy (GA) OPEN ACCESS

Verena Steffen; Neha Anegondi; Qi Yang; Michel Friesenhahn; Daniela Ferrara; Simon S Gao; Christina Rabe

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1498. doi:

Results of a Delphi consensus study of geographic atrophy (GA) diagnosis and current management OPEN ACCESS

Rishi P Singh; Winfried M K Amoaku; Francesco Bandello; Fred Kuanfu Chen; Frank G Holz; Preeti Joshi; Laurent Kodjikian; José Maria Ruiz-Moreno; Charles Clifton Wykoff

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1499. doi:

Efficacy of intravitreal pegcetacoplan in patients with geographic atrophy (GA): 12-month results from the phase 3 OAKS and DERBY studies. OPEN ACCESS

Roger Goldberg; Jeffrey S Heier; Charles Clifton Wykoff; Giovanni Staurenghi; Rishi P Singh; Nathan Steinle; David S Boyer; Jordi Monés; Frank G Holz; Caleb Bliss; Federico Grossi; Ravi Metlapally; Ramiro Ribeiro

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1500. doi:

Impact of baseline imbalances on the efficacy of pegcetacoplan for the treatment of geographic atrophy (GA): A post hoc analysis of OAKS, DERBY, and FILLY OPEN ACCESS

Sunir Garg; Charles Clifton Wykoff; Nathan Steinle; Giovanni Staurenghi; Debra Morris; Allen Chiang; Caleb Bliss; Daniel Jones; Ramiro Ribeiro; Allen C Ho; Jeffrey S Heier

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1501. doi:

Patient characteristics from a post hoc analysis of nascent geographic atrophy progression following treatment with avacincaptad pegol from the GATHER1 study OPEN ACCESS

Carl J Danzig

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1502. doi:

Learning-based modelling for longitudinal prediction of geographic atrophy growth rate OPEN ACCESS

Tharindu de silva; Tiarnan D L Keenan; Emily Y Chew; Catherine Cukras

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1503. doi:

Preliminary Results from a First-in-human Phase I/II Gene Therapy Study (FOCUS) of Subretinally Delivered GT005, an Investigational AAV2 Vector, in Patients with Geographic Atrophy Second... OPEN ACCESS

Jared Nielsen; Robert E MacLaren; Jeffrey S Heier; David Steel; Tsveta Ivanova; Sobha Sivaprasad; Paulo Stanga; Clare Bailey; Peter Charbel Issa; Luisa Mendonca; James Francis; Darin Curtiss; Jane Hughes; Nadia K Waheed

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1504. doi:

Quality of life in children and adults with childhood glaucoma: An interview study OPEN ACCESS

Lachlan Knight; Bronwyn Ridge; Sandra E Staffieri; Jamie E Craig; Mallika Prem Senthil; Emmanuelle Souzeau

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1823. doi:

Glaucoma reduces vision-related quality of life: results from the population-based Gutenberg Health Study OPEN ACCESS

Stephanie D Grabitz; Annika Junglas; Esther M Hoffmann; Julia Verena Stingl; Stefan Nickels; Philipp Wild; Karl Lackner; Thomas Münzel; Manfred E Beutel; Irene Schmidtmann; Norbert Pfeiffer; Alexander Karl-Georg Schuster

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1824. doi:

Differences in Vision-Specific Quality of Life with Visual Acuity by Race, Ethnicity in the Multiethnic Ophthalmology Cohorts of California Study (MOCCaS) OPEN ACCESS

Roberta McKean-Cowdin; Dominic Joseph Grisafe; Mina Torres; Bruce Burkemper; Kaili Ding; Xuejuan Jiang; Benjamin Xu; Rohit Varma

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1825. doi:

Prevalence of falls and fall-related outcomes in older adults with diagnoses of ocular disease OPEN ACCESS

Brittany Tsou; Dana Huh; Pradeep Y Ramulu; Fasika Woreta

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1826. doi:

PrevenTing Falls in a high-risk, low vision population through specialist ORientation and Mobility services: the PiaTFORM randomised trial OPEN ACCESS

Lisa Keay; Lisa Dillon; Kelly Prentice; Kirsten Jakobsen; Kris Rogers; Jodi Martin; Rebecca Ivers; Anne Tiedemann; Cathie Sherrington; Pradeep Y Ramulu; Peter J McCluskey; Stephen Jan; Ashleigh Chandra; Sheela Kumaran; Xiaoqiu (Julia) Liu; Lindy Clemson

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1827. doi:

The ageing visual function system and functional health in multi-ethnic older adults: The PIONEER study OPEN ACCESS

Preeti Gupta; Alfred TL Gan; Ryan EK Man; Eva K Fenwick; Ecosse Luc Lamoureux

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1828. doi:

Relationship between Severity and Laterality of Age-Related Sensory Decline and Frailty In Multi-ethnic Elderly Asians OPEN ACCESS

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1829. doi:

Phase Decorrelation OCT for Monitoring Accelerated Crosslinking: Depth Resolution and Improved Scan Area OPEN ACCESS

Brecken Blackburn; Matthew McPheeters; Michael W Jenkins; William J Dupps; Andrew M. Rollins

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1830. doi:

Correlation of clinical fibrillar layer detection with corneal thickness in advanced Fuchs endothelial corneal dystrophy eyes. OPEN ACCESS

Mario Matthaei; Orlando Özer; Mert Mestanoglu; Antonia Howaldt; Thomas Clahsen; Sebastian Siebelmann; Niklas Reinking; Claus Cursiefen; Björn Bachmann

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1831. doi:

Investigating the Potential Effects of Peroxisome Proliferator-Activated Receptor (PPAR)-α Agonists on Corneal Nerve Regeneration in Patients with Type II Diabetes Mellitus OPEN ACCESS

Celesta Hui Yi Teo; Hong Chang Tan; Molly Tzu-Yu Lin; Isabelle Xin Yu Lee; Jodhbir S Mehta; Yu-Chi Liu

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1832. doi:

Effect of Trigeminal Nerve Stimulation on Chronic Ocular Pain and Corneal Nerve Density in Sub-basal Plexus OPEN ACCESS

Simran Mangwani-Mordani; Arturo Ramirez-Miranda; Enrique O Graue-Hernandez; Alejandro Navas

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1833. doi:

OK-101, A Novel Chemerin Receptor Agonist, Ameliorates Neuropathic Corneal Pain in a Mouse Model of Ciliary Nerve Ligation OPEN ACCESS

Deshea L Harris; Fangfang Qiu; Ayesha Sultan; Raj Patil; Gary S. Jacob; Pedram Hamrah

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1834. doi:

Identifying Small-fiber Neuropathy of the Corneal Sub-Basal Nerve Plexus in Sjögren Syndrome Using In-Vivo Confocal Microscopy OPEN ACCESS

Jeremy Nortey; Elisabeth Gebreegaziabher; Jeremy D Keenan; Tom Lietman; John Alexander Gonzales

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1835. doi:

Deep Learning-based Segmentation of Nerves and Pathological Structures in Corneal Confocal Microscopy Images of the Subbasal Nerve Plexus OPEN ACCESS

Zane Zemborain; Matias Soifer; Nadim Azar; Hazem M Mousa; Victor L Perez; Sina Farsiu

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1836. doi:

Clinical Characteristics and Response to Eye Muscle Surgery in 15 Children Patients With Dyschromatopsia and Infantile Nystagmus Syndrome (INS) OPEN ACCESS

Richard W Hertle; Ian Boydstun; Ana Juric De Paula

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1837. doi:

Truncating *PAX6* mutations result in severe arrested retinal development with loss of cone photoreceptor specialisation: A multi-centre study OPEN ACCESS

Mervyn George Thomas; Helen Kuht; Jinu Han; Gail Maconachie; Rebecca McLean; Zhanhan Tu; Viral Sheth; Martin Tobin; Brian Patrick Brooks; Elizabeth Engle; Irene Gottlob

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1838. doi:

The Genotypic and Phenotypic Spectrum of Foveal Hypoplasia: A Multi-centre Study on behalf of the Foveal Development Investigators Group (FDIG) OPEN ACCESS

Helen Kuht; Jinu Han; Line Kessel; Mies M. van Genderen; Richard W Hertle; Karen Gronskov; Vasily Smirnov; Fred Kuanfu Chen; Rachael C Heath Jeffery; Brian Patrick Brooks; Sasha Strul; Jin Jing; Martin Tobin; Irene Gottlob; Mervyn George Thomas

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1839. doi:

Phenotypic Characteristics as a Diagnostic Tool for Albinism: Sensitivity and Specificity Analysis OPEN ACCESS

Abdullah Aamir; Helen Kuht; Jinu Han; Mies M. van Genderen; Gail Maconachie; Rebecca McLean; Zhanhan Tu; Viral Sheth; Richard W Hertle; Line Kessel; Brian Brooks; Frank A Proudlock; Irene Gottlob; Mervyn George Thomas

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1840. doi:

Investigation of extraocular muscle development in a mouse model of infantile nystagmus syndrome OPEN ACCESS

Mary Whitman; Sampath Kumar Vemula; Seoyoung Kim

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1841. doi:

Masquerading Superior Oblique Palsy Mimics All Features of Congenital and Acquired Superior Oblique (SO) Muscle Weakness OPEN ACCESS

Joseph L Demer

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1842. doi:

Magnetic resonance imaging analysis of age-related distance esotropia in geriatric Indian subjects OPEN ACCESS

Zia Chaudhuri; Pratibha Kataria; Umesh Chandra Garga; Yashvant Singh

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1843. doi:

Deep unsupervised discovery of OCT phenotypes enables genome-wide analyses OPEN ACCESS

Nazlee Zebardast; Mojtaba Fazli; Sayuri Sekimitsu; Saber Kazeminasab Hashemabad; Tobias Elze; Ayellet V. Segrè; Mengyu Wang; Janey L Wiggs

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1844. doi:

Lower Diastolic Blood Pressure: A Risk Factor for Faster GCC Rates of Progression in Patients with Moderate to Advanced Glaucoma OPEN ACCESS

Kouros Nouri-Mahdavi; Vahid Mohammadzadeh; Massood Mohammadi; Erica Su; Lynn Shi; Anne L. Coleman; Simon K. Law; Joseph Caprioli; Robert E Weiss

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1845. doi:

Cerebrospinal fluid dynamics and its coupling with global brain activity are altered in early glaucoma patients OPEN ACCESS

Ji Won Bang; Eva Yarsky; Gadi Wollstein; Joel S Schuman; Kevin C. Chan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1846. doi:

Intraocular pressure, ocular perfusion pressure, retinal perfusion and electrophysiology in brain-dead organ donors OPEN ACCESS

Mary Anne Garner; Massimo A. Fazio; Mark Clark; Udayakumar Karuppanan; Meredith Hubbard; Seth Hubbard; Alecia K Gross; Christopher A Girkin

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1847. doi:

Schlemm canal-targeted Tie2 knockdown (SC-Tie2 KD) as mouse model of adult-onset human glaucoma OPEN ACCESS

Alejandra Bosco; Cesar O Romero; Joon Schwakopf; Oleg Yarishkin; J Cameron Millar; Michael Steele; David Krizaj; Monica L Vetter

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1848. doi:

In Vivo Evaluation of Naïve and Diseased RGC Activities at Single-Cell Level OPEN ACCESS

Liang Li; Fang Fang; Xue Feng; Shaobo Zhang; David Andrew Miller; Pei Zhuang; Haoliang Huang; Pingting Liu; Junting Liu; Nripun Sredar; Liang Liu; Yang Sun; Xin Duan; Jeffrey L Goldberg; Hao Zhang; Yang Hu

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1849. doi:

Light-evoked RGC calcium dynamics are altered in glaucoma: live imaging evidence of abnormal calcium clearance OPEN ACCESS

Yukihiro Shiga; Aline Giselle Rangel Olguin; Luis Alarcon-Martinez; Nicolas A Belforte; Heberto Quintero; Deborah Villafranca-Baughman; Florence Dotigny; Arjun Krishnaswamy; Adriana Di Polo

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1850. doi:

Active Transport of Cationic Liposomes Across the Retina OPEN ACCESS

Anne Zebitz Eriksen; Fredrik Melander; Paul Joseph Kempen; Andreas Kjaer; Thomas Lars Andresen; Andrew James Urquhart

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1851. doi:

IDENTIFYING BIO-INTELLIGENCE AT BLOOD-AQUEOUS BARRIER IN PREDICTING AQUEOUS HUMOR PENETRATION USING QSPR APPROACH OPEN ACCESS

Ujjalkumar Subhash Das; Nabanita Halder; Jeevan S Tityal; Baskar S. Singh; B Jayaram; Vishnubhatla Sreenivas; Thirumurthy Velpandian

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1852. doi:

Photodisruption of the ILM to enhance retinal drug delivery after intravitreal injection OPEN ACCESS

Karen Peynshaert; Kaat De Clerck; Helena Vanluchene; Geraldine Accou; Félix Sauvage; An-Katrien Minnaert; Kevin Braeckmans; Stefaan De Smedt; Katrien Remaut

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1853. doi:

Contact lenses that deliver statins OPEN ACCESS

Ana Filipa Pereira-da-Mota; Maria Vivero-López; Maria Serramito; Fernando Hueté-Toral; Gonzalo Carracedo; Angel Concheiro; Carmen Alvarez-Lorenzo

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1854. doi:

A novel, minimally invasive implant for intraocular drug delivery OPEN ACCESS

Rohan Chawla; Dinesh Kalyanasundaram; Laxmi Moksha; Jayanta Bhattacharyya; Anjali Phour; Thirumurthy Velpandian; Seema Kashyap

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1855. doi:

Effective intracameral injection in the mouse model OPEN ACCESS

Jennyfer Zapata; Alexandre Abid; Mohamed Djallali; Marilyse Piché; Michel Meunier; Christos Boutopoulos; Isabelle Brunette

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1856. doi:

Biodegradable silicon nanoneedles for sustained treatment of angiogenesis OPEN ACCESS

Yannis Mantas Paulus; Woohyun Park; Van Phuc Nguyen; Chi Hwan Lee

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1857. doi:

Large-Area RPE Removal by Microsecond Laser followed by hiPS-RPE transplantation OPEN ACCESS

Boris V. Stanzel; Christian Burri; Sami Al-Nawaiseh; Philip Wakili; Sylvia Jane Gasparini; Gerardo Farese; Christina Kroetz; Boris Greber; Christoph Meier; Martin Frenz; Peter Szurman; André Schulz; Marius Ader

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1858. doi:

In Vivo Tracking of Transplanted Progenitor Cells after Photocoagulation Using Multimodal Photoacoustic Microscopy, OCT, and Fluorescence Imaging OPEN ACCESS

Phuc Nguyen; Wen Fan; Tianye Zhu; Wei Qian; Yanxiu Liu; Binh Liu; Wei Zhang; Jessica Henry; Songtao Yuan; Xueding Wang; Yannis M. Paulus

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1859. doi:

Automated production of patient derived iPSCs for autologous photoreceptor cell replacement. OPEN ACCESS

Budd A. Tucker; Laura R Bohrer; Nicholas E Stone; Kristin R. Anfinson; Cathryn M. Schaffer; Meagan A Luse; Bradley A. Hittle; Kimerly A. Powell; George F. Muschler; Robert F Mullins; Edwin M Stone

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1860. doi:

Effects OF CRISPR knockout of the Humanin trimeric CNTFR/gp130/WSX-1 receptor in AMD OPEN ACCESS

Sonali R Nashine; M.Cristina Kenney

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1861. doi:

Safety and Efficacy of a Phase 1/2a Clinical Trial of Transplanted Allogeneic Retinal Pigmented Epithelium (RPE, OpRegen) Cells in Advanced Dry Age-Related Macular Degeneration (AMD) OPEN ACCESS

Allen C Ho; Eyal Banin; Adiel Barak; David S Boyer; Rita Ehrlich; Tareq Jaouni; H Richard MacDonald; Christopher D Riemann; David Telander; Jordi Monés; Avi Ben Shabat; Gary S Hogge; Benjamin Reubinoff

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1862. doi:

Suprachoroidal Retinal prostheses, longterm stability and safety results. OPEN ACCESS

Penelope J Allen; Carla J Abbott; Maria Kolic; Elizabeth Baglin; David AX Nayagam; Stephanie Epp; Nicholas Barnes; Chi D Luu; Robert Briggs; Jonathan Yeoh; William Kentler; Samuel Titchener; Christopher E Williams; Matthew Petoe

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1863. doi:

Long-term integration of the retina with 3D implants: structure and function OPEN ACCESS

Bing-Yi Wang; Mohajeet Balveer Bhuckory; Zhijie Charles Chen; Andrew Shin; Ludwig Galambos; Keith Mathieson; Theodore Kamins; Daniel V Palanker

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1864. doi:

The polycomb repressor complex 2 influences glial reactivity and the formation of Müller glia-derived progenitor cells in the chick retina OPEN ACCESS

Heithem M El-Hodiri; Warren Campbell; Diego Torres; Evan C Hawthorn; Lisa E Kelly; Leo Volkov; Andy J Fischer

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1865. doi:

Cross-species single-cell transcriptomic analysis reveals factors limiting human Müller glial-derived retinal regeneration OPEN ACCESS

glial derived retinal regeneration OPEN ACCESS

Rahul Dhodapkar; Diego Martell; Eda Calapkulu; Yu Xing; Le Zhang; Madhvi Menon; Andrew Jin; Alex Dong; Brian Palmer Hafler

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1866. doi:

RPE neural competency is restricted by alterations to a homeobox transcription factor regulatory network OPEN ACCESS

Jared Austin Tangeman; Raúl Pérez-Estrada; Emily Van Zeeland; Lin Liu; Chun Liang; Katia Del Rio-Tsonis

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1867. doi:

Sphingosine 1 Phosphate Signaling Enhances NF-κB Activation and Suppresses Muller Glia Reprogramming in the Injured Retina OPEN ACCESS

Olivia Taylor; Andy J Fischer

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1868. doi:

Regulation of Retinal Regeneration by the Extracellular Matrix Protein Nephronectin OPEN ACCESS

Dmitri Serjanov; James Twist; Meghan Swantkowski; David Hyde

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1869. doi:

Notch inhibition promotes regeneration and immunosuppression supports cone survival in a zebrafish model of inherited retinal dystrophy OPEN ACCESS

Brian D Perkins; Ping Song; Joseph Fogerty; Patrick Boyd; Sarah Grabinski; Thanh V Hoang; Seth Blackshaw; Jeff S Mumm; David Hyde

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1870. doi:

Inducing regeneration of retinal ganglion-like cells *in vivo* from Muller glia in the adult mouse using transcription factors. OPEN ACCESS

Levi Todd; Wesley Jenkins; Marcus Hooper; Connor Finkbeiner; Thomas Reh

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1871. doi:

Plasma metabolomics of primary open-angle glaucoma in three prospective US cohorts and the UK Biobank OPEN ACCESS

Oana Alina Zeleznik; Jae Kang; Jessica A Lasky-Su; Clary B Clish; Bernard Rosner; Tobias Elze; Anthony Khawaja; Janey L Wiggs; Louis R Pasquale

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2263. doi:

Association of alcohol consumption with glaucoma and related traits OPEN ACCESS

Kelsey Vernon Stuart; Robert Luben; Alasdair Warwick; Kian Madjedi; Praveen Patel; Marleen Lentjes; Paul Foster; Anthony Khawaja

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2264. doi:

Long-Term Alcohol Consumption and Risk of Exfoliation Glaucoma among US Health Professionals OPEN ACCESS

Jae Kang; Akiko Hanyuda; Bernard Rosner; Janey L Wiggs; Louis R Pasquale

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2265. doi:

Impact of Smoking on Visual Field Progression OPEN ACCESS

Golnoush Mahmoudinezhad; Takashi Nishida; Robert N Weinreb; Sally Baxter; Medi Eslani; Jeffrey M Liebmann; Massimo A. Fazio; Christopher A Girkin; Linda Zangwill; Sasan Moghimi

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2266. doi:

Association of commonly used systemic medications with glaucoma prevalence and intraocular pressure across Europe: the E3 Consortium OPEN ACCESS

Alexander Karl-Georg Schuster; Joëlle Vergroesen; Kelsey Vernon Stuart; Geir Bertelsen; Fotis Topouzis; Mukharram Bikbov; Catherine Creuzot-Garcher; Cecile Delcourt; Rufino Silva; Nomdo M Jansonius; Franziska G Rauscher; Caroline C W Klaver; Norbert Pfeiffer; Wishal D Ramdas; Anthony P Khawaja

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2267. doi:

Plant-based low carb diet and other risk factors in relation to incident primary open-angle glaucoma characterized by autonomously determined visual field loss patterns OPEN ACCESS

Akiko Hanyuda; Mengyu Wang; Bernard Rosner; Janey L Wiggs; Tobias Elze; Louis R Pasquale; Jae Kang

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2268. doi:

Bidirectional association of glaucoma and chronic kidney disease: a systematic review and meta-analysis of two million participants OPEN ACCESS

Faye Yu Ci Ng; Harris Jun Jie Muhammad Danial Song; Benjamin Kye Jyn Tan; Chong Boon Teo

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2269. doi:

Hedgehog signaling promotes expansion of Meibomian Gland stem cells in vivo OPEN ACCESS

Xuming Zhu; Mingang Xu; Marina Grachtchouk; Andrzej A Dlugosz; Sarah E Millar

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2270. doi:

Pathophysiological consequences of *Soat1*/SOAT1 inactivation for the ocular surface and Meibomian gland homeostasis OPEN ACCESS

Amber Wilkerson; Igor A Butovich

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2271. doi:

Characterization of Mouse Meibomian glands by single cell RNA sequencing. OPEN ACCESS

James V Jester; Julie Wiedemann; Shelley Lane; Ghaidaa Kashgari; Donald Brown; Bogi Andersen

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2272. doi:

Sensing local osmolarity of the tear film on the corneal surface using fluorescent dye-loaded nanoliposomes OPEN ACCESS

Sudhir H Ranganath; M.Y. Thanuja; Joseph A Bonanno; Sangly P Srinivas

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2273. doi:

Novel murine model for autoantibody-induced dry eye disease OPEN ACCESS

Simon Kaja; Mananna Bacellar-Galdino; Christine Mun; Anita K. Ghosh; Sandeep Jain

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2274. doi:

Effects of Age and Genetic Diversity Background on Ectopic Lymphoid Structures in the Lacrimal Gland OPEN ACCESS

Cintia S De Paiva; Kaitlin Scholand; Helen P Makarenkova; Zhiyuan Yu

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2275. doi:

Reduced RXRα signaling increases dry eye disease inducing γδT17 cells in the conjunctiva OPEN ACCESS

Stephen C Pflugfelder; Jahan Alam; Ghasem Yazdanpanah; Rinki Ratnapriya; Nicholas Borcherding; Cintia S De Paiva; De-Quan Li; Rodrigo Guimaraes de Souza; Zhiyuan Yu

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2276. doi:

Deletion of Zeb1 blocks injury-induced endothelial mesenchymal transition in the mouse corneal endothelium *in vivo* OPEN ACCESS

J. Martin Heur; JeongGoo Lee

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2277. doi:

RNA-Seq based transcriptome analysis of corneal endothelial cells derived from the patients with Fuchs endothelial corneal dystrophy OPEN ACCESS

Tatsuya Nakagawa; Naoki Okumura; Yuya Komori; Naoya Haniada; Yuichi Tokuda; Masakazu Nakano; Theofilos Tourtas; Ursula Schlötzer-Schrehardt; Friedrich Kruse; Noriko Koizumi

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2278. doi:

Transcriptomic and metabolomic analyses of Fuchs endothelial corneal dystrophy and bullous keratopathy OPEN ACCESS

Takefumi Yamaguchi; Yukari Yagi-Yaguchi; Takanori Suzuki; Hirotsugu Kasamatsu; Kazunari Higa; Masahiro Sugimoto; Hisashi Noma; Jun Shimazaki

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2279. doi:

Effects of long-term application of topical ROCK inhibitor on corneal endothelium and Descemet's membrane of TAZ deficient mice OPEN ACCESS

Sara M Thomasy; Sangwan Park; Krista Cosert; Michelle Mccorkell; Nayeli Echeverria; Sophie M Le; Christopher J Murphy; Vijaykrishna Raghunathan; Brian C Leonard

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2280. doi:

Berberine rescues corneal endothelial cell loss in Fuchs dystrophy OPEN ACCESS

Raymond Wong; Neha Deshpande; Varun Kumar; Ula V Jurkunas

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2281. doi:

Development of a research pipeline to identify novel treatments for Fuchs Endothelial Corneal Dystrophy OPEN ACCESS

Matilda F Chan; Szu-Yu Kuo; Finn Wolfreys; Eric Ding; Martin Kampmann; Jason E. Gestwicki; Peipei Pan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2282. doi:

Sex Difference in Congenital Hereditary Endothelial Dystrophy and a *Slc4a11*$^{-/-}$ mouse model OPEN ACCESS

Wenlin Zhang; Dominic Williams; Onyinye Onyia; Marco Morselli; Matteo Pellegrini; Arthur Arnold; Anthony J Aldave

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2283. doi:

Monocular visual acuity does not accurately represent function of the amblyopic eye during binocular viewing OPEN ACCESS

Eileen E Birch; Reed M Jost; Lindsey A Hudgins; Sarah E Morale; Matt Donohoe; Krista R Kelly

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2284. doi:

Fixation Eye Movement Abnormalities, Stereopsis and Inter-ocular suppresion in Amblyopia. OPEN ACCESS

Fatema Firoz Ghasia; Cody Dulaney; Jordan Murray

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2285. doi:

Dose-response relationship and treatment efficiency for patching vs gaming therapy for amblyopia OPEN ACCESS

Aveen Kadhum; Emily Tan; Maria Fronius; Maurits V. Joosse; Huibert Jan Simonsz; Sjoukje E Loudon

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2286. doi:

Bilateral Lateral Rectus Muscle Recessions Versus Recess-Resect for Childhood Intermittent Exotropia (IXT): 8-year Outcomes OPEN ACCESS

Sean Donahue; Danielle L Chandler; Rui Wu; Christine Law; Raymond G Areaux; Fatema Firoz Ghasia; Justin D Marsh; Christina A Esposito; Zhuokai Li; Raymond T Kraker; Susan A Cotter; Jonathan M Holmes

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2287. doi:

Effects of subthalamic deep brain stimulation (DBS) on binocular coordination of saccades and strabismus angle in Parkinson's disease (PD) OPEN ACCESS

Palak Gupta; Sinem Balta Beylergil; Jordan Murray; Jonathan Jacobs; Aasef Shaikh; Fatema Firoz Ghasia

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2288. doi:

Neural recordings of extraocular muscle motoneurons do not show evidence for selective innervation of muscle compartments OPEN ACCESS

Samuel Adade; Vallabh E Das

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2289. doi:

Amblyopia Impacts on Activity within Human V2/V3 Thin and Thick Stripes during Binocular Summation OPEN ACCESS

Shahin Nasr; Bryan Kennedy; Jan Skerswetat; Nicolas Aycardi; Amanda Nabasaliza; Roger BH Tootell; Peter J Bex; David G Hunter

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2290. doi:

Metabolite and lipid biomarkers associated with intraocular pressure and inner retinal morphology: results from the UK Biobank OPEN ACCESS

Louis R Pasquale; Janey L Wiggs; Anthony Khawaja; Jae Kang; Jihye Kim; Pirro G Hysi; Tobias Elze; Jessica Lasky-Su; Oana Zeleznik

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2291. doi:

An objective and easy-to-use glaucoma severity classification system based on artificial intelligence OPEN ACCESS

Xiaoqin Huang; Fatemeh Saki; Mengyu Wang; Tobias Elze; Michael Boland; Louis Pasquale; Chris A Johnson; Siamak Yousefi

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2292. doi:

Physiology-informed machine learning to enable precision medical approaches of intraocular pressure and blood pressure management in glaucoma OPEN ACCESS

Giovanna Guidoboni; Daphne Zou; Maggie Lin; Roberto Nunez; Rajat Rai; James Keller; Christopher Wikle; Erin L. Robinson; Alice Verticchio; Brent A Siesky; Alon Harris

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2293. doi:

Forecasting Risk of Future Rapid Glaucoma Worsening Using Early Visual Field, Optical Coherence Tomography and Clinical Data OPEN ACCESS

Patrick Herbert; Kaihua Hou; Chris Bradley; Michael V Boland; Pradeep Y Ramulu; Mathias Unberath; Jithin Yohannan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2294. doi:

Primary Open-Angle Glaucoma Detection with Vision Transformer: Improved Generalization Across Independent Fundus Photograph Datasets OPEN ACCESS

Christopher Bowd; Rui Fan; Kamran Alipour; Mark Christopher; Nicole Brye; James A. Proudfoot; Michael Henry Goldbaum; Akram Belghith; Christopher A Girkin; Massimo A. Fazio; Jeffrey M Liebmann; Robert N Weinreb; Michael Pazzani; David Kriegman; Linda Zangwill

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2295. doi:

The Impact of Bilateral Visual Field Patterns on Quality of Life Parameters OPEN ACCESS

Taibo Li; Chris Bradley; Aleksandra Mihailovic; Jasdeep Sabharwal; Pradeep Y Ramulu; Lucy Q Shen; Mengyu Wang; Jithin Yohannan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2296. doi:

Factors Involved in Developing an Open Electronic Health Record Glaucoma Dataset OPEN ACCESS

Jimmy S Chen; Michael F Chiang; Michelle Hribar

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2297. doi:

α-klotho overexpression and age-related changes in mouse lenses across lifespan OPEN ACCESS

Juliet A Moncaster; Douglas Parsons; Olga Minaeva; Carmela Abraham; Lee E Goldstein

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2298. doi:

ATP's Potential Role as a Hydrotrope Thereby Preventing Intralenticular Protein Aggregation OPEN ACCESS

Jack V Greiner; Thomas Glonek

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2299. doi:

Looking for hidden cues: can the function of the moonlighting ocular protein βA3/A1-crystallin be regulated by the signals hidden in its coding sequence? OPEN ACCESS

Nadezda A Stepicheva; Ekaterina Volkova; Victoria Koontz; PENG SHANG; Haitao Liu; Sayan Ghosh; Anastasiia Strizhakova; Olivia Chowdhury; Rachel Daley; J. Samuel Zigler; Stacey L Hose; Debasish Sinha

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2300. doi:

Creation of a semi-synthetic γS-crystallin to support studies of age-related modifications in cataract OPEN ACCESS

Larry L David; Victoria S Halls; Keith Zientek; Francis I Valiyaveetil; Ravikumar Reddi; Kate A Haverson; Ujwal P Shinde; Kirsten J Lampi

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2301. doi:

A Novel Method to Improve Protein Solubility and Elasticity in Aged Human Lenses OPEN ACCESS

SUDIPTA PANJA; Rooban B. Nahomi; Johanna Rankenberg; Mihyun Nam; Cole R Michel; Hanmant Gaikwad; Ram H Nagaraj

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2302. doi:

Mechanism of AQP5 trafficking in lens fiber cells OPEN ACCESS

Kevin L Schey; Romell B Gletten

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2303. doi:

Deamidation in human gammaS-crystallin increases susceptibility to glutathione induced oxidation and aggregation OPEN ACCESS

Kirsten J Lampi; Keith Zientek; Samuel G Wheeler; David Anderson; Ujwal P Shinde; Larry L David

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2304. doi:

2-Hydrazino-4,6-dimethylpyrimidine (2-HDP) as a novel therapeutic for the neurovascular pathology of diabetic retinopathy OPEN ACCESS

Josy Augustine; Evan P Troendle; Thomas Friedel; Eimear M Byrne; Paul Canning; Peter Barabas; Martin B Ulmschneider; Alan W Stitt; Tim M Curtis

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2305. doi:

THR-687, a potent pan-RGD integrin antagonist, protects against retinal vascular permeability, inflammation and reactive gliosis in the diabetic rat OPEN ACCESS

Tine Van Bergen; Astrid De Vriese; Bart Jonckx; Kelly Vanhulst; Marc Vanhove; Michaël Porcu; Elke Vermassen; Philippe Barbeaux; Alan W Stitt

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2306. doi:

Association of Aqueous Retinol Binding Protein 3 (RBP3) and Diabetic Retinopathy Severity OPEN ACCESS

Tanvi Chokshi; Ward Fickweiler; Margalit Mitzner; I-Hsien Wu; Tahani Bourmenna; Devon Robinson; Hyunseok Park; Kyoungmin Park; Lloyd Paul Aiello; Jennifer K Sun; George King

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2307. doi:

A Phase I/IIa trial examining the safety and efficacy of BI-X in patients with diabetic macular ischemia and diabetic retinopathy: The HORNBILL study OPEN ACCESS

Sobha Sivaprasad; Quan Dong Nguyen; Chirag Jhaveri; Harsha Sen; David M Brown; Raj K Maturi; Abosede Cole; Andrea Giani; Elizabeth Pearce

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2308. doi:

Maintenance of intestinal ACE2 minimizes the risk of developing diabetic retinopathy in type 1 diabetes OPEN ACCESS

Ram Prasad; Jason Floyd; Bright Asare-Bediako; Dibyendu Chakraborty; Yvonne Adu-Agyeiwaah; Angela Harbour; Qiuhong Li; Maria B Grant

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2309. doi:

Intravitreal administration of AAV2-SIRT1 reverses diabetic retinopathy (DR) in a murine model of type 2 diabetes (T2D) OPEN ACCESS

Maria B Grant; Yvonne Adu-Agyeiwaah; Cristiano P. Vieira; Bright Asare-Bediako; Sandra S Hammer; Sergio Li Calzi; Julia V Busik

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2310. doi:

A single cell multi-omics atlas of the human retina OPEN ACCESS

Xuesen Cheng; Qingnan Liang; Jun Wang; Leah A Owen; Yumei Li; Margaret M DeAngelis; Rui Chen

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2311. doi:

Single-cell analysis reveals decreased metabolism in mice with phase I ROP OPEN ACCESS

Zhongjie Fu; Wenjun Yan; Jarrod C. Harman; William Allen; Edward Bull; Jay Yang; Minji Ko

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2312. doi:

Single-cell Multiomics Analysis of Human Retinal Development OPEN ACCESS

Zhen Zou; Xuesen Cheng; Yumei Li; Salma Ferdous; Jin Li; Antonio Jacobo Lopez; Ala Moshiri; Rui Chen

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2313. doi:

Topological analysis of single-cell hierarchy reveals inflammatory glial landscape of macular degeneration OPEN ACCESS

Brian Palmer Hafler; Manik Kuchroo; Marcello DiStasio; Eric Song; Le Zhang; Maryam Ige; Amar Sheth; Madhvi Menon; Alexander Tong; Yu Xing; Scott Gigante; Jessie Huang; George Mourgkos; Smita Krishnaswamy; Rahul Dhodapkar; Guy Wolf

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2314. doi:

Single cell RNA sequencing reveals the role of *Myelin regulatory factor (MYRF)* in regulating melanogenesis and cell structure during retinal pigment epithelial development. OPEN ACCESS

Lev Prasov; Michelle L. Brinkmeier; Su Qing Wang; Athera Yakoo; Leonard Y. Cheung

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2315. doi:

Molecular Characterization of Neovascular AMD in Human Eyes using Spatial Transcriptomics and Single Cell RNA Sequencing OPEN ACCESS

Robert F Mullins; Andrew P Voigt; Todd E Scheetz; Nathaniel Kevin Mullin; Miles J Flamme-Wiese; Li-Chun Lin; Edwin M Stone; Ian Han; Budd A. Tucker

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2316. doi:

Spatial single cell atlas of the mouse retina using MERFISH OPEN ACCESS

Salma Ferdous; Jongsu Choi; Jin Li; Rui Chen

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2317. doi:

Multimodal Imaging, OCT B-Scan Localization, and *En face* OCT Detection of Macular Hyperpigmentation in Eyes with Intermediate AMD OPEN ACCESS

Rita Laiginhas; Jeremy Liu; Mengxi Shen; Yingying Shi; Omer Trivizki; Nadia K Waheed; Giovanni Gregori; Philip J Rosenfeld

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2318. doi:

Automated detection of morphologic changes on SD-OCT leading toward outer retinal atrophy in intermediate age-related macular degeneration in the prospective PINNACLE trial OPEN ACCESS

Sophie Riedl; Wolf-Dieter Vogl; Oliver Leingang; Hrvoje Bogunovic; Lars Fritsche; Toby Prevost; Daniel Rueckert; Hendrik P Scholl; Sobha Sivaprasad; Andrew J Lotery; Ursula Schmidt-Erfurth

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2319. doi:

Prospective, longitudinal feasibility study: daily self-imaging with home OCT in neovascular age-related macular degeneration OPEN ACCESS

Yingna Liu; Nancy M Holekamp; Jeffrey S Heier

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2320. doi:

Quantification of lesion progression of incomplete and complete retinal pigment epithelium and outer retinal atrophy in age-related macular degeneration OPEN ACCESS

Steffen Schmitz-Valckenberg; Marlene Sassmannshausen; Martina Braun; Verena Steffen; Simon S Gao; Lee Honigberg; Daniela Ferrara; Maximilian Pfau; Frank G Holz

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2321. doi:

Adaptive optics phenotypes of intermediate age-related macular degeneration OPEN ACCESS

Ahmed M Hagag; Sophie Riedl; Toby Prevost; Lars Fritsche; Daniel Rueckert; Hendrik P Scholl; Ursula Schmidt-Erfurth; Sobha Sivaprasad; Andrew J Lotery

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2322. doi:

Does outer retinal thickness represent another clinical biomarker for predicting geographic atrophy growth? OPEN ACCESS

Ruikang K Wang; Qinqin Zhang; Zhongdi Chu; Yuxuan Cheng; Hao Zhou; Yingying Shi; Mengxi Shen; William J Feuer; Giovanni Gregori; Philip J Rosenfeld

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2323. doi:

Ratio of photoreceptor to retinal pigment epithelium loss as an important predictor of GA growth and therapeutic efficacy OPEN ACCESS

Ursula Schmidt-Erfurth; Sophie Riedl; Wolf-Dieter Vogl; Julia Mai; Gregor Sebastian Reiter; Dmitrii Lachinov; Christoph Grechenig; Alex McKeown; Lukas Scheibler; Hrvoje Bogunovic

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2324. doi:

The Most Influential Articles on Artificial Intelligence in Ophthalmology OPEN ACCESS

Maxine Joly-Chevrier; Anne Xuan-Lan Nguyen; Isabelle Hardy

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2325. doi:

Automated Machine learning models applied to Optical Coherence Tomography Angiography for detection and classification of Diabetic Retinopathy in Diabetes Mellitus type 1 OPEN ACCESS

Maximiliano Olivera; Carolina Bernal-Morales; Anibal Alé-Chilet; Marina Barraso; Sara Marin; Silvia Feu; Josep Rosmés; Cristian Oliva; Teresa Hernandez; Irene Vila; Robbert Struyven; Mariana Batista-Gonçalves; Siegfried Wagner; Pearse Andrew Keane; Javier Zarranz-Ventura

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2326. doi:

Leveraging unlabeled OCT data for training better deep learning vision-transformer models OPEN ACCESS

Theodore Spaide; Yelena Bagdasarova; Cecilia S Lee; Aaron Y Lee

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2327. doi:

Predicting contrast sensitivity functions with digital twins generated by Hierarchical Bayesian modelling OPEN ACCESS

Zhong-Lin Lu; Yukai Zhao; Luis A Lesmes; Michael Dorr

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2328. doi:

Federated learning for collaborative clinical diagnosis and disease epidemiology in retinopathy of prematurity OPEN ACCESS

Adam H Hanif; Charles Lu; Ken Chang; Praveer Singh; Aaron S Coyner; James Brown; Susan Ostmo; R.V. Paul Chan; Daniel Rubin; Michael F Chiang; Jayashree Kalpathy-Cramer; J. Peter Campbell

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2329. doi:

Detection of graft failure in post-keratoplasty patients by Automated Deep Learning OPEN ACCESS

Carlos Mendez Mangana; Anton Barraquer Kargacin; Jorge Fernandez-Engroba; Pedro Tañá; Gil Santolaria; Maximiliano Olivera; Rafael I Barraquer

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2330. doi:

THE USE OF SMARTPHONES FOR THE COLLECTION OF DIGITAL HABITS BIG DATA AND ITS

CORRELATION WITH CLINICAL REFRACTION IN A UNIVERSITY POPULATION OPEN ACCESS

Norberto Lopez-Gil; Rosa Salmerón-Campillo; Andres Gonzalez-Diaz; David Zarzoso-Fernandez; David Aparicio; Matt Jaskulski

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2331. doi:

A first in class Virus-Like Drug Conjugate (VDC) shows anti-tumor activity in Cancers that Commonly Metastasize to the Choroid OPEN ACCESS

Anneli Savinainen; Rhonda Kines; Cadmus C Rich

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2616. doi:

Role of exosomes in liver metastasis of uveal melanoma OPEN ACCESS

Angels Fabra; Raquel Ramos; Eduard Cabré; Antonia Vinyals; Jose Maria Caminal; J Vaquero; Daniel Lorenzo; Josep M. Piulats; Montse Gomá; Cristina Gutierrez; Ester Gonzalez Sanchez; I. Fabregat

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2617. doi:

Metabolic expression patterns from peripheral blood distinguish between low and high risk of metastasizing in uveal melanoma OPEN ACCESS

Daniel de Bruyn; Michiel Bongaerts; Dion Paridaens; Nicole Naus; Annelies de Klein; Emine Kilic; Erwin Brosens

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2618. doi:

pRB-depleted pluripotent stem cell retinal organoids mimic retinoblastoma development OPEN ACCESS

Agata Rozanska; Rodrigo Cerna-Chavez; Rachel Queen; Joseph Collin; Darin Zerti; Birthe Dorgau; Chia Shyan Beh; Tracey Davey; Jonathan Coxhead; Rafiqul Hussain; Jumana Al-Aama; David Steel; Nissim Benvenisty; Lyle Armstrong; Manoj Parulekar; Majlinda Lako

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2619. doi:

Development of a preclinical model of retinoblastoma in rats mimicking different clinical presentations OPEN ACCESS

Denis Malaise; François Doz; Nathalie Cassoux; Carole Thomas

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2620. doi:

FOXD1 is involved in uveal melanocyte development and associated with high-risk uveal melanoma OPEN ACCESS

Quincy van den Bosch; Josephine Nguyen; Tom Brands; Thierry van den Bosch; Robert Verdijk; Dion Paridaens; Nicole Naus; Annelies de Klein; Emine Kilic; Erwin Brosens

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2621. doi:

Single cell characterization reveals more frequent *IGHV3* and *IGHV4* gene usage and the correlation with *MYD88* mutation in primary vitreoretinal lymphoma OPEN ACCESS

Meng Wang; Tong Seng Lim; Nagavalli DO Somasundaram; Meihui Wu; Anita Chan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2622. doi:

Identification of autosomal recessive novel genes and retinal phenotypes in members of the solute carrier (SLC) superfamily OPEN ACCESS

Dror Sharon; Talya Millo; Jose Antonio Rivera; Alexey Obolensky; Dvorah Marks-Ohana; Enosh Wilhelm; Prakadee Gopalakrish; Menachem Gross; Boris Rosin; Mor Hanany; Anna Maria Tracewska; Ora Schueler-Furman; Susanne Roosing; Eyal Banin

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2623. doi:

Phenotype-Based Genetic Analysis Reveals Missing Heritability of *ABCA4*-Related Retinopathy: Deep Intronic Variants and Copy Number Variations OPEN ACCESS

Tian Lu; Chunjie Chen; Yuning Song; Xiaohui Zhang; Ke Xu; Yue Xie; Zi-Bing Jin; Yang Li

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2624. doi:

BMPR1B identified as a novel human ocular coloboma gene through cross-species meta-analysis OPEN ACCESS

Nicholas Owen; Maria Toms; Rodrigo M Young; Jonathan Eintracht; Hajrah Sarkar; . Genomics England Research Consortium; Brian Brooks; Mariya Moosajee

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2625. doi:

Genetic analysis of familial AMD cohort identifies genes associated with disease susceptibility OPEN ACCESS

Lina Zelinger; Tammy M Martin; Jayshree Advani; Milton English; Alan Kwong; Claire Malley; Jennifer Maykoski; YURI SERGEEV; Robert N Fariss; Emily Y Chew; Michael L Klein; Anand Swaroop

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2626. doi:

Spatial modeling of variants in complement genes associated with age-related macular degeneration OPEN ACCESS

Michelle Grunin; Sarah de Jong; Ellen Palmer; Bowen Jin; David Rinker; Christopher Moth; John A Capra; Jonathan L Haines; William S Bush; Anneke I Den Hollander

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2627. doi:

Identification and characterization of a novel retina-specific lncRNA upstream *ABCA4* with a potential role in *ABCA4*-associated inherited retinal disease OPEN ACCESS

Alfredo Dueñas Rey; Víctor López Soriano; Zelia Corradi; Claire-Marie Dhaenens; Manon Boucksert; Jasper Verwilt; Avril M Watson; Majlinda Lako; Eva D'haene; Karla Alejandra Ruiz Ceja; Sandro Banfi; Miriam Bauwens; Frans P Cremers; Steve Lefever; Elfride De Baere; Frauke Coppieters

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2628. doi:

Integrated multi-omics analysis to dissect a *cis*-regulatory role of ultraconserved non-coding elements (UCNEs) in human developing and adult retina OPEN ACCESS

Víctor López-Soriano; Alfredo Dueñas Rey; Stijn Van de Sompele; Frauke Coppieters; Andrew R Webster; Miriam Bauwens; Elfride De Baere

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2629. doi:

Breast, Cervical and Colorectal Cancer Screening among Canadians with and without Self-Reported Visual Impairment OPEN ACCESS

Milena Cioana; James H.B. Im; Yvonne Buys; Hatem Krema; Sophia Liu; Peng Yan; Yaping Jin

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2630. doi:

Skin Carotenoid Assessment to Detect Vitamin A Deficiency in Children and Pregnant Women in Nepal OPEN ACCESS

Raba Thapa; Sanduk Ruit; Emmanuel Kofi Addo; Paul S Bernstein

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2631. doi:

Impact of indeterminant ranges around the cut-off for antibody positivity on the use of serology for trachoma monitoring OPEN ACCESS

Xinyi Chen; Beatriz Munoz; Harran Mkocha; Charlotte Gaydos; Laura Dize; Thomas Quinn; Sheila K West

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2632. doi:

Preterm birth and ophthalmological impairments at $5^{1/2}$ years: EPIPAGE-2 cohort study. OPEN ACCESS

thibaut Chapron; Véronique Pierrat; Georges Caputo; Mathilde Letouzey; Elsa Kermorvant; Amandine Barjol; Guylene Le Meur; Valérie Benhamou; Laetitia Marchand-Martin; Pierre-Yves Ancel; Héloise Torchin

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2633. doi:

Adherence to the Mediterranean Diet and Geographic Atrophy Enlargement Rate in the Age-Related Eye Disease Study 2 OPEN ACCESS

Tiarnan D L Keenan; Elvira Agron; Julie A Mares; Emily Y Chew

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2634. doi:

The International Globe and Adnexal Trauma Epidemiological Eye Study (IGATES) registry. OPEN ACCESS

Annette K Hoskin; Yunia Irawati; Mehul Shah; Prem S Subramanian; Mohammad Soleimani; Alok Sen; Sundaram Natarajan; Jose Dalma; Eli Pradhan; Apoorva Ayachit; Dr Giridhar; Manisha Agarwal; Amer Awan; Kasturi Bhattacharjee; Stephanie L Watson; Rupesh Vijay Agrawal

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2635. doi:

Dynamic Prediction Model for Treatment-requiring Retinopathy of Prematurity OPEN ACCESS

Gui-Shuang Ying; Yinxi Yu; Gil Binenbaum

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2636. doi:

BMP3 suppresses embryonic corneal myofibroblast phenotype by promoting focal adhesion turnover and αSMA fiber disassembly OPEN ACCESS

Peter Lwigale; James Spurlin

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2637. doi:

A biomimetic hydrogel-based therapeutic approach for preventing corneal scarring OPEN ACCESS

Vivek Singh; Shibu Chameettachal; Animith Venuganti; Yash Parekh; Deeksha Prasad; Abhishek Sahoo; Kiran Bokara; Falguni Pati; Sayan Basu

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2638. doi:

In-Situ Repair of Corneal Stroma using A Light-Curable Hydrogel from Porcine Corneal Extracellular Matrix OPEN ACCESS

Ali R Djalilian; Ghasem Yazdanpanah; Xiang Shen; Tara Thanh Nguyen; Khandaker Anwar; Oju Jeon; Yizhou Jiang; Mohammad Pachenari; Yayue Pan; Tolou Shokuhfar; Mark Rosenblatt; Eben Alsberg

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2639. doi:

Epigenetic mechanism to induce dedifferentiation of corneal myofibroblast to fibroblast OPEN ACCESS

Rajiv R Mohan; Praveen Kumar Balne; Nishant Rajiv Sinha; Alexandria Hofmann; Nicholas Hauser; Ratnakar Tripathi; Prashant Sinha; Suneel Gupta; Kempuraj Duraisamy

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2640. doi:

Novel hyaluronic acid-based corneal stromal replacement OPEN ACCESS

Alfonso Iovieno; Roza Ghaemi; Vikramaditya Yadav; Sonia Yeung

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2641. doi:

Latent Transforming Growth Factor-β Binding Protein 1 expression in the corneal stroma OPEN ACCESS

Edgar M Espana; Sarah Salvator; Mei Sun; Devon Cogswell

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2642. doi:

Schlemm's Canal Outflow Resistance System (SCORS) visualized by Clarification and Immunohistochemistry (IHC) OPEN ACCESS

Elizabeth Martin; Murray A Johnstone

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2643. doi:

SMAD4-β-catenin nuclear complex inhibits TGFβ2-induced pathological changes in the trabecular meshwork. OPEN ACCESS

Chenna Kesavulu Sugali; Naga pradeep Rayana; Jiannong Dai; Weiming Mao

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2644. doi:

Understanding the requirement of AP-2β in development of the Trabecular Meshwork OPEN ACCESS

Aftab Taiyab; Japnit Dham; Fatima Shirazee; Monica Akula; Trevor Williams; Judith A West-Mays

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2645. doi:

Therapeutics of stem cell secretome in dexamethasone-induced ocular hypertension mice OPEN ACCESS

Yiqin Du; Ajay Kumar

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2646. doi:

Spatial cluster analysis reveals how segmental outflow patterns change over time in living mice OPEN ACCESS

Darryl R Overby; Tiffany Baptiste; Daniel Duffill; Ester Reina-Torres

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2647. doi:

Clusterin modulates IOP homeostasis by regulating the actin cytoskeleton and attenuating profibrotic responses in TM OPEN ACCESS

Avinash Soundararajan; Padmanabhan P Pattabiraman

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2648. doi:

Role of Septins in Regulation of Actin Cytoskeletal Organization in Trabecular Meshwork Cells OPEN ACCESS

Pallavi Gorjavolu; Rupalatha Maddala; William Bachman; Nikolai P Skiba; Rakesh K. Singh; Vasantha Rao

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2649. doi:

Changes in Optic Nerve Glia Induced by Astrocyte-specific Deletion of STAT3 OPEN ACCESS

Paul F Cullen; Daniel Sun

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2650. doi:

Astrocytes of the optic nerve head in pig and human eyes have no aquaporin channels OPEN ACCESS

Harry A Quigley; Casey Keuthan; Mary Pease; Elizabeth Kimball

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2651. doi:

Inflammation modulates regeneration following acute or chronic retinal damage in zebrafish OPEN ACCESS

Maria Inbarne; David Hyde

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2652. doi:

Single-cell RNA sequencing analysis of neurogenic competence in Müller glia in a rabbit retinal injury model OPEN ACCESS

Clayton Pio Santiago; Megan Gimmen; Yuchen Lu; Ying Xin; Minda McNally; Tyler Creamer; Linda Orzolek; Thomas Zollner; William Schubert; Khaled Nassar; Charles Eberhart; Jiang Qian; Seth Blackshaw; Mandeep Singh

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2653. doi:

Non-random cellular distribution of the mitochondrial 3243A>G variant in the human retina and choroid and its impact on disease phenotype. OPEN ACCESS

Nathaniel Kevin Mullin; Andrew P Voigt; Miles J Flamme-Wiese; Xiuying Liu; Kelsey L Wieland; Edwin M Stone; Budd A. Tucker; Robert F Mullins

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2654. doi:

Retinoschisin deficiency induces persistent aberrant waves of activity affecting neuroglial signaling in the developing retina OPEN ACCESS

Cyril Eleftheriou; Carlo Corona; Shireen Khattak; Elena Ivanova; Paola Bianchimano; Yang Liu; Duo Sun; Rupesh Singh; Julia Batoki; J Jason McAnany; Neal S Peachey; Carl Romano; Botir Sagdullaev

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2655. doi:

A chronic proinflammatory retinal microenvironment progresses neurodegeneration in a spontaneous model of inherited retinal dystrophy OPEN ACCESS

TJ Hollingsworth; Xiangdi Wang; William White; Usman Baguda; Raven Simpson; Monica M Jablonski

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2656. doi:

Improving detection of depression in adults with vision impairment OPEN ACCESS

Edine van Munster; Claire Nollett; Edith Holloway; Ruth M A van Nispen; Otto Maarsingh; Martijn Heymans; Hilde Petronella Adriana van der Aa

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2657. doi:

Mediating factors in the link between visual impairment and psychiatric disorders OPEN ACCESS

Tyler Prister; Jo Ellen Wilson; Lindsey McKernan; Sapna Gangaputra

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2658. doi:

Prevalence of Charles Bonnet syndrome among UK visually impaired military veterans and associated impact of visual hallucinations during the COVID-19 pandemic OPEN ACCESS

Lee Jones; Matthew Lee; Renata Gomes; Mariya Moosajee

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2659. doi:

Impact of COVID-19 on healthcare access for older adults with combined hearing and vision loss: A Canada-wide survey of healthcare workers OPEN ACCESS

Atul Jaiswal; Peter Holzhey; Shreya Budhiraja; Abinethaa Paramasivam; Sangeetha Santhakumaran; Norman Robert Boie; Marie Savundranayagam; Claude Vincent; Edeltraut Kröger; Walter Wittich

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2660. doi:

An Evolution of Telerehabilitation for Low Vision Follow-ups OPEN ACCESS

Ava K Bittner; Nicole Ross

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2661. doi:

Developing a care delivery framework for older adults with chronic eye disease and vision impairment: A mixed methods study on patient perspectives OPEN ACCESS

Fahd Naufal; Xinxing Guo; Catherine Kerr-Niermann; Judith E Goldstein

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2662. doi:

Psychometric validation of patient-reported outcome (PRO) and observer-reported outcome (ObsRO) measures in Retinitis Pigmentosa and Leber Congenital Amaurosis OPEN ACCESS

Isabelle S Audo; Nicola Williamson; Melissa Barclay; Joel Sims; Kieran Boparai; Francesco Patalano; Christel Naujoks; Claudio Spera; Judit Banhazi; Paul O'Brien; Christine Kay; Jane Green; Todd Durham; Helena Bradley; M Dominik Fischer

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2663. doi:

Association of retinal fractal dimension with incident cardiovascular events in a hospital-attending population in London, United Kingdom OPEN ACCESS

Siegfried Wagner; Robbert Struyven; Mario Cortina-Borja; Alastair K Denniston; NIKOLAS PONTIKOS; Emanuele Trucco; Muthu Rama Krishnan Mookiah; Konstantinos Balaskas; Axel Petzold; Jugnoo Rahi; Pearse Andrew Keane

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2664. doi:

A Novel Approach to Estimating Choroidal Lesion Thickness Using 2D Optomap Images OPEN ACCESS

Michael Yu; Michael Heiferman; Edward Korot; Prithvi Mruthyunjaya

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2665. doi:

Retinal vascular features as new biomarkers for aortic aneurysms and aortic dissections OPEN ACCESS

Yu Huang; Danli Shi; Xiayin Zhang; Zhuoting Zhu; Xueli Zhang; Shulin Tang; Xianwen Shang; Cong Li; Mingguang He

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2666. doi:

Late hyperfluorescent plaque in type 1 choroidal neovascularization in age-related macular degeneration and central serous chorioretinopathy OPEN ACCESS

Marta Zola; Elodie Bousquet; Catherine Favard; Anthony Gigon; Irmela Mantel; Francine F Behar-Cohen

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2667. doi:

Proliferation of intraretinal vessels and disease progression in Macular Telangiectasia Type 2 (MacTel) OPEN ACCESS

Lukas Goerdt; Kristina Hess; Philipp Herrmann; Frank G Holz; Simone Tzanids

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2668. doi:

Novel retinopathy in pediatric retinal vasculitis: long term follow up OPEN ACCESS

Cigdem Yasar; Hashem Ghoraba; Jonathan Regenold; Chi Mong Or; Muhammad Sohail Halim; Gunay Uludag; Jaclyn Hwang; Irmak Karaca; Azadeh Mobasserian; Amir Akhavanrezayat; Mimbay Yasar; Hassan Khojasteh; Yasir J. Sepah; Diana V Do; Quan Dong Nguyen

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2670. doi:

Evaluating the Risk of Retinal Vascular Occlusion among COVID-19 patients OPEN ACCESS

Haig Pakhchanian; Rahul Raiker; Masumi Asahi; Don Pham; Alison Hong; Monica Dalal

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2671. doi:

Visit Adherence and Visual Acuity in SCORE2 OPEN ACCESS

Brian L VanderBeek; Yinxi Yu; Neal Oden; Paul C Van Veldhuisen; Barbara A Blodi; Michael S Ip; Ingrid U Scott

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2672. doi:

Predicting outcomes and treatment frequency following monthly intravitreal aflibercept for macular edema secondary to central retinal vein occlusion: a machine learning model approach OPEN ACCESS

Nitish Mehta; Yasha Modi; Weiming Du; Fabiana Q Silva; Hadi Moini; Rishi P Singh

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2673. doi:

36-month outcomes of VEGF inhibitors for treatment-naïve Central Retinal Vein Occlusion: Data from the Fight Retinal Blindness! registry. OPEN ACCESS

Adrian Hunt; Vuong Nguyen; Sanjeeb Bhandari; Jennifer J Arnold; Ian McAllister; Hemal Mehta; Alessandro Invernizzi; David Squirrell; Theodorus Ponsioen; Pierre-Henry GABRIELLE; Louise O' Toole; Javier Zarranz-Ventura; Daniel Barthelmes; Mark C Gillies

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2674. doi:

A novel HIF1α inhibitor KC7F2 attenuates oxygen-induced retinal neovascularization OPEN ACCESS

Xiaoyu Tang; Kaixuan Cui; Peiqi Wu; Yue Xu; Xiaoling Liang

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2675. doi:

Systemic and Laboratory Risk Factors for Retinopathy and Detection of Tear Film SARS-CoV-2 RNA OPEN ACCESS

Jessica Shantha; Tolulope Fashina; Victoria Simmons; Casey Randleman; Laura Ward; Matthew Regueiro; Susanne Linderman; Carolyn Drews-Botsch; Rafi Ahmed; Jesse Waggoner; Steven Yeh

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2676. doi:

Deletion of Angiotensin II type 2 receptor (AT2) exacerbates retinal neovascularization and hemorrhage in oxygen-induced retinopathy (OIR) OPEN ACCESS

Kevin Harkin; Pietro Bertelli; Hazal Yilmaz; Paul Canning; Ana Rodriguez; Thomas Walther; Alan W Stitt

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2677. doi:

A phase 2 randomized controlled trial of the Janus Kinase (JAK) inhibitor filgotinib in patients with noninfectious uveitis OPEN ACCESS

Sunil K Srivastava; Tim Watkins; Quan Dong Nguyen; Sumit Sharma; David Scales; Mark Dacey; Rajiv E Shah; David Chu; Dilraj S Grewal; Lisa Faia; Eric B Suhler; Mark Genovese; Ying Guo; William Barchuk; Andrew D Dick; James T Rosenbaum

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2678. doi:

High dimensional profiling and immune monitoring of Uveitis patients OPEN ACCESS

Pulak Ranjan Nath; Mary Maclean; Jung Lee; Aman Kumar; Hadi Nadali; Mehmet Yakin; Shilpa Kodati; Vijayraj Nagarajan; Koray Kaya; Rachel R Caspi; Jonas J.W. Kuiper; H. Nida Sen

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2679. doi:

Antigen-driven immune responses distinguish uveitis subtypes. OPEN ACCESS

Lynn Hassman

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2680. doi:

Kinetics of rolling and crawling immune cells in retinal venules during inflammation imaged with label-free adaptive optics ophthalmoscopy OPEN ACCESS

Kosha Dholakia; Colin J Chu; Jesse Schallek

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2681. doi:

A novel and distinct TIGIT-dependent Treg subset provides resistance to relapsing uveitis through suppression of Th17 cells OPEN ACCESS

Darren J Lee; Trisha McDonald; Kayleigh Peters

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2682. doi:

Growth Hormone releasing hormone (GHRH) promotes autoimmune uveitis by enhancing Th17 cell differentiation OPEN ACCESS

Lin DU; Jian Li; Bo Man Ho; Yolanda Wong Ying Yip; Sun On Chan; Calvin C P Pang; WAI KIT CHU

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2683. doi:

MHC class II positive retinal microglia exacerbate uveitis by activating infiltrating T cells OPEN ACCESS

Shintaro Shirahama; May Yue Lee; Yoko Okunuki; Kip M Connor; Meredith S Gregory-Ksander; Bruce Ksander

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2684. doi:

Enhanced S-Cone Syndrome gives rise to enhanced S-cone acuity OPEN ACCESS

Yiyi Wang; Jessica Wong; Jacque L Duncan; Austin Roorda; William Scott Tuten

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2685. doi:

Multimodal high-resolution imaging of retinal function in Retinitis Pigmentosa OPEN ACCESS

Ben J Wendel; Vimal Prabhu Pandiyan; Xiaoyun Jiang; Ayoub Lassoued; Emily Slezak; William Scott Tuten; Debarshi Mustafi; Jennifer R Chao; Ramkumar Sabesan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2686. doi:

Reliability and Reciprocity of the Population Cone Optoretinogram OPEN ACCESS

Raymond Luval Warner; David H Brainard; Jessica Ijams Wolfing Morgan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2687. doi:

Adaptive Optics Scanning Laser Ophthalmoscopy (AOSLO) Measures in MERTK-Related Retinal Degenerations OPEN ACCESS

Stephanie Duret; Jessica Wong; Hao Zhou; Ruikang K Wang; Jacque L Duncan; Austin Roorda

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2688. doi:

Characterization of fluorescently labeled photoreceptors observed in carriers of choroideremia using multimodal adaptive optics imaging OPEN ACCESS

Andrew J. Bower; Nancy Aguilera; Sarah Abouassali; Tao Liu; Joanne Li; Rongwen Lu; John Giannini; Margery Smelkinson; Robert N Fariss; Alfredo Dubra; Zhuolin Liu; Daniel Hammer; Brian Patrick Brooks; Wadih M Zein; Larryssa Huryn; Johnny Tam

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2689. doi:

Detecting inflammatory cells in patients with Multiple Sclerosis using AO-SLO phase contrast imaging OPEN ACCESS

Elena Gofas; Celine Louapre; Nathaniel Norberg; Ysoline Beigneux; Michel Paques; Catherine Vignal Clermont; Kate Grieve

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2690. doi:

OPTICAL COHERENCE TOMOGRAPHY ANGIOGRAPHY ANALYSIS OF THE CORIO-RETINAL MICROVASCULAR INVOLVEMENT IN SYSTEMIC SCLEROSIS OPEN ACCESS

Gloria Gambini; Tomaso Caporossi; Umberto De Vico; Matteo Mario Carlà; Maria Cristina Savastano; Antonio Baldascino; Silvia Fiore; Enrico De Lorenzis; Silvia Bosello; Stanislao Rizzo

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2691. doi:

Phototranduction noise in rods controlling visual detection threshold. OPEN ACCESS

Ulisse Bocchero; Lior Levy; Johan Pahlberg

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2692. doi:

Characterization of cone membrane physiology during secondary cone degeneration in the rd10 model of retinitis pigmentosa OPEN ACCESS

Erika Ellis; Gordon Fain; AP Sampath

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2693. doi:

Deciphering the Role of bII-spectrin in the Developing Outer Retina OPEN ACCESS

Debalina Goswami-Sewell; Caitlin Bagnetto; Elizabeth Zuniga-Sanchez

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2694. doi:

Upregulation of Rod Ribbon Synapse Components Coincides with Well-preserved Scotopic Vision in the P23H Model of Retinitis Pigmentosa OPEN ACCESS

Frans Vinberg; Fatima Abbas; Elliot H Choi; Marcin Tabaka; Umair Seemab; Krzysztof Palczewski; Henri Olavi Leinonen

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2695. doi:

Role of LRFN2 in synaptic function of cone photoreceptors in mouse retina OPEN ACCESS

Nazarul Hasan; Ronald G Gregg

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2696. doi:

Hybrid rod-cone anatomical characteristics revealed in the ultrastructural features and synaptic architecture of the functionally plastic pure-rod retina OPEN ACCESS

Laura Magana Hernandez; Emma Alvarez; David Umbertus; Julio Robles; Erin Rose; Daniel Brown; Ivan Anastassov

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2697. doi:

Fat3 deficiency impairs bipolar cell function and fast vision in mice OPEN ACCESS

Yunlu Xue; Evelyn Avilés; Vladimir Kefalov; Lisa Goodrich; Connie Cepko

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2698. doi:

Vision impairment and Dementia: Economic hardships for patients and caregivers OPEN ACCESS

Varshini Varadaraj; Matthew Eisenberg; Emmanuel Garcia-Morales; Nicholas Reed; Orla Sheehan; Bonnielin K Swenor

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3084. doi:

A decision analytic economic model for use in glaucoma management OPEN ACCESS

Shefali Sood; Noah Heilenbach; Victor Sanchez; Lama A Al-Aswad

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3085. doi:

Cost-Effectiveness Analysis of Personalized Diabetic Retinopathy Screening Recommendations OPEN ACCESS

Poria Dorali; Zahed Shahmoradi; Christina Y Weng; Taewoo Lee

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3086. doi:

Gender-based differences in Medicare reimbursements among ophthalmologists persist across time OPEN ACCESS

Omar Halawa; Sayuri Sekimitsu; Michael V Boland; Nazlee Zebardast

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3087. doi:

Developing a care delivery framework for older adults with visual impairment: A mixed methods study on ophthalmologist perspectives OPEN ACCESS

Judith E Goldstein; Catherine Kerr-Niermann; Fahd Naufal; Xinxing Guo

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3088. doi:

State-level differences in duties permitted to be performed by medical assistants in the delivery of eye care OPEN ACCESS

Mary-Grace Reeves; Jiayin Xue; Arnold Milstein; Geoff Tabin; Jeffrey L Goldberg; Kevin Schulman

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3089. doi:

Evaluating access to laser therapy by driving distance using Medicare data and Geographic Information Systems mapping OPEN ACCESS

Jamie Shaffer; Darby D Miller; Aaron Y Lee; Cecilia S Lee

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3090. doi:

Loss of macrophage chemoattractant protein-1 reduces retinal inflammation and neuron death in hypertensive glaucoma OPEN ACCESS

Michelle Guo; Turner D Schwartz; Jacob Sterling; Jie Wu; Ahab Alnemri; Modupe Adetunji; Emily Lawrence; Ahmara G Ross; Joshua L Dunaief; Qi N Cui

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3091. doi:

RNAi BASED APPROACH FOR MYOC-ASSOCIATED GLAUCOMA OPEN ACCESS

Gaurang Patel; Brijeshkumar Patel; Charleen Hunt; Sarthak R Zaveri; Sabrina Walley; rajeevalochan wudali; Sven-Moller Tank; James Mcninch; Mark Schlegel; Adam Castoreno; Elena Castellanos-Rizaldos; Abigail Liebow; Kavita Praveen; Ying Hu; Vasant Jadhav; Carl Romano

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3092. doi:

Exfoliation syndrome (XFS): Production of extracellular aggregates in a human capsulorhexis culture model OPEN ACCESS

Terete Borras; David Fleischman

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3093. doi:

Multipolar migration and the SDF1-CXCR4 axis direct human retinal ganglion cell integration in mice OPEN ACCESS

Jonathan Soucy; Monichan Hayes Phay; Petr Y Baranov

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3094. doi:

Correlating longitudinal Optical Coherence Tomography (OCT) structural change to retrolaminar myelin-related protein alteration in non-human primate (NHP) early experimental glaucoma (EG) OPEN ACCESS

Hongli Yang; Priya Chaudhary; Cheri Stowell; Juan Reynaud; Stuart Keith Gardiner; Galen Williams; Imee Williams; Nicholas Marsh-Armstrong; Claude F Burgoyne

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3095. doi:

Extracellular Matrix Remodeling of Human Trabecular Meshwork Cells in Static and Dynamic Biopolymer Scaffolds OPEN ACCESS

Bikram Adhikari; Melissa Krebs; Mina B Pantcheva

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3096. doi:

Astrocyte Morphology in the Collagenous Lamina Cribrosa Revealed by Multicolor DiOlistic Labeling OPEN ACCESS

Susannah Waxman; Marissa Quinn; Cara Donahue; Siamak Salavatian; Aman Mahajan; Louis Falo; Daniel Sun; Ian Sigal

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3097. doi:

Improved Prediction of Perimetric Loss in Glaucomatous Eyes Using Latent Class Mixed Modeling OPEN ACCESS

Swarup Sai Swaminathan; Alessandro A Jammal; Felipe Medeiros

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3098. doi:

Comparison of Rates of Change in 10-2 and 24-2 Perimetry to Detect Glaucoma Progression OPEN ACCESS

Ndidi-Amaka Onyekaba; Alessandro A Jammal; Tais Estrela; Rizul Naithani; Asmaa Youssif; Henry Tseng; Felipe Medeiros

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3099. doi:

Using Moving instead of Static Stimuli to Extend the Dynamic Range of Perimetry OPEN ACCESS

Stuart Keith Gardiner; Steven L Mansberger

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3100. doi:

Investigating the Impact of Blur on Virtual Reality Perimetry OPEN ACCESS

Brett King; William H Swanson

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3101. doi:

Learning curve on tablet-based visual field tests during one week of daily testing OPEN ACCESS

Sofia De Arrigunaga; Joyce Kang; Yan Zhao; Sandra Freeman; Ana M. Roldan; Tobias Elze; Michael M. Lin; Daniel Liebman; Dolly Chang; David S Friedman

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3102. doi:

Comparison of a virtual reality-based visual field test to conventional perimetry and OCT OPEN ACCESS

Zer Keen Chia; Alan W Kong; Marcus Lawrence Turner; Benjamin T Backus; Michael Deiner; Yvonne Ou

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3103. doi:

Diagnostic accuracy of an iPad application for detection of visual field defects OPEN ACCESS

Quintin Richardson; Rajesh S. Kumar; B Ramgopal; Mahalakshmi V Rackenchath; Sathi Devi A V; Sriharsha Nagaraj; Caitlin A Moe; Dionna M Wittberg; Kieran S O'Brien; Robert L Stamper; Jeremy D Keenan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3104. doi:

The adult human lens transcriptome changes with age OPEN ACCESS

Melinda K Duncan; Adam Faranda; Samuel G Novo; Justin d'Antin; Yan Wang; Mahbubul H Shihan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3105. doi:

Mechano-activated Connexin Hemichannels and Glutathione Transport Protect Lens Fiber Cells against Oxidative Insults OPEN ACCESS

Jean Jiang; Yuxin Tong; Manuel Riquelme; Yu Du; Yumeng Quan; Sumin Gu

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3106. doi:

Circadian rhythms and glutathione homeostasis in the rat lens OPEN ACCESS

Julie C Lim; Haruna Suzuki-Kerr; Tai Nguyen; Christopher Lim; Raewyn C Poulsen

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3107. doi:

Lamin phosphorylation directs nuclear condensation and nuclear envelope reorganization during lens differentiation OPEN ACCESS

Elizabeth A Whitcomb; Giuliana Perini-Villanueva; Sarah Francisco; Marc Kantorow; Lisa A Brennan; Paul G FitzGerald; Allen Taylor

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3108. doi:

Distinct changes of aquaporins in Connexin 50 knockout and MEK1 transgenic lens epithelial cells OPEN ACCESS

Chun-hong Xia; William Lin; Chenxi Ou; Tom Zhang; Isaac Xu; Xiaohua Gong

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3109. doi:

Small molecule movement in the bovine lens – comparing and contrasting nutrient and pharmaceutical uptake and metabolism with MALDI mass spectrometry OPEN ACCESS

Angus C Grey; George Guo; Kyriakos Varnava; Ali Zahraei; Melody Tang; Nicholas Demarais; Paul J Donaldson

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3110. doi:

Differential Expression of the Major Components of the cGAS/STING Pathway in Normal Human Lens and Cataractous patients OPEN ACCESS

Yan Wang; Jialing Fu; Shuyu Zheng; yuan xiao; Jingmiao Wang; Ling Wang; Jiawen Xiang; David W Li

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3111. doi:

In vivo flow cytometry in retina to study rare blood cells OPEN ACCESS

Jin won Huh; Kosha Dholakia; Derek Power; Jesse Schallek

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3112. doi:

Clarifying the roles of high and low blood pressure in glaucoma via physiology-informed machine learning OPEN ACCESS

Roberto Nunez; Alon Harris; Marcela Szopos; Rajat Rai; James Keller; Christopher Wikle; Erin L. Robinson; Maggie Lin; Daphne Zou; Alice Verticchio; Brent A Siesky; Giovanna Guidoboni

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3113. doi:

Apoptosis and necroptosis is induced in cone photoreceptor cells subjected to cold storage and rewarming OPEN ACCESS

Swati Jain; Dor Yoeli; Neil Khatter; An-Jey Su; Evan Farkash; Christene Huang; Kia Washington; Alkesh Jani

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3114. doi:

A novel function for IL-36 cytokines enhancing retinal endothelial cell barrier integrity OPEN ACCESS

Erin Fahey; Lucia Celkova; Conor Delaney; Patrick T Walsh; Seamus J Martin; Matthew Campbell; Sarah L Doyle

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3115. doi:

Oncostatin M reduces hypoxia-induced retinal neovascularization through Müller cell activation OPEN ACCESS

Felicitas Bucher; Julian Rapp; Paula Liang; Gunther R Schlunck; Hansjürgen T Agostini

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3116. doi:

Effect of the ATP-sensitive potassium channel opener diazoxide on retinal vessel diameter of C57BL/6J mice OPEN ACCESS

Uttio Roy Chowdhury; Michael P Fautsch

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3117. doi:

Conversion Rates from Non-exudative to Exudative Age-Related Macular Degeneration: An AAO IRIS Registry Analysis OPEN ACCESS

Connor Ross; Dan Gong; Nathan Hall; Tobias Elze; Lucia Sobrin; Joan W Miller; Alice Lorch; John B Miller

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3118. doi:

Clinical outcome of a modified treat-and-extend protocol in the treatment of neovascular age-related macular degeneration. OPEN ACCESS

Brice Nguedia Vofo; Yaacov Chaany; Itay Chowers

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3119. doi:

Faricimab in neovascular age-related macular degeneration: updated week 48 efficacy, safety, and durability in the phase 3 TENAYA and LUCERNE trials OPEN ACCESS

Nikolas London; Robyn H Guymer; Anna-Maria Demetriades; Carlos Quezada Ruiz; David Silverman; Jane Ives; Karen Basu; Hugh Lin

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3120. doi:

Archway phase 3 trial of the Port Delivery System with ranibizumab (PDS) for neovascular AMD: end-of-study results OPEN ACCESS

ROBERT MITTRA; Logan Brooks; Charles Wykoff; Natalia Callaway; Stephanie DeGraaf; Anne Fung; Shamika Gune; Sophie LePogam; Robert Smith; Jeffrey Willis; Giulio Barteselli

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3121. doi:

Efficacy, durability and safety of KSI-301 antibody biopolymer conjugate in wet AMD – Year 1 primary endpoint results from the pivotal DAZZLE study OPEN ACCESS

Carl Regillo; Jason S Ehrlich; Daniel Janer; Diana V Do; Pablo Velazquez-Martin; Rezi Zawadzki; Victor Perlroth

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3122. doi:

Real-World Management of Neovascular Age-Related Macular Degeneration in the US OPEN ACCESS

Andrew A Moshfeghi; Ehsan Rahimy; Nick Boucher; Steven Sherman; Fabiana Q Silva; Hadi Moini; John D Pitcher

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3123. doi:

Phase I/IIa study examining the safety and tolerability of single and multiple rising intravitreal doses of BI 836880 in patients with wAMD OPEN ACCESS

Oliver Zeitz; Albert Edwards; Allen Hu; Brian Berger; Gudrun Simons; michael ehrlich; Daniel Peter; Sobha Sivaprasad

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3124. doi:

National versus international practice patterns and outcomes of intravitreal anti-VEGF injection for retinopathy of prematurity OPEN ACCESS

Sandra Hoyek; Nimesh A. Patel; Luis A. Acaba-Berrocal; Kenneth C. Fan; Maria Ana Martinez-Castellanos; Caroline R Baumal; C.Armitage Harper III; Audina M. Berrocal

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3125. doi:

Intravitreal aflibercept compared with laser photocoagulation for infants with retinopathy of prematurity: A FIREFLEYE subgroup analysis OPEN ACCESS

Andreas Stahl; Emine Sukgen; Wei-Chi Wu; Domenico Lepore; Noriyuki Azuma; Hidehiko Nakanishi; Jan Mazela; Thomas Schmelter; Sergio Leal; Evra Koefuencue

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3126. doi:

Risk Factors for Severe Retinopathy of Prematurity Among Low-risk Infants OPEN ACCESS

Yvette Schein; Yinxi Yu; Gui-Shuang Ying; Gil Binenbaum

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3127. doi:

Ultra-widefield optical coherence tomography in retinopathy of prematurity OPEN ACCESS

Susan R Ostmo; Thanh-Tin P. Nguyen; Shuibin Ni; Shanjida Khan; Xiang Wei; Michael F Chiang; Yali Jia; David Huang; Yifan Jian; J. Peter Campbell

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3128. doi:

Effectiveness of an artificial-intelligence based single-exam retinopathy of prematurity prediction model in three Asian populations OPEN ACCESS

J. Peter Campbell; Aaron S Coyner; Minn Oh; Parag Shah; Praveer Singh; Susan R Ostmo; Nita Valikodath; Emily Cole; Tala Al-Khaled; Sanyam Bajimaya; Sagun KC; Tsengelmaa Chuluunbat; Bayalag Munkhuu; R.V. Paul Chan; Michael F Chiang; Jayashree Kalpathy-Cramer

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3129. doi:

Integration of multidimensional data from bedside optical coherence tomography imaging for retinopathy of prematurity examination. OPEN ACCESS

Kai Seely; Shwetha Mangalesh; Vincent Tai; Du Tran-viet; Katrina Winter; Stephanie J Chiu; Christian Viehland; Cynthia A Toth

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3130. doi:

Placental Inflammation Significantly Correlates with Reduced Risk for Retinopathy of Prematurity OPEN ACCESS

Leah Owen; Charles Zhang; Blair Wood; Lara Carrpll; Jessica Comstock; Margaret M DeAngelis

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3131. doi:

Rewiring of the adult midget pathway in a primate model of acute photoreceptor loss. OPEN ACCESS

Ryutaro Akiba; Shane Boniec; Hirofumi Uyama; Hung-Ya Tu; Sharm Knecht; Takayuki Baba; Masayo Takahashi; Michiko Mandai; Rachel Wong

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3132. doi:

Calcium responses to optogenetic stimulation decay faster in primate retinal ganglion cells after photoreceptor ablation OPEN ACCESS

Zhengyang Xu; Karteek Kunala; Peter Murphy; Edith Koo; Teresa Puthussery; Juliette E McGregor

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3133. doi:

Restoration of high-sensitivity patterned vision in motion with an engineered light-gated G protein-coupled receptor OPEN ACCESS

Ehud Isacoff; Amy Holt; Michael Berry; Johannes Broichhagen; John Gerard Flannery

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3134. doi:

Knockout of *Nr2e3* protects against photoreceptor degeneration in two mouse models of retinitis pigmentosa OPEN ACCESS

Alexander Kolesnikov; Daniel Murphy; Joseph Corbo; Vladimir Kefalov

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3135. doi:

Cone function is dependent on rod rescue in a mouse model of Retinitis Pigmentosa gene therapy OPEN ACCESS

Miranda Scalabrino; Mishek Thapa; Esther Zhang; Lucy Peters; Molly Pluenneke; Jay Nolt; Lindsey Chew; Alapakkam P Sampath; Jeannie Chen; Greg Field

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3136. doi:

Loss of Trpm1, the gene for the ON bipolar cell transduction channel, in 15q13.3 microdeletion syndrome contributes to central behavioral deficits OPEN ACCESS

Chieko Koike; Tesshu Hon; Keishun Iwao; Shohei Ikuta; Satoko Hattori; Keizo Takao; Tsuyoshi Miyakawa

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3138. doi:

Design of Novel Multi-Cistronic AAV2 Gene Therapy Constructs for the Treatment of Diabetic Macular Edema OPEN ACCESS

Emily Francesca Warner; Kara Boyd; Michael Whitehead; Peter Stuart Widdowson; Katie Binley; Andrew Osborne

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3470. doi:

Efficacy of *CRX* gene therapy for treating mouse models of dominant *CRX*-associated retinopathies and beyond. OPEN ACCESS

Jerome E Roger; Elodie-Kim Grellier; Sophie Lourdel; Muriel Perron

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3471. doi:

QR-1011 corrects splicing in the Stargardt disease type 1-causing variant *ABCA4* c.5461-10T>C OPEN ACCESS

Melita Kaltak; Petra de Bruijn; Sang-Eun Lee; Davide Piccolo; Kalyan Dulla; Rob WJ Collin; Michael E Cheetham; Gerard Platenburg; Jim Swildens

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3472. doi:

Use of non-viral episomal vectors as a large gene augmentation strategy for *USH2A* retinopathy OPEN ACCESS

Maria Toms; Lyes Touaibi; Patrick Almeida; Richard Harbottle; Mariya Moosajee

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3473. doi:

A Mutation-Independent CRISPR/Cas9-based 'Knockout and Replace' Strategy to Treat Rhodopsin-Associated Autosomal Dominant Retinitis Pigmentosa OPEN ACCESS

Chi-Hsiu Liu; Pavlina Wolf; Ruhong Dong; Yan Huang; Diana Tabbaa; Eugenio Marco; Brian Duke; Andrea Pinilla; Asha Pant; Racheal D'Souza; Judith Newmark; Georgia Giannoukos; Kate Zhang; Adrian Timmers; Mark Shearman; Mariacarmela Allocca

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3474. doi:

Lipid nanoparticles transfect multiple retinal cell types in the non-human primate. OPEN ACCESS

Renee Christine Ryals; Milan Gautam; Jonathan Stoddard; Rene Reynaga; Scott Shubert; Lauren Renner; Jeonghwan Kim; Wayne Tschetter; Ian Fries; Andreas Lauer; Martha Neuringer; Gaurav Sahay

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3475. doi:

In vivo base editing rescues cone photoreceptors in a mouse model of early-onset inherited retinal degeneration OPEN ACCESS

Elliot H Choi; Susie Suh; Andrzej Foik; Henri Olavi Leinonen; Gregory Newby; Samagya Banskota; Thanh V Hoang; Samuel W Du; Xin D Gao; Zhiqian Dong; Aditya Raguram; Sajeev Kohli; Seth Blackshaw; David Lyon; David R Liu; Krzysztof Palczewski

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3476. doi:

Targeted deletion of interferon regulatory factor 5 gene in mice triggers choroidal neovascularization OPEN ACCESS

Congxiao Zhang; Russell Quinn; Eric Nguyen; Nilisha Fernando; Joys Annika G David; Kapil Bharti

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3477. doi:

Characterisation of three novel animal models of geographic atrophy OPEN ACCESS

Natalie Hudson; Jeffrey O'Callaghan; Conor Delaney; Avril Reddy; Kieva Byrne; Sarah Doyle; Matthew Campbell

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3478. doi:

Spontaneous Polygenetic AMD Preclinical Models Selected from the BXD Family of Mice OPEN ACCESS

Monica M Jablonski; Xiangdi Wang; Raven N. Simpson; Anand Swaroop; Emily Y Chew; David Ashbrook; Robert W. Williams; TJ Hollingsworth

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3479. doi:

A porcine model of advanced age-related macular degeneration OPEN ACCESS

Raymond Iezzi; Jarel Gandhi; Alan D Marmorstein

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3480. doi:

Sex and Age-Related Changes in RPE Morphology and Function in Mice OPEN ACCESS

Margarete Karg; Emma Hoffmann; Drenushe Krasniqi; Daisy Y Shu; May Moorefield; Hannah Philipose; Bruce Ksander; Magali Saint-Geniez

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3481. doi:

Effects of Long Duration of High-Fat Diet on Gut Microbiota Composition and Laser-Induced Choroidal Neovascularization OPEN ACCESS

Urooba Nadeem; Hugo Adrian Barba; Bingqing Xie; Jason Zhang; Mark D'Souza; Jason Xiao; Michael Boachie-Mensah; Edward F Xie; Eugene Chang; Dinanath Sulakhe; Dimitra Skondra

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3482. doi:

Cell-specific Studies Through Novel Mouse Model Reveal the Transcriptomic Response of Retinal Müller Glia to Aging OPEN ACCESS

Ana J Chucair-Elliott; Sarah Ocañas; Kevin Pham; Michael Van Der Veldt; Ashley Cheyney; David Stanford; Michael H Elliott; Willard Freeman

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3483. doi:

A Novel Suture Device for Anterior Segment Applications OPEN ACCESS

Caleb Shumway; Jorge Andrade; Douglas Buxton; Nathaniel Natanelí; Martin Mayers; Matthew Wade

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3485. doi:

Combined Umbilical cord patching with amniotic membrane graft for corneal reconstruction OPEN ACCESS

kanm Elmowafi; Rania kamel; Sahar El Tarshoby

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3486. doi:

Laser-assisted Bowman layer graft preparation OPEN ACCESS

Esther Groeneveld-van Beek; Jacky de Leeuw; Isabel Dapena; Silke Oellerich; Jacqueline van der Wees; Gerrit RJ Melles; Viridiana Kocaba

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3487. doi:

The DMEK Learning Curve in Three Fellows OPEN ACCESS

Jessica Chen; Alex Bauer; Alyssa Snyder; Michael Straiko; Mark Terry

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3488. doi:

Size and shape matters: Evaluation of endothelial cell viability for preloaded Descemet Stripping Automated Endothelial Keratoplasty (DSAEK) grafts in two different carriers OPEN ACCESS

Mark S. Ellison; Philip K. Dye; Dolkar T. Tsering; Rebecca Hubbs; Matthew T. Hikes; Kelly Odell; Megan M.W. Straiko; Khoa D. Tran

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3489. doi:

Greater physical activity is associated with neuroretinal thinning in glaucomatous and normative cohorts OPEN ACCESS

Ella Claire Berry; Henry Marshall; Sean Mullany; Santiago Diaz Torres; Joshua Schmidt; Daniel Thomson; Mark Hassall; Stewart R Lake; Richard A Mills; John Landers; Stuart MacGregor; Robert Casson; Owen Siggs; Jamie E Craig

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3490. doi:

Functional imaging of mitochondria using flavoprotein fluorescence and its correlation with intraocular pressure in treated glaucoma patients OPEN ACCESS

Julia Anne Kim; Dolly Chang; Sofia De Arrigunaga; Joyce Kang; Sandra Freeman; Yan Zhao; Justin Elstrott; Simon S Gao; Tiffany Heaster; Michael M. Lin; David S Friedman

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3491. doi:

Longevity of IOP Control Post Single Bimatoprost Implant Injection in a Phase 3b Study OPEN ACCESS

Mahdi Basha; James Paauw; Steven R Sarkisian; Miriam Kolko; Ashley Nguyen; Shraddha Mehta; Marina Bejanian; Randy Craven; William Christie

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3492. doi:

Patient Reported Outcome Measures while using a device to objectively measure eye drop adherence OPEN ACCESS

Steven L Mansberger; Facundo G Sanchez; Jack Phillip Rees; Stuart Keith Gardiner; Viridian Klei; Julie Duvdevany; Max L Kobak; Robert M Kinast

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3493. doi:

An Association between Large Optic Cupping and Total and Regional Brain Volume: The Women's Health Initiative (WHI) OPEN ACCESS

Catherine Wang; Sasha Kravets; Abhishek Sethi; Mark A Espeland; Louis Pasquale; Stephen R Rapp; Barbara Klein; Stacy Meuer; Mary N Haan; Pauline M Maki; Joelle Hallak; Thasarat S Vajaranant

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3494. doi:

Pre- and Post-POAG Rate of Visual Field Progression in the Ocular Hypertension Treatment (OHTS) Study OPEN ACCESS

Mae e Gordon; James David Brandt; Dale K Heuer; Eve J higginbotham; Richard K Parrish II; Chris A Johnson; John L Keltner; Julia Huecker; Michael A Kass

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3495. doi:

Pharmacodynamic response of optic nerve head (ONH) vasculature measured by OCT-angiography (OCTA) after administration of the endothelin receptor antagonist PER-001 OPEN ACCESS

Brad Fortune; Grant Cull; Crystal Jadach; Kristine Ly; Michaela Dunn; Dawn Jennings; Trinity Holthausen; Howard Lockwood; Stuart Keith Gardiner; Lin Wang; Jennifer Wilk; Juan Reynaud

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3496. doi:

Precise quantification of episcleral venous flow rates in human subjects before and after netarsudil 0.02% OPEN ACCESS

Sarah Kim; Victoria Chen; Marvin Cruz; Jessica Pottenburgh; Osamah Saeedi

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3497. doi:

Early Rate of Optical Coherence Tomography Angiography Changes is Associated with Normal Tension Glaucoma Progression Risk OPEN ACCESS

Timothy P.H. Lin; Bella Ruyue Shen; Annie Ling; Oscar Wong; Tony Sit; Poemen P Chan; Clement C. Tham; Carol Y. Cheung

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3498. doi:

Comparison Between Swept-Source and Spectral-Domain Optical Coherence Tomography Angiography in Ocular Hypertension and Glaucoma OPEN ACCESS

Katherine Lun; Bingyao Tan; Chelvin Sng; Leopold Schmetterer; Jacqueline Chua

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3499. doi:

A Novel Image-Based Method to Determine Iris Biomechanics in Angle-Closure Glaucoma OPEN ACCESS

C Ross Ethier; Mohammad Reza Bahrani Fard; Babak Safa

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3500. doi:

A novel femtomolar hemodynamic modulation strategy reveals major microvascular defects in glaucoma at single-pericyte scale OPEN ACCESS

Deborah Villafranca-Baughman; Luis Alarcon-Martinez; Jorge Luis Cueva Vargas; Nicolas A Belforte; Florence Dotigny; Adriana Di Polo

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3501. doi:

In vivo measurement of plexus-specific retinal erythrocyte velocity and acceleration in human subjects and NHPs OPEN ACCESS

Shih-En Chen; Victoria Chen; Jessica Pottenburgh; Osamah Saeedi

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3502. doi:

Comparison of Cataract Surgery Outcomes in Patients with Type 1 versus Type 2

Diabetes OPEN ACCESS
Julia L Xia; Jennifer L. Patnaik; Karen L. Christopher
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3503. doi:

Increased Post-Cataract Surgery Refractive Surprise in Glaucoma Patients OPEN ACCESS
Johnson Huang; Alekya Rajanala; Mai Tsukikawa; Karine D Bojikian; Philip P Chen; Andrew Chen
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3504. doi:

Comparison of visual and refractive outcomes in simultaneous vs sequential pars plana vitrectomy and cataract surgery OPEN ACCESS
Abdelhalim Awidi; Priya Mathews; Yassine Jamil Daoud
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3505. doi:

Zonular instability and decreased capsulorhexis diameter in post-mortem pseudophakic eyes OPEN ACCESS
Emmanuel Issa Bassam Nassrallah; Georges Nassrallah; Christina Mastromonaco; Ana Beatriz Dias; Jose Joao Mansure; Nabil Saheb; Miguel N Burnier
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3506. doi:

Post-operative inflammation outcomes with the use of a sustained-release intracanalicular dexamethasone implant (Dextenza) following routine phacoemulsification OPEN ACCESS
Amy Huang; Monica K Ertel; Cristos Ifantides; Jennifer L. Patnaik; Leonard Seibold
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3507. doi:

Inverted meniscus IOLs reduce retinal distortion in the peripheral visual field OPEN ACCESS
Consuelo Robles; Pedro M Prieto; Jose M. Marin-Sanchez; Encarna Alcon; Pedro Taña; Lucia Hervella; Dimitrios Christaras; Harilaos S Ginis; Pablo Artal
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3508. doi:

MODIFIED SURGICAL IMPLANTATION TECHNIQUE OF SCLERAL-FIXATED ITRAOCULAR CARLEVALE IOL WITH FORMATION OF "SCLERAL POCKETS" OPEN ACCESS
Lyubomyr Lytvynchuk; Makar Ponomarov; Eric Carlos Reyna; Matus Rehak
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3509. doi:

Capillary velocimetry on human retina—a preliminary study OPEN ACCESS
Qinqin Zhang; Xiao Zhou; Ruikang K Wang
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3510. doi:

Investigation of band 2 in the human outer retina with visible light Optical Coherence Tomography (OCT) OPEN ACCESS
Vivek Jay Srinivasan; Aaron Kho; Pooja Chauhan
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3511. doi:

Balanced-detection visible-light optical coherence tomography in humans at 125 kHz OPEN ACCESS
Hao Zhang; Ian Rubinoff; David Andrew Miller; Roman Kuranov
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3512. doi:

Automated instrument-tracking and adaptive-sampling for 4D visualization of ophthalmic surgical maneuvers OPEN ACCESS
Eric Tang; Mohamed El-Haddad; Shriji Patel; Yuankai Tao
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3513. doi:

Automated visualization of Henle's fiber layer and outer nuclear layer in retinal volumes using robotically-aligned optical coherence tomography OPEN ACCESS
Amit Narawane; Pablo Ortiz; Mark Draelos; Ryan P McNabb; Anthony N Kuo; Joseph A. Izatt
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3514. doi:

Flavoprotein Fluorescence (FPF) Elevation Using Retinal Metabolic Analysis Correlates with Decreased Visual Acuity in Patients with Various Retinal Pathologies OPEN ACCESS
Sofia Ahsanuddin; Oscar Otero-Marquez; Collin Rich; Richard B Rosen
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3515. doi:

Measurement of true Henle's fiber layer and outer nuclear layer thickness using volumetric directional optical coherence tomography OPEN ACCESS
Shanjida Khan; Shuibin Ni; Thanh-Tin P. Nguyen; Ringo Ng; Brandon Lujan; Ou Tan; David Huang; Yifan Jian
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3516. doi:

Compensatory expression of Crystallin γS in retinal microglia neutralizes endotoxin-induced neuroinflammation OPEN ACCESS
Fengyang Lei; Naiwen Cui; Chengxin Zhou; Yamei Cai; Nikolaos Efstathiou; James Chodosh; Demetrios G. Vavvas; Huidan Zhang; David Weitz; Graeme J. Wistow; Eleftherios I Paschalis
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3517. doi:

A Phase 1b/2 Study of the Safety and Tolerability of Tinlarebant in Adolescent STGD1 Subjects OPEN ACCESS
John R Grigg; Fred Kuanfu Chen; Ta-Ching Chen; Robyn V Jamieson; Nathan L Mata; Webber Liao
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3518. doi:

Systemic Pegylated-Arginase 1 Treatment of *db/db* mice Attenuates Diabetic Retinopathy Progression OPEN ACCESS
Katharine Leilani Bunch; Ammar Abdelrahman; Ruth B Caldwell; R. William Caldwell
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3519. doi:

Initial experience with biosimilar bevacizumab-bvzr for intravitreal use in children: A Case Series OPEN ACCESS
Eric E Jung; Thomas Lee; Aaron Nagiel
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3520. doi:

Topical peptide inhibitors of MARCKS reduce signs of dry eye in the alacrimal rat model OPEN ACCESS
Brian C Gilger; Jacklyn H Salmon; Kenneth B Adler
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3521. doi:

Ocular antibiotics susceptibility of multidrug-resistant *Staphylococcus* isolated from ocular anterior segment OPEN ACCESS

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3522. doi:

Pharmacological modulation of Toll-like receptor-stimulated downstream inflammatory pathways in an experimental model of uveitis. OPEN ACCESS

Moksha Laxmi; Nabanita Halder; Atul kumar; Baskar S. Singh; Rohan Chawla; Thirumurthy Velpandian

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3523. doi:

Effect of Statins on the Age of Onset of Age-Related Macular Degeneration OPEN ACCESS

Durga Ganesh; Jeffrey N. Chiang; Giulia Corradetti; Eran Halperin; Srinivas R Sadda

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3524. doi:

Correlations between Renal Function and Age-Related Macular Degeneration (AMD) Phenotypes OPEN ACCESS

Amisha Dave; Kristina Hess; Katherine Chen; Henry Wiley; Tiarnan D L Keenan; Elvira Agron; Emily Y Chew; Catherine A Cukras

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3525. doi:

Age-related macular degeneration (AMD), cardiovascular disease and stroke OPEN ACCESS

Robert Thomson; Joshua Chazaro; Oscar Otero-Marquez; Gerardo Ledesma-Gil; Yuehong Tong; Arielle Coughlin; Zachary R. Teibel; Katy Tai; Harriet Lloyd; Richard B Rosen; Lawrence Yannuzzi; K Bailey Freund; R. Theodore Smith

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3526. doi:

Plasma Metabolites Associated with Optical Coherence Tomography (OCT) Features of Age-related Macular Degeneration (AMD) OPEN ACCESS

Ines Lains; Xikun Han; Joao Quadrado Gil; Joana Providencia; Archana Nigalye; Rodrigo Alvarez; Vivian Paraskevi Douglas; Rachel S Kelly; John B Miller; Demetrios G. Vavvas; Ivana K Kim; Rufino Silva; Jessica Lasky-Su; Joan W Miller; Deeba Husain

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3527. doi:

Visual acuity results at ten years in participants with age-related macular degeneration enrolled in the Age-Related Eye Disease Study 2 OPEN ACCESS

Sanjeeb Bhandari; Eleni Konstantinou; Elvira Agron; Traci E Clemons; Emily Y Chew

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3528. doi:

Role of Metformin in the Development and Progression of Age-Related Macular Degeneration OPEN ACCESS

Jennifer Adeghate; Rikki Enzor; Bushra Usmani; Peter Jones; Jamie Odden; Asad Farooq Durrani; Benjamin Botsford; Steve Koscumb; Oscar Marroquin; Jose Alain Sahel

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3529. doi:

Characteristics and outcomes of patients with nAMD managed in US routine clinical practice OPEN ACCESS

anita barikian; Jaya Badhwar Kumar; April McCullough; Fabiana Q Silva; Steven Sherman; Hadi Moini; Rishi P Singh

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3530. doi:

Loss of retinal ganglion cell synaptic outputs to the visual thalamus in the DBA/2J mouse model of glaucoma OPEN ACCESS

Matthew J Van Hook; Jennifer Thompson; Jennie C Smith

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3531. doi:

Probing the role of retinorecipient target cells in visual circuit regeneration OPEN ACCESS

Supraja Varadarajan; Onkar Dhande; Phung Le; Andrew Huberman

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3532. doi:

Disrupted Macular Cone Post-Synaptic Circuitry is Related to Poor Vision in Albinism OPEN ACCESS

Uma Balakrishnan; Niamh Wynne; Wanda Pfeifer; Joseph Carroll; Arlene V Drack

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3533. doi:

Electroretinography as a biomarker to monitor Stargardt disease OPEN ACCESS

Jana Sajovic; Andrej Meglič; Maja Šuštar Habjan; Marko Hawlina; Ana Fakin

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3534. doi:

OCT-guided variable-spot ERG enabled spatially resolved measurements to assess retinal function in a selected and integrated region OPEN ACCESS

Sanghoon Kim; Michael Carlson; Silvia Aparicio-Domingo; Kang Li; Subrata Batabyal; Valeria Canto Soler; Samarendra Mohanty

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3535. doi:

Revival of *In Vivo*-like ERG A- and B-waves in *Ex Vivo* Human Organ Donor Eyes OPEN ACCESS

Anne M Hanneken; Fatima Abbas; Frans Vinberg

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3536. doi:

Correlation between oscillatory potentials and photopic negative response amplitudes in a clinical setting OPEN ACCESS

Radouil T Tzekov; Sara Safari; Katherine Tsay; Jan J Kremers; Christopher L Passaglia; David Drucker

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3537. doi:

Longitudinal changes in the retinal and choroidal thickness in young children at low and high risk for myopia OPEN ACCESS

Ashutosh Jnawali; Kristen L Kerber; Fuensanta A Vera-Diaz

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3810. doi:

Computational Analysis of Diffusion-Limited Regions in the Choriocapillaris and their Effect on Passive Transfers to the Outer Retina. OPEN ACCESS

Moussa A. Zouache; Christian A. Klettner

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3811. doi:

Retinal and Choroidal Thickness at Different Eccentricities in the Myopic Eye OPEN ACCESS

Jose Villa-Carpes; Enrique J. Fernandez; David Orenes; Rosa Martinez-Ojeda; Francisco J. Avila; Jose M. Marin-Sanchez; Juan M Bueno

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3812. doi:

Sector-wise Comparison of Retinal Layer Thickness in High Myopia and Low/Non-Myopia Eyes without Visual Field Defects OPEN ACCESS

Rachel S Chong; Marco Yu; Yin Ci Sim; Jolene Chia; Amanda Gan; Samantha Lor; Qiu Ying Wong; Shivani Majithia; Seang Mei Saw; Ching Yu Cheng; Donny Hoang; Leopold Schmetterer; Jacqueline Chua

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3813. doi:

Longitudinal thickness changes of peripapillary tissues during high myopia development

Longitudinal thickness changes of peripapillary tissues during high myopia development in juvenile tree shrews OPEN ACCESS

Mahmoud Tawfik KhalafAllah; Preston A Fuchs; Fred Nugen; Mustapha El Hamdaoui; Alexander Ievy; Brian C Samuels; Rafael Grytz

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3814. doi:

Assessment of stiffness of posterior eye wall in myopic eyes with an ultrasound-based algorithm using strain elastography OPEN ACCESS

Shen Yi Lim; Kazuyo Ito; Yee Shan Dan; Jason Daryle G. Yu; Ronald H Silverman; Jonathan Mamou; Seang-Mei Saw; Quan V Hoang

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3815. doi:

The role of light in the pathogenesis of rhodopsin retinitis pigmentosa OPEN ACCESS

Rosellina Guarascio; Kwan Hau; Rowan Asfahani; Kalliopi Ziaka; Hannah Poultney; Dimitra Athanasiou; Monica Aguila; Yumei Li; Rui Chen; Michael E Cheetham

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3816. doi:

Deciphering how missense mutations in CRX homeodomain produce distinct dominant retinopathies OPEN ACCESS

Yiqiao Zheng; CHI SUN; Xiaodong Zhang; Philip A Ruzycki; Shiming Chen

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3817. doi:

Activation of autophagy reverses progressive and deleterious protein aggregation in PRPF31 patient induced pluripotent stem cells (iPSCs)-derived retinal pigment epithelium (RPE) cells. OPEN ACCESS

Maria Georgiou; Chunbo Yang; Robert Atkinson; Kuan-Ting Pan; Adriana Buskin; Marina Moya Molina; Joseph Collin; Sebastian E. J. Ludwig; Sushma Nagaraja-Grellscheid; Colin Johnson; Robin Ali; Lyle Armstrong; Viktor Korolchuk; Henning Urlaub; Sina Mozaffari-Jovin; Majlinda Lako

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3818. doi:

Metabolic defects and circadian clock alterations in *Prpf31*-mutant mice. OPEN ACCESS

Elora Vanoni; Abdallah Hamieh; Géraldine Puel; Thierry D Leveillard; Emeline F Nandrot

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3819. doi:

Phosphatidylinositol 5-Kinase (PIKfyve) Negatively Regulates Photoreceptor Neuroprotection OPEN ACCESS

Raju V S Rajala; Mohd A Bhat; Kenneth Teel; Ammaji Rajala

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3820. doi:

Disrupting the ciliary gradient of active Arl3 affects rod photoreceptor nuclear migration OPEN ACCESS

Amanda M Travis; Samiya Manocha; Jason R Willer; Jillian N Pearring

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3821. doi:

Single-cell transcriptional dynamics and *in vivo* enhancer assays provide insight into gene regulatory networks of *PRDM13* and *IRX1* implicated in North Carolina macular dystrophy OPEN ACCESS

Munevver Burcu Cicekdal; Stijn Van de Sompele; Victor López-Soriano; Alfredo Dueñas Rey; Miriam Bauwens; Juan J Tena; Kris Vleminckx; Juan R. Martinez-Morales; Elfride De Baere

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3822. doi:

Use of virtual care by Ontario ophthalmologists during the COVID-19 pandemic in 2020 OPEN ACCESS

Wongel Bogale; Yvonne Buys; Mayilee Canizares; Sherif El-Defrawy; Yaping Jin

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3823. doi:

Physician-to-Physician eConsultations to Ophthalmologists at an Academic Medical Center OPEN ACCESS

Grayson Wilkes Armstrong; Noha A Sherif; Alice Carlyle Lorch

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3824. doi:

Determinants of non-attendance in asynchronous telemedicine ophthalmology clinics OPEN ACCESS

Ciara O'Byrne; Siegfried Wagner; Laxmi Raja; Robbert Struyven; Mario Cortina-Borja; Pearse Andrew Keane; Josef Huemer; Konstantinos Balaskas; Dawn Sim; Jugnoo Rahi; Ameenat Lola Solebo; Swan Kang

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3825. doi:

Comparison of 2-Field and 5-Field Mydriatic Handheld Retinal Imaging in a Community-Based Diabetic Retinopathy Screening Program OPEN ACCESS

Lizzie Anne Aquino; Recivall Salongcay; Claude Michael Salva; Glenn Paulo Alog; Kaye Locaylocay; Aileen Viguilla Saunar; Jennifer K Sun; Lloyd P Aiello; Tunde Peto; Paolo S Silva

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3826. doi:

Can EHR Data Automatically Calculate Ophthalmic Quality Measures? The Impact of Baselines OPEN ACCESS

Michelle Hribar; Jimmy S Chen; Aiyin Chen; Michael F Chiang

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3827. doi:

Predicting one-day post-cataract surgery intraocular pressure spikes using machine learning methods OPEN ACCESS

Levi Bonnell; Karen L. Christopher; Naresh Mandava; Anne M. Lynch; Jennifer L. Patnaik

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3828. doi:

Development of Image Recognition Technology to Identify Individuals with Trachomatous Trichiasis Who Need Surgery OPEN ACCESS

Emily Gower; Juan Carlos Prieto; Hina Shah; Kasey Jones; Rebecca Flueckiger; Jerusha Weaver; Hashiya Kana; Robert Chew

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3829. doi:

Topical Recombinant Human Nerve Growth Factor for Management of Refractory Epithelial Keratopathy OPEN ACCESS

Xi Dai; Xi Zhu; Sezen Karakus

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3830. doi:

SARM1 protects the cornea from sensory nerve degeneration and persistent severe inflammation in murine Herpes Stromal Keratitis (HSK) OPEN ACCESS

Hongmin Yun; Kate L Carroll; Anthony St. Leger

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3831. doi:

Inhibitory Effect of Disodium and Lactone Rose Bengal on the Growth of Candida spp.

Isolates In Vitro OPEN ACCESS

Katherine D. Leviste; Heather Durkee; Paula A. Sepulveda Beltran; Braulio C.L.B. Ferreira; Roger M. Leblanc; Eduardo C Alfonso; Guillermo Amescua; Darlene Miller; Jean-Marie Parel

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3832. doi:

Metagenomic sequencing of Sjögren syndrome and healthy gut microbiota reveals differential bacterial species that correlate with disease severity OPEN ACCESS

Laura Schaefer; Firas S Midani; Claudia M Trujillo-Vargas; Stephen C Pflugfelder; Robert A Britton; Cintia S De Paiva

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3833. doi:

Risk Factors Predicting Loss to Follow-Up, Hospital Admission, and Medication Noncompliance Among Patients with Infectious Keratitis at a Public County Hospital OPEN ACCESS

Jacqueline Breanna Lopez; Lawrence Chan; Murtaza Saifee; Madeline Yung; Matilda F Chan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3834. doi:

Variability of outer retinal hyper-reflective bands detected using optical coherence tomography OPEN ACCESS

Ayesha Girach; Helen Kuht; Jinu Han; Garima Nishad; Prateek Pani; Yu-Dong Zhang; Zhanhan Tu; Girish Varma; Mervyn Thomas

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3835. doi:

Comparison of OCT Eccentric Fixation in Children with Non-residual vs Residual Strabismic Amblyopia OPEN ACCESS

Jingyun Wang; Sharon Lehman; Dorothy Hendricks; Jing Jin

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3836. doi:

Local analysis reveals lower light sensitivity and thicker retinal layers of the amblyopic eyes near the fovea OPEN ACCESS

Susana T L Chung; Roger Li; Betty Zhu Li; Quan Lei; Dennis M Levi

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3837. doi:

Availability of data for cost-effectiveness comparison of vision screening programmes OPEN ACCESS

Huibert Jan Simonsz; Jan Kik; Eveline Heijnsdijk; Allison Mackey; Gwen Carr; Anna Horwood; Maria Fronius; Jill Carlton; Inger Uhlén

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3838. doi:

Associations between oxygen supplementation and choroid thickness in preterm infants OPEN ACCESS

Mason Seely; Shwetha Mangalesh; Suzanne Michalak; Neeru Sarin; Vincent Tai; Katrina Winter; Joanne Finkle; Charles Cotten; Yineng Chen; Gui-Shuang Ying; Cynthia Toth; Lejla Vajzovic

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3839. doi:

Single Nuclear RNA Sequencing of Thyroid Eye Disease Retrobulbar Fat Reveals Fibroblasts Undergoing Adipogenesis *In Vivo* OPEN ACCESS

Fatemeh Rajaii; Dong Won Kim; Jeong Han; Timothy McCulley; Nicholas Mahoney; Seth Blackshaw

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3840. doi:

Demographic variables and systemic comorbidities associated with diagnosis of chalazion and chalazion incision/excision from a US claims database OPEN ACCESS

Diana Kim; Brendan McGeehan; Cesar A Briceno; Brian L VanderBeek

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3841. doi:

Antisense oligonucleotide-based rescue of complex splicing defects in *ABCA4* OPEN ACCESS

Zelia Corradi; Laura de Rooij; Rebekkah J Hitti-Malin; Alejandro Garanto; Rob WJ Collin; Frans P Cremers

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3842. doi:

A MiniCEP290 gene replacement therapy to treat CEP290-Leber congenital amaurosis (LCA10) OPEN ACCESS

Laura Moreno Leon; Wei Zhang; Bhubanananda Sahu; Guangping Gao; Hemant Khanna

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3843. doi:

In vitro modelling of autosomal dominant *TGFBI* corneal dystrophies and development of a targeted therapeutic approach OPEN ACCESS

Olivia Farah Rezek; Beatriz Sanchez-Pintado; Michael E Cheetham; Alice E Davidson; Stephen Tuft; Alison J Hardcastle

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3844. doi:

Comparison of CRISPR-Cas13 RNA editing tools for inherited retinal disease OPEN ACCESS

Lewis E Fry; Michelle E. McClements; Robert E MacLaren

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3845. doi:

AAV5-*RPGR* (botaretigene sparoparvovec) gene therapy for X-linked retinitis pigmentosa (XLRP) demonstrates localized improvements in static perimetry OPEN ACCESS

Michel Michaelides; Jialin Xu; Dai Wang; Peggy Wong; Albert Fung; Alexandra Forbes; Stuart Naylor; Robert Zeldin; Maria A Parker; Richard Weleber; Thales Antonio Cabral de Guimaraes; Cagri Besirli; Yesa Yang; James Bainbridge

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3846. doi:

Functional restoration of Kir7.1 nonsense mutations using engineered tRNA OPEN ACCESS

Bikash R Pattnaik; Meha Kabra; Pawan K Shahi; Enes Akyuz; Christopher Ahern

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3847. doi:

AAV mediated delivery of Exon-specific U1 snRNA corrects *ELP1* splicing and prevents retinal degeneration in familial dysautonomia OPEN ACCESS

Anil Kumar Chekuri; Elisabetta Morini; Emily Kirchner; Jessica Bolduc; Franco Pagani; Luk H. Vandenberghe; Susan Slaugenhaupt

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3848. doi:

Brolucizumab for treatment of diabetic macular edema (DME): 100-week results from the KESTREL and KITE studies OPEN ACCESS

Charles Clifton Wykoff; Justus G Garweg; Carl Regillo; eric souied; Sebastian Wolf; Dilsher Dhoot; Hansjürgen T Agostini; Andrew Chang; Augustinus Laude; Lidija Kovacic; Lixin Wang; Ying Wang; Emmanuel Bouillaud; David M Brown

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3849. doi:

Efficacy, durability, and safety of faricimab in diabetic macular edema: 2-year results from the phase 3 YOSEMITE and RHINE trials OPEN ACCESS

Jennifer I Lim; John A Wells; David Aaron Eichenbaum; Carl J Danzig; Kemal Asik; Zdenka Haskova; Sheun Mohan; David Silverman; Yannan Tang; Hugh Lin

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3850. doi:

Personalized treatment interval (PTI) dosing dynamics over 2 years in the phase 3 YOSEMITE and RHINE trials of faricimab in diabetic macular edema OPEN ACCESS

Caroline R Baumal; John Kitchens; Glenn Jaffe; Bianca S Gerendas; Francis Abreu; Kemal Asik; Acner Camino; Nitin Jain; Zdenka Haskova

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3851. doi:

Genetic biomarkers predicting response to anti-vascular endothelial growth factor injections in diabetic macular edema, a pilot study OPEN ACCESS

Rajya L gurung; Liesel M FitzGerald; Bennet J McComish; ebony lui; Jamie E Craig; Nitin Verma; Alex W Hewitt; Brendan JT Vote; Kathryn P Burdon

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3852. doi:

Automated macular fluid volume as a treatment indicator for diabetic macular edema OPEN ACCESS

kotaro tsuboc Qisheng You; Yukun Guo; JIE WANG; Christina J Flaxel; Steven T Bailey; David Huang; Yali Jia; Thomas S Hwang

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3853. doi:

Baseline Outer Retinal Layer Thickness is Associated with Response of Diabetic Macular Edema to Anti-VEGF Therapy OPEN ACCESS

Margalit Mitzner; Ward Fickweiler; Devon Robinson; Tahani Boumenna; Lloyd P Aiello; Jennifer K Sun

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3854. doi:

Discovery of imaging biomarkers for healthy aging and age-related macular degeneration using counterfactual generative adversarial networks OPEN ACCESS

Martin Joseph Menten; Oliver Leingang; Hrvoje Bogunovic; Robbie Holland; Ahmed M Hagag; Rebecca Kaye; Sophie Riedl; Ghislaine Traber; Lars Fritsche; Toby Prevost; Hendrik P Scholl; Ursula Schmidt-Erfurth; Sobha Sivaprasad; Daniel Rueckert; Andrew J Lotery

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3855. doi:

A deep learning pipeline for the detection and quantification of drusen and reticular pseudodrusen on optical coherence tomography OPEN ACCESS

Roy Schwartz; Hagar Khalid; Sandra Liakopoulos; Yanling Ouyang; Coen de Vente; Cristina González Gonzalo; Aaron Y Lee; Catherine A Egan; Clara Sánchez; Adnan Tufail

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3856. doi:

Comparison between a deep learning algorithm and human expertise predicting the progression of geographic atrophy (GA) secondary to age-related macular degeneration OPEN ACCESS

Gregor Sebastian Reiter; Dmitrii Lachinov; Wolf Bühl; Günther Weigert; Christoph Grechenig; Hrvoje Bogunovic; Ursula Schmidt-Erfurth

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3857. doi:

Deep Survival Prediction of Progression from Intermediate to Atrophic AMD from Longitudinal Retinal OCT OPEN ACCESS

Antoine Rivail; Wolf-Dieter Vogl; Sophie Riedl; Christoph Grechenig; Gregor Sebastian Reiter; Robyn H Guymer; Zhichao Wu; Ursula Schmidt-Erfurth; Hrvoje Bogunovic

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3858. doi:

Feature discovery using ablation studies for deep learning–based geographic atrophy (GA) progression prediction OPEN ACCESS

Julia Ciuceru; Neha Anegondi; Qi Yang; Verena Steffen; Christina Rabe; Michel Friesenhahn; Daniela Ferrara; Simon S Gao

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3859. doi:

Automated Identification of Incomplete and Complete Retinal Epithelial Pigment and Outer Retinal Atrophy Using Machine Learning OPEN ACCESS

Giulia Corradetti; Jeffrey N. Chiang; Federico Corvi; Muneeswar Gupta nittala; Nadav Rakocz; Akos Rudas; Berkin Durmus; Alec Chiu; Ulzee An; Sriram Sankararaman; Eran Halperin; Srinivas R Sadda

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3860. doi:

The RAP study, Report 6: Quantification of exudative biomarkers in neovascular age-related macular degeneration (nAMD) using deep learning, a type-based comparative analysis. OPEN ACCESS

Bilal Haj Najeeb; Bianca S Gerendas; Hrvoje Bogunovic; Ursula Schmidt-Erfurth

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3861. doi:

Longitudinal changes in thickness of the aging human lens measured with OCT OPEN ACCESS

Marco Ruggeri; Yu-Cherng Chang; Iulen Cabeza; Leana Rohman; Bianca Maceo Heilman; Florence Cabot; Sonia H Yoo; Arthur Ho; Jean-Marie Parel; Fabrice Manns

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3862. doi:

Quantification of ciliary muscle movement during accommodation from transscleral OCT images OPEN ACCESS

Iulen Cabeza; Begoña Calvo; Yu-Cherng Chang; Marco Ruggeri; Fabrice Manns

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3863. doi:

Quantification of ciliary muscle thickness changes during accommodation from dynamic transscleral OCT images OPEN ACCESS

Ngoc Lan Vy Truong; Gabrielle Monterano Mesquita; Yu-Cherng Chang; Florence Cabot; Marco Ruggeri; Sonia H Yoo; Jean-Marie Parel; Arthur Ho; Fabrice Manns

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3864. doi:

Role of accommodative microfluctuations in deciphering the sign of defocus for blur-driven accommodation OPEN ACCESS

Praveen Kumar Bandela; Shrikant R Bharadwaj; Arthur Ho; Eric Papas

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3865. doi:

Computational evaluation of a novel intraocular lens design for controlling negative peripheral pseudophakic dysphotopsia OPEN ACCESS

Arthur Ho

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3866. doi:

Quadrifocal diffractive lens design for presbyopia correction OPEN ACCESS

Jiakai Lyu; Seungpil Bang; Geunyoung Yoon

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3867. doi:

Clinical measurements of peripheral contrast sensitivity in elderly phakic and pseudophakic eyes. OPEN ACCESS

Aixa Alarcon; Carmen Canovas; Marrie van der Mooren; Priya Janakiraman; Robert Rosen; Linda Lundstrom; Daniel H Chang

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3868. doi:

Subretinal fibrosis in patients with choroidal neovascularization based on spectral-domain optical coherence tomography classification: findings from the HARBOR trial OPEN ACCESS

Sean Adrean; Lauren Hill; Manuel J Amador-Patarroyo

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3869. doi:

Use of collagen-hybridizing peptides to assess active fibrosis in 2 mouse models of choroidal neovascularization OPEN ACCESS

Peter Westenskow; Lucas Bennink; Richard Foxton; Mike Kirkness; Markus Linder

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3870. doi:

Collagen dynamics in one-stage versus two-stage laser-induced choroidal neovascularization using Collagen-1-YFP reporter mice OPEN ACCESS

Ema Ozaki; Peter Westenskow; Derrick Feenstra; Sarah L Doyle

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3871. doi:

Extracellular vesicles from ARPE-19 cells expressing R345W-Fibulin-3 can induce epithelial-mesenchymal transition in recipient cells via a TGF-beta pathway OPEN ACCESS

Stephanie Louise Grillo; Mi Zhou; Yuanjun zhao; Sarah Weber; Han Chen; Xiaoming Liu; Hong-Gang Wang; Michael Ford; Matthew Swulius; Alistair J Barber; Jeffrey Sundstrom

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3872. doi:

MiRNA-24 represses TGF-β2 induced epithelial-mesenchymal transition (EMT), endothelial-mesenchymal transition (EndMT), and fibrosis program OPEN ACCESS

Yinga Wu; Yao Tong; Katherine Byrnes; Qi Zhou; Jing Ma; Shusheng Wang

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3873. doi:

Decorin for choroidal neovascularization fibrosis and epithelial-mesenchymal transition of retinal pigment epithelium OPEN ACCESS

Francine F Behar-Cohen; laura Berrichou; Louis Debillon; Karine Bigot; Thierry Bordet; Min Zhao

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3874. doi:

The association of social determinants of health with cataracts in the U.S. OPEN ACCESS

Muhammad Ali; Abdelhalim Awidi; Jiangxia Wang; Varshini Varadaraj; Cindy Cai; Divya Srikumaran; Pradeep Y Ramulu; Alfred Sommer; Fasika Woreta

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4243. doi:

Final Level of Myopia versus Age of Onset: Effect of Race and Age at Final Refraction OPEN ACCESS

Mark A Bullimore; Noel A Brennan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4244. doi:

Asian and Western refractive centile curves from meta-analysis of population refraction data OPEN ACCESS

James Loughman; Kathryn Jill Saunders; Siofra Harrington; Daniel Ian Flitcroft

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4245. doi:

The Prevalence and Risk Indicators of Uncorrected Refractive Error in African Americans: The African American Eye Disease Study (AFEDS) OPEN ACCESS

Nathan Dhablania; Mina Torres; Kaili Ding; Bruce Burkemper; Roberta McKean-Cowdin; Rohit Varma

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4246. doi:

Myopia control in children wearing DIMS spectacle lens: 6 years results OPEN ACCESS

Carly SY Lam; Wing Chun Tang; Han Yu Zhang; Dennis Yan-yin Tse; Chi-ho To

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4247. doi:

Identifying Content for an Item Bank to Measure the Quality-of-Life Impact of Myopia OPEN ACCESS

Ryan Man; Kodi Goh; Ester Lee; Amudha Aranvindhan; Alfred TL Gan; Marcus Ang; Quan V Hoang; Chee Wai Wong; Seang Mei Saw; Eva K Fenwick; Ecosse Luc Lamoureux

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4248. doi:

Open Globe Repairs in the United States 2014-2018: Incidence, risk factors and visual outcomes - An IRIS® Registry (Intelligent Research in Sight) Analysis OPEN ACCESS

Maurizio Tomaiuolo; Fasika Woreta; Alexander Li; Yoshihiro Yonekawa; James Sharpe; Qiang (Ed) Zhang; Zeba A Syed; Deepak Ramesh; Alice Carlyle Lorch; Nathan Hall; Ankoor Shah; Grant Justin; Leslie Hyman

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4249. doi:

The Surprising Impact of Hormones on Keratoconus OPEN ACCESS

Dimitrios Karamichos; Paulina Escandon; Sarah Nicholas; David Murphy; Lyly Van; Rebecca Cunningham; Kamran Riaz

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4250. doi:

High-frequency ultrasound detects biomechanical weakening in keratoconus with a decreasing stiffness at higher grades OPEN ACCESS

Juri Liu; Sunny Kwok; Xueliang Pan; Andrew Hendershot; William Liu

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4251. doi:

Unique structural differences between thin cornea and asymmetric keratoconus quantified using Polarization Sensitive – Optical Coherence Tomography (PS-OCT) OPEN ACCESS

Rahul P. Patil; Raghav Narasimhan; Yash Patel; Pooja Khamar; Rohit Shetty; Abhijit Sinha Roy

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4252. doi:

Long-Term Follow-Up of Biomechanical Changes in Very Asymmetric Ectasia OPEN ACCESS

Shizuka Koh; Ryota Inoue; Sayo Maeno; Naoyuki Maeda; Renato Ambrósio; Vishal Jhanji; Kohji Nishida

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4253. doi:

Exosomes and their miRNA/protein profile in keratoconus-affected corneal stromal cells OPEN ACCESS

Yutao Liu; Mariam Khaled; Theresa Akoto; Dimitrios Karamichos

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4254. doi:

Rescue of Lysyl Oxidase levels by Batimastat and Trehalose treatment in human corneal stromal tissue and cell models: implications for Keratoconus therapy OPEN ACCESS

NITHIN KIRAN; Rohit Shetty; Pooja Khamar; Arkasubhra Ghosh

Childhood glaucoma or large optic disc? - The Gutenberg Optic Disc Study (GODS) OPEN ACCESS

Julia Verena Stingl; Cordula Braun; Felix Wagner; Alexander Schuster; Esther M Hoffmann

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4256. doi:

Short-term changes in Bruch's Membrane Opening-Based Morphometrics during the first week after trabeculectomy OPEN ACCESS

Philip Enders; Jan Lüke; Thomas S Dietlein; Alexandra Lappas; Verena Prokosch; Sigrid Roters; Ludwig M Heindl; Claus Cursiefen; Caroline Gietzelt

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4258. doi:

Birefringence of the retinal nerve fiber layer is reduced in early glaucoma eyes analyzed by polarization-sensitive OCT OPEN ACCESS

Stefan Steiner; Florian Schwarzhans; Sylvia Desissaire; Hemma Resch; Georg Fischer; Michael Pircher; Christoph K Hitzenberger; Clemens Vass

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4259. doi:

A sublamina-based approach to retinal vessel analysis using OCT angiography in glaucoma and glaucoma suspect eyes OPEN ACCESS

Rolake Alabi; Opeyemi Alabi; Alan W Kong; Mohit Jethi; Luca Della Santina; Yvonne Ou

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4260. doi:

Can the Inner Nuclear Layer Thickness Help Detect Progression in Advanced Glaucoma? OPEN ACCESS

Eitan Shemuelian; Gadi Wollstein; Maria de los Angeles Ramos Cadena; Zeinab Ghassabi; TingFang Lee; Jiyuan Hu; Hiroshi Ishikawa; Joel S Schuman; Fabio Lavinsky

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4261. doi:

Glaucoma rose plots: redesigning circumpapillary progression analysis OPEN ACCESS

Timothy Edward Yap; Benjamin Davis; Philip Bloom; Maria Francesca Cordeiro; Eduardo Normando

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4262. doi:

Factors Influencing Reading Speed in Pediatric Vision Impairment OPEN ACCESS

Dawn K DeCarlo; Anne Caroline Durena; Liyan Gao; MiYoung Kwon

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4263. doi:

Remote and In-Lab Eccentric Viewing Training in Patients with Central Vision Loss OPEN ACCESS

Brittany Bowman; Jan Skerswetat; Nicole Ross; Peter J Bex

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4264. doi:

Estimating visual acuity without a visual acuity chart OPEN ACCESS

Yueh-Hsun Wu; Deyue Yu; Judith E Goldstein; MiYoung Kwon; Emily Catherine Watson; Luc Waked; Micaela R Gobeille; Dawn K DeCarlo; Rachel Gage; Chun Wang; Gordon E Legge

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4265. doi:

Longitudinal Results and Test-Retest Variability of a Novel Optokinetic Nystagmus-Based Visual Acuity Test in Children with CLN2 Disease OPEN ACCESS

Christina Ohnsman; Yevgeniya Atiskova; Jan Wildner; Angela Schulz; Simon Dulz

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4266. doi:

Rod and cone dark adaptation in *PAX6*-associated aniridia OPEN ACCESS

Hilde Rogeberg Pedersen; J.Gilson Stuart; Erlend Sommer Landsend; Øygunn Aas Utheim; Tor Utheim; Rigmor C Baraas

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4267. doi:

Post-hoc simulation study to optimize performance of the computer adaptive EyeQ OPEN ACCESS

Petra Rausch - Koster; Frank D. Verbraak; Ger M.H.B. van Rens; Ruth M A van Nispen

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4268. doi:

Application of Rasch analysis to the TeachCVI survey tool in a spectrum of CVI patients OPEN ACCESS

Jem Martin; Chris Bradley; Shannin Yee; Nicole Ross

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4269. doi:

Prob-eye-otics: Cytokine Producing Therapeutic Ocular Commensals OPEN ACCESS

Jackie L Shane; Yannis Rigas; Robert M Q Shanks; Anthony St. Leger

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4270. doi:

Defining the phenotype and distribution of resident immune cells surrounding meibomian gland orifices in mice OPEN ACCESS

Ching Yi Wu; Laura Elizabeth Downie; Carole Maldonado-codina; Philip Morgan; Holly Rose Chinnery

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4271. doi:

Topical glaucoma therapy is associated with alterations of the ocular surface microbiome OPEN ACCESS

Chih-Chiun Jamie Chang; Karina Somchanc; Christine Zemsky; Anne-Catrin Uhlemann; Jeffrey M Liebmann; George A Cioffi; Lama A Al-Aswad; Susan Lynch; Bryan Winn

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4272. doi:

The Effect of Blocking Substance P in Treating the Allergic Red Eye OPEN ACCESS

Amirreza Naderi; Shudan Wang; Lingjia Liu; Tomas Blanco; Yutong Xia; Yihe Chen; Reza Dana

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4273. doi:

Topical application of anti-miR-183/96/182 cluster causes transient, reversible corneal nerve reduction and demonstrates therapeutic potential against bacterial keratitis OPEN ACCESS

Naman Gupta; Sharon A McClellan; Denise Bessert; Linda D Hazlett; Shunbin Xu

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4274. doi:

Temporal analysis in Transcriptomic profile identifies immune markers and modulation of key pathways in Murine Model of Multi-Drug Resistant (MDR) *Pseudomonas aeruginosa* endophthalmitis OPEN ACCESS

Joveeta Joseph Ruben; POONAM NAIK; Milind Neelkanth Naik

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4275. doi:

Hypoxia adaptation is essential for *Aspergillus fumigatus* virulence in the cornea

OPEN ACCESS

Kevin K Fuller; Emily Adams; Jorge D Lightfoot

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4276. doi:

Transcription factors involved in determination of photoreceptor fate OPEN ACCESS

Juan Angueyra; Vincent P. Kunze; Laura K. Patak; Hailey Kim; Katie Kindt; Wei Li

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4277. doi:

Control of selected transcripts in LWS1 vs LWS2 cones by thyroid hormone in zebrafish OPEN ACCESS

Ashley Alice Farre; CHI SUN; Audrey Duncan; Sam Hunter; Margaret Starostik; Linn Gieser; Milton English; Abirami Santhanam; Eyad Shihabeddin; John O'Brien; Anand Swaroop; Deborah L Stenkamp

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4278. doi:

CCN2 regulates the extracellular matrix and facilitates retinal ganglion cell maturation in the developing retina OPEN ACCESS

Charles Karrasch; Sohyun Moon; Golam Mohiuddin; Oleg Evgrafov; Brahim Chaqour

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4279. doi:

Transcription factor Myt1L promotes neuronal fate acquisition in the developing retina OPEN ACCESS

Luciano Custo Greig; Mollie Woodworth; Jeffrey L Goldberg; Sui Wang

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4280. doi:

Retina-lens detachment: a matrix-mediated step of vertebrate eye development OPEN ACCESS

Kristen Kwan; Macaulie Casey; Chase Bryan; J. Thomas Brown

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4281. doi:

Early photoreceptor trajectories towards a cancer-predisposed cone precursor state OPEN ACCESS

Dominic Shayler; Kevin Stachelek; Sunhye Lee; Yeha Kim; Mitali Singh; Maxwell Bay; Matthew Thornton; Narine Harutyunyan; Andrew Salas; Kayla Stepanian; Jennifer Aparicio; Brendan Grubbs; Michael Bonaguidi; Hardeep Singh; David Cobrinik

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4282. doi:

The role of Tet3 in retinal development and function OPEN ACCESS

Grazia Giorgio; Silke Haverkamp; Elisa Murenu; Stylianos Michalakis

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4283. doi:

Binding affinity: A measure of potency for OCU200, a potential therapeutic for the treatment of wet-AMD and DME OPEN ACCESS

Pratap C Naha; Subechhya Neupane; Arun K Upadhyay

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4284. doi:

Aqueous humor vascular endothelial growth factor pharmacodynamics in the phase 3 Archway trial of the Port Delivery System with ranibizumab OPEN ACCESS

Murtaza Adam; Laura Barras; Mauricio Maia; Shamika Gune; Katie Maass; Michael Chang

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4285. doi:

Therapeutic effect of hindered phenol compound in a solid lipid nanoparticle formulation in mouse models of dry AMD OPEN ACCESS

Yin Shan Eric Ng; Zhenyu Ji; Anthoula Arta; Yu Su; Andrew James Urquhart; Patricia A D'Amore

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4286. doi:

UBX1325, A Novel Senolytic Treatment for Patients with Advanced DME or wet AMD: 24-Week Results of a Phase 1 Study OPEN ACCESS

Robert Bhisitkul; Sharon Klier; Pamela Tsuruda; Ben Xie; Lauren Masaki; Jessica Bautista; Akbar Khan; Jamie Dananberg

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4287. doi:

Stereopure oligonucleotide treatment results in durable rescue of disease phenotype in a P23H hRHO pig model of human autosomal dominant retinitis pigmentosa (adRP) OPEN ACCESS

Jennifer M. Noel; Archana Jalligampala; Olivia N Jacobs; Joseph Prestigiacomo; Hailin Yang; Qianli Pan; Fangjun Liu; Yuan Yin; Richard Looby; Chandra Vargeese; Michael Byrne; Maureen A McCall

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4289. doi:

Sex matters in eye and brain metabolism: targeted metabolomics reveals tissue-specific sex difference in metabolism in fasted vs. fed state OPEN ACCESS

Olivia Roby; Saravanan Meghashri; Rong Xu; Yekai Wang; Jianhai Du

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4290. doi:

Natural history of the progression of choroideremia: 24-month follow-up OPEN ACCESS

David G Birch; Paul S Bernstein; Ian M MacDonald; Timothy Stout; David Liao; Kirsten Locke; Yi Zhai; Maniong Xu; Mark Lomax; Shobana Aravind; Jennifer Vernotto; David Kirn; Peter Francis

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4291. doi:

Intrinsic signal optoretinography of dark adaptation abnormality due to rod degeneration OPEN ACCESS

Jie Ding; Tae-Hoon Kim; Xincheng Yao

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4292. doi:

Deep Learning Facilitated Study of the Relationship between Visual Field Sensitivity (VFS) and Photoreceptor Outer Segment (OS) Metrics in Retinitis Pigmentosa (RP) OPEN ACCESS

Yi-Zhong Wang; Katherine Juroch; Tein Luu; David G Birch

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4293. doi:

Prospective natural history of retinitis pigmentosa due to *RHO*, *PDE6A*, or *PDE6B* mutations: interim analysis of the PHENOROD2 study OPEN ACCESS

Anne Celle; Alice Le Meur; Daniel C Chung; Saddek Mohand-Said; Jose Alain Sahel; Isabelle S Audo

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4294. doi:

ABCA4-alleles bearing two rare cis-variants comprise a significant proportion of those found in affected patients. OPEN ACCESS

Maria Pilar Martin Gutierrez; Sandra Vermeirsch; Nikolas Pontikos; Mark Simcoe; Michel Michaelides; Gavin Arno; Omar Abdul Rahman Mahroo; Andrew R Webster

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4295. doi:

Vitreoretinal Amyloidosis: Clinical Features, OCTA Appearances, Gene Mutations, and

Treatment Outcomes of Vitrectomy Surgery OPEN ACCESS

Nan Zhou; wenbin wei

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4296. doi:

Photoreceptor Manifestations of Primary Mitochondrial Optic Nerve Disorders OPEN ACCESS

Yin-Hsi Chang; Yu-Chuan Kang; Pei-Kang Liu; Sarah Levi; Hung-Xuan Wang; Yun-Ju Tseng; Go Hun Seo; Hane Lee; Lung-Kun Yeh; Kuan-Jen Chen; Wei-Chi Wu; Chi-Chun Lai; Laura Liu; Nan-Kai Wang

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4297. doi:

The Effect of Physician Face Mask Use on Post-injection Endophthalmitis OPEN ACCESS

Blake Hugo Fortes; Konstantin Astafurov; Wendy M. Smith; Andrew J. Barkmeier; Timothy W Olsen; Raymond Iezzi; Sophie J. Bakri

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4298. doi:

Clinical Outcomes of Patients with Endophthalmitis after Dexamethasone Intravitreal Implant OPEN ACCESS

Annika G. Samuelson; Ankur Nahar; Samir N Patel; Raziyeh Mahmoudzadeh; Mirataollah Salabati; JOHN W HINKLE; Rebecca Russ Soares; Ajay E. Kuriyan; Sunir Garg

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4299. doi:

Outcomes of vitreoretinal complications requiring surgery after abusive head trauma OPEN ACCESS

Yasmin Islam; Syed Gibran Khurshid

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4300. doi:

Recovery of Vision in Open Globe Injury Patients with Initial No Light Perception Vision OPEN ACCESS

Karen Michelle Wai; Noha A Sherif; Marisa Tieger; Grayson Wilkes Armstrong

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4301. doi:

Risk factors for retinal detachment following open globe injury and outcomes of retinal detachment repair following ocular trauma OPEN ACCESS

Asad Farooq Durrani; Katie Li; Yunshu Zhou; Avi Toiv; Peter Yu Cheng Zhao; Michael Huvard; David C Musch; David N Zacks

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4302. doi:

The relationship between retinal ganglion cell degeneration and retinal perfusion after acute traumatic brain injury OPEN ACCESS

Elinor Laws; Jenny Hepschke; Noor Haziq Saliman; Antonio Belli; Richard J Blanch

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4303. doi:

Accommodation Microfluctuation is Impaired in Mild Traumatic Brain Injury OPEN ACCESS

Nawaf M Almutairi; Chunming Liu; Karen Hampson

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4304. doi:

Dorsal and ventral stream associations with autistic traits in children OPEN ACCESS

Andrew Ernest Silva; Jane E Harding; Chris J.D McKinlay; Darren W.T. Dai; Samson Nivins; Rajesh K Shah; Benjamin Thompson

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4305. doi:

Color Correcting Lenses Enhance Cone VEPs in Color Deficiency OPEN ACCESS

Jeff C Rabin; Frances Silva; Natalie Trevino; Harper Gillentine; Li Liqing; Loary Inolan; Gary Anderson; Erica Lee; Harrison Vo

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4306. doi:

Contrast imbalance and its impact on stereoacuity in keratoconus? OPEN ACCESS

Bhagya Lakshmi Lakshmi Marella; Pravin Krishna Vaddavalli; Jagadesh C Reddy; Miriam Conway; Catherine M Suttle; Shrikant R Bharadwaj

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4307. doi:

Cognitive visual functions among diabetic and healthy individuals with diabetic family history OPEN ACCESS

Aiswaryah Radhakrishnan; Suchismita Rout

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4308. doi:

Effect of interocular difference in retinal illuminance on monocular and binocular flicker perception OPEN ACCESS

Reena Durai; Amithavikram R R Hathibelagal; Marisa Rodriguez Carmona; John L Barbur; Shrikant R Bharadwaj

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4309. doi:

Effect of Rapid Alternating and in phase flicker occlusion on Stereopsis OPEN ACCESS

Bhavatharini Ramakrishnan; Scott B Stevenson

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4310. doi:

Assistance for macular degeneration (MD): Different strategies for different augmentations OPEN ACCESS

Alexandra Sipatchin; Miguel García García; Siegfried Wahl

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 714 - F0442. doi:

One-Year Outcome of Ocular Injuries in Survivors of the Beirut Port Ammonium Nitrate Blast OPEN ACCESS

Malik Said Ladki; Ahmad Mansour; Daniel Cherfan; Alex Jalkh; Ferenc Kuhn

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 696 - F0221. doi:

Evidence-Based Screening to Optimize the Yield of Positive Ophthalmologic Examinations in Children Evaluated for Non-accidental Trauma OPEN ACCESS

Maxwell Su; Kirby Taylor; Jaquelin Stoutin; Courtney Shaver; Matthew Recko

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 694 - F0219. doi:

Computational Modeling of Soccer Ball Trauma of the Eye and Comparison With Abusive Head Trauma OPEN ACCESS

Matthew Lam; Pengfei Dong; Yasin Shokrollahi; Donny W Suh; Linxia Gu

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 692 - F0217. doi:

Rates of Structural and Functional Progression of Glaucoma and Their Risk Factors in an African Ancestry Cohort OPEN ACCESS

Rebecca Salowe; Yineng Chen; Selam Zenebe-Gete; Roy Lee; Hanni V Gudiseva; Qi N Cui; Eydie G Miller-Ellis; Victoria Addis; Prithvi Sankar; Ebenezer Daniel; Gui-Shuang Ying; Joan O'Brien

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 625 - A0365. doi:

Prevalence of Refractive Error in Inherited Retinal Dystrophies OPEN ACCESS

Shaden Yassin; Evan Walker; Shyamanga Borooah
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 619 – A0334. doi:

Diabetic Retinopathy Screening Experiences among Hispanic, Spanish-Speaking Adults: "¡Trátame Como Familia!" OPEN ACCESS
Pamela Capellan; Eugenia Greig; Kristen Harris Nwanyanwu; Rosana Gonzalez-Colaso
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 558 – A0123. doi:

Association between heavy metals and diabetic retinopathy in the National Health and Nutrition Examination Surveys (NHANES) OPEN ACCESS
Anne Xuan-Lan Nguyen; Leonardo Landó; Xuan-Vi Trinh; Jerry Kurian; Vincent Quoc-Huy Trinh; Albert Y. Wu
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 556 – A0121. doi:

Intriguing linear semi-logarithmic relationships of oxygen permeability with water, silicon, and fluorine contents of silicone-hydrogel contact lens materials OPEN ACCESS
Terin E Dupre; William J Benjamin
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 527 – A0225. doi:

Dynamic Salt Accumulation in the Post-Lens Tear Film with Soft-Contact-Lens Wear: Implications for Protection Against Corneal Hyperosmolarity OPEN ACCESS
Clayton J Radke; Young Hyun Kim; Thien Nguyen; Meng C Lin; CHENG-CHUN PENG
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 519 – A0217. doi:

Choroidal Abnormalities in Pediatric NF1: a Cohort Natural History Study OPEN ACCESS
Raffaele Parrozzani; Luisa Frizziero; Giacomo Miglionico; Chiara Sofia De Biasi; Giulia Midena; Edoardo Midena
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 482 – A0019. doi:

Role of Warburg Effect in Age-Related Macular Degeneration OPEN ACCESS
Amany M Tawfik; Yara A Samra; Pragya Rajpurohit; Wagdy Elkalawozgy; Yusra Zaidi
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 465 – A0002. doi:

The Efficacy of Netarsudil - Post-approval Reality OPEN ACCESS
Oluwafeyikemi Okome; Jane Song; Jun Lin; Sze Wong
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4379 – A0422. doi:

Factors affecting eye preference in a prospective randomized controlled fellow eye study comparing WFG-LASIK and WFO-LASIK treatment OPEN ACCESS
Bryce Chiang; Edward E Manche
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4362 – A0299. doi:

Evaluation of tensile strength and burst pressure of slipknots and surgeon's knots OPEN ACCESS
Patrick Wang; Davin Johnson
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4337 – A0274. doi:

Later bedtime associated with greater myopic refractive error and variations in axial length rhythms OPEN ACCESS
Xiao Nicole Liu; Thomas John Naduvilath; Padmaja Sankaridurg
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4328 – A0033. doi:

Wide field topographical choroidal thickness measurement following binocular, eye-tracking mapped, short-term optical defocus OPEN ACCESS
Peter Wagner; Arthur Ho; Juno Kim
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4319 – A0024. doi:

Choroidal thickness changes in response to defocus-free monochromatic light OPEN ACCESS
Katharina Breher; Diana Gottschalk; Siegfried Wahl
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4318 – A0023. doi:

Accommodation-induced changes in ciliary body length and thickness, peripheral choroidal thickness and peripheral axial length OPEN ACCESS
David Andrew Atchison; Dinesh Kaphle; Marwan Suheimat; Katrina L Schmid
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4314 – A0019. doi:

At-Home Refraction Measurement OPEN ACCESS
Noam Sapiens; Amra Ramic; John Serri
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4204 – A0132. doi:

Pulmonary function in school-age children following intravitreal injection of bevacizumab for retinopathy of prematurity OPEN ACCESS
Wei-Chi Wu
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4203 – F0263. doi:

Thermal conduction in posterior scleritis and choroiditis. OPEN ACCESS
Ankush Kawali; Aayesha Khanum; Apeksha Shettigar; Ashwin Mohan; Srinivasan Sanjay; Jananee Rajendran; Padmamalini Mahendradas; Rohit Shetty
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4097 – F0061. doi:

Retinal Mitochondrial Flavoprotein Fluorescence in Patients with Genetically Confirmed Retinal Dystrophies OPEN ACCESS
Matthew Russell; Justin Muste; Collin Rich; Kurt Riegger; Rishi P Singh; Elias I Traboulsi
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4094 – F0058. doi:

Depolarization mapping in the retina using polarization-sensitive OCT in a large field of view OPEN ACCESS
Alice Regina Motschi; Sylvia Desissaire; Markus Schranz; Stefan Steiner; Florian Schwarzhans; Hrvoje Bogunovic; Philipp Ken Roberts; Clemens Vass; Michael Pircher; Christoph K Hitzenberger
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4071 – F0035. doi:

Characterization of the human iridocorneal angle in vivo using OCT Gonioscopy OPEN ACCESS
Alessandra Carmichael-Martins; Brett King; Thomas J Gast; Brittany Walker; Stephen A Burns
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 402 – F0440. doi:

Acute Ophthalmic Manifestations in Mycoplasma Induced Rash and Mucositis OPEN ACCESS
Abdelrahman M. Elhusseiny; Ramy Rashad; Swapna S Shanbhag; James Chodosh; Hajirah N. Saeed

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3946 – A0226. doi:

Automated machine learning (AutoML) models for diabetic retinopathy (DR) image classification from handheld retinal images OPEN ACCESS

Duy Doan; Lizzie Anne Aquino; Joseph Paolo Y. Silva; Claude Michael Salva; Cris Martin P. Jacoba; Recivall Salongcay; Glenn Paulo Alog; Kaye Locaylocay; Aileen Viguilla Saunar; Jennifer K Sun; Tunde Peto; Lloyd Paul Aiello; Paolo S Silva

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2105 – F0094. doi:

Automated detection of the spatial location of vitreoretinal instruments from retinal images using Deep Learning methods OPEN ACCESS

Marialejandra Diaz Ibarra; Josiah K To; Junze Liu; Sherif Abdelkarim; Anjali Herekar; Baruch D Kuppermann; Pierre Baldi; Andrew Browne

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 210 – F0057. doi:

A robust, flexible retinal segmentation algorithm designed to handle neuro-degenerative disease pathology (NDD-SEG) OPEN ACCESS

Rahele Kafieh; Sajed Rakhshani; Jeffry Hogg; Rachael A Lawson; Nicola Pavese; Will Innes; David H Steel; Jaume Bacardit; Jenny Read; Anya Hurlbert

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2080 – F0069. doi:

A deep learning approach for automated dispersion compensation in optical coherence tomography OPEN ACCESS

Shaiban Ahmed; David Le; Taeyoon Son; Tobiloba Adejumo; Xincheng Yao

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 208 – F0055. doi:

Deep learning (DL) to segment retinal layer disruption on optical coherence tomography (OCT) in neovascular age-related macular degeneration (nAMD) OPEN ACCESS

Yun Li; Huanxiang Lu; Thomas Albrecht; Andreas Maunz; Alex Neubert; Fethallah Benmansour; Alvaro Gomariz; Jennifer Luu; Daniela Ferrara

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2079 – F0068. doi:

Deep learning based segmentation of retinal fluids using optical coherence tomography (OCT) data OPEN ACCESS

Alexander Schmid; Krunalkumar Ramanbhai Patel

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2077 – F0066. doi:

Iterative Machine Learning: A Test Case for the Detection of Disc Hemorrhage OPEN ACCESS

Aaron C Brown; Henry Cousins; Karina Esquenazi; Yonwook Kim; Clara Cousins; Tobias Elze; Alon Harris; Michael A Coote; Louis R Pasquale

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 205 – F0052. doi:

Using Deep Learning for Assessing Image-Quality of 3D Macular Scans from Spectral-Domain Optical Coherence Tomography OPEN ACCESS

Ziqi TANG; Xi Wang; Anran Ran; Fangyao Tang; Yu Cai; Haoxuan Che; Dawei Gabriel YANG; Luyang Luo; Quande Liu; Yiu Lun Wong; Hao Chen; Pheng-Ann Heng; Carol Y. Cheung

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 204 – F0051. doi:

DDLSNet: a novel deep learning-based system for grading glaucomatous funduscopic images for damage OPEN ACCESS

Haroon Rasheed; Esteban Morales; Tyler Austin Davis; Zhe Fei; Lourdes Grassi; Agustina De Gainza; Joseph Caprioli

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2038 – A0479. doi:

Determining the Accuracy of Rates of RNFL Loss Measured by Peripapillary OCT OPEN ACCESS

Chris Bradley; Kaihua Hou; Patrick Herbert; Mathias Unberath; Jithin Yohannan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2030 – A0471. doi:

Evaluation of a combined OCT index in healthy and glaucomatous eyes OPEN ACCESS

Patricia Sha; Gary C Lee; Niranchana Manivannan; Stephanie Magazzeni; Auberie Bonjean; Laura Moyal; Sirine Hammoud; Mathieu Lehmann; Bénédicte Dupas

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2025 – A0466. doi:

Identifying Eyes at Risk for Glaucoma Surgery with Deep Learning OPEN ACCESS

Ruolin Wang; Patrick Herbert; Kaihua Hou; Chris Bradley; Mathias Unberath; Jithin Yohannan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2015 – A0456. doi:

A Deep Autoencoder Model to Denoise Visual Fields in Glaucoma OPEN ACCESS

Vishal Sharma; Lucy Q Shen; Louis Pasquale; Tobias Elze; Michael V Boland; Sarah R Wellik; Gustavo De Moraes; Jonathan S Myers; Siamak Yousefi; Mengyu Wang

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2010 – A0451. doi:

MSC-EVs treat dry eye disease by regulating dendritic cells and promoting tissue repair OPEN ACCESS

Rongjie Guo; Jiaxuan Jiang; chenchen wang; Qi Liang; Kai Hu

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1978 – A0308. doi:

Spatial Sequencing in a Model of Early Onset Retinal Degeneration OPEN ACCESS

Kristyn Huffman; Roman Sasik; Shyamanga Borooah

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1939 – F0357. doi:

Multi-omic investigation of metabolic disturbance in a mouse model of retinopathy of prematurity. OPEN ACCESS

Jarrod C. Harman; Jay Yang; Minji Ko; Michael Kinter; Zhongjie Fu

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1910 – A0056. doi:

Optic nerve crush elicits proteomic alterations in the rat retina OPEN ACCESS

Xiaorong Xin

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1907 – A0053. doi:

TGF-β2 Gene Expression in Chick RPE is Differentially Regulated by Retinal Simultaneous Competing Defocus of Opposite Sign OPEN ACCESS

Yan Zhang; Wulian Song; Michael J Collins; Christine Frances Wildsoet

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1881 – A0010. doi:

Viscous and Elastic Properties of Rabbit Lenses as a Function of Age OPEN ACCESS

Salavat Aglyamov; Hongqiu Zhang; Manmohan Singh; Fernando Zvietcovich; Kirill Larin

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1822 – F0438. doi:

Extended Depth of Focus from AGN-190584 in GEMINI 1 and GEMINI 2 Pooled Phase 3

Studies OPEN ACCESS

Christopher Lievens; Shane Kannarr; Weston Pack; Zuoyi Zhang

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1812 – F0428. doi:

Duration of Efficacy of AGN-190584 on Photopic Distance-Corrected Intermediate Visual Acuity in the GEMINI 1 and GEMINI 2 Pooled Phase 3 Studies OPEN ACCESS

Daniel Chang; William Christie; Weston Pack; Yixin Fang

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1811 – F0427. doi:

BINOCULARLY EXTENDED DEPTH OF FOCUS WITH A NEW INVERTED MENISCUS IOL OPEN ACCESS

Eloy A. Villegas; Jose M. Marin; Consuelo Robles; Lucia Hervella; Encarna Alcon; Pedro M Prieto; Pedro Taña; Harilaos S Ginis; Pablo Artal

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1807 – F0423. doi:

Direct visualization of negative dysphotopsia in a physical model of the pseudophakic eye OPEN ACCESS

Harilaos S Ginis; Dimitrios Christaras; Spyridon Tsoukalas; Angelos Livir-Rallatos; Pablo Artal

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1798 – F0414. doi:

A comparative analysis of gene and protein expression in a zebrafish model of chronic photoreceptor degeneration OPEN ACCESS

Ashley Kramer; Justin Carthage; Marla Spain; Katherine Gurdziel; Tiffany A. Cook; Ryan Thummel

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1771 – F0320. doi:

Characterization of Deletions using Oxford Nanopore Long-Read Sequencing OPEN ACCESS

Benjamin Mc Clinton; Laura A. Cronnon; Martin McKibbin; Rajarshi Mukherjee; Manir Ali; Chris Inglehearn; Christopher M. Watson; Carmel Toomes

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1597 – A0386. doi:

Changes in Glaucoma Management Following Diurnal Home Tonometry OPEN ACCESS

Nicholas O'Connor; Lauren E Hock; Aakriti Garg Garg Shukla; Natasha N Kolomeyer; Reza Razeghinejad; L. Jay Katz; Jonathan S Myers; Daniel Lee

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 159 – A0352. doi:

CTG18.1-mediated Fuchs endothelial corneal dystrophy: characterizing biomarkers of pathogenicity in patients with rare intermediate triplet repeat expansions OPEN ACCESS

Nihar Bhattacharyya; Amanda Sadan; Christina Zarouchlioti; Nathaniel Jordan Hafford-Tear; Kirithika Muthusamy; Alison J Hardcastle; Pavlina Skalicka; Petra Liskova; Stephen Tuft; Alice E Davidson

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1588 – A0377. doi:

Efficacy and Safety of OTX-DED Dexamethasone Intracanalicular Insert in Subjects with Dry Eye Disease: A Multicenter, Randomized, Vehicle-Controlled Phase 2 Study OPEN ACCESS

Lisa Nijm; Joseph Tauber; David G. Evans; Betsy Gillick; Rabia Gurses-Ozden; Michael Goldstein

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1558 – A0283. doi:

Use of SPEED Questionnaire for School Based Dry Eye Screening OPEN ACCESS

Amy Catherine Nau; Reeti Rawal; Olivia Nau; Bhup Rawal; Ragyie Rawal

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1553 – A0278. doi:

Scleral deformation under air pulse – a finite element study OPEN ACCESS

Andres De la Hoz; Judith Sophie Birkenfeld; Susana Marcos

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1431 – F0389. doi:

Cross-species comparison of non-canonical Wnt pathway expression in the developing outer plexiform layer OPEN ACCESS

ROSANNA CALDERON; Kayla Stepanian; Angela Ferrario; G. Esteban Fernandez; Aaron Nagel

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1371 – F0302. doi:

Evaluating the durability of extended aflibercept treatment regimens in patients with resistant CNVs. OPEN ACCESS

Melina Cavichini Cordeiro; Varsha Alex; Fritz Gerald P Kalaw; Sumit Singh; Lingyun Cheng; William R Freeman

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1335 – F0169. doi:

Analysis of AI-quantified fluid dynamics over time and their impact on visual acuity in real-world patients with neovascular age-related macular degeneration OPEN ACCESS

Philipp Fuchs; Leonard Coulibaly; Hrvoje Bogunovic; Oliver Leingang; Anastasiia Gruber; Daniel Barthelmes; Gregor Sebastian Reiter; Ursula Schmidt-Erfurth

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1333 – F0167. doi:

Assessing vessel density variability in OCT-A scans as a means of differentiating papilledema from pseudopapilledema OPEN ACCESS

Jonathan Siktberg; Berkowitz Sean; Gloria Nashed; Masoud Fard; Raheem Kaifeh; Virna Shah

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 131 – A0293. doi:

Intraocular pressure in infant Rhesus monkeys: diurnal curves and awake versus sedated measurements OPEN ACCESS

Krista M Beach; Li-Fang Hung; Linjiang Lou; Lisa A Ostrin

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1298 – F0113. doi:

Preliminary Retrospective Validation of a Novel Virtual Reality Visual Field Standard Testing Algorithm, as Compared to Standard Automated Perimetry OPEN ACCESS

Hounsh Munshi; Kirsten Da Silva; Eleonore Savatovsky; Elena Bitrian; Alana L Grajewski; Ta Chen Chang

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1275 – A0415. doi:

Comparison of Global and Hemifield Rates of Visual Field (VF) Progression in Glaucoma OPEN ACCESS

Johnny Xiang Li; Carlos G DeMoraes; Noga Harizman; Ari Leshno; Qing Wang; George A Cioffi; Jeffrey M Liebmann

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1274 – A0414. doi:

Investigation on rabbit corneal birefringence using digital photoelasticity technique OPEN ACCESS

Himanshu Gururani; Sai Naga Sri harsha Chittajallu; Ashutosh Richhariya; M Ramji; Viswanath Chinthapenta

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1203 – A0203. doi:

Corneal Innervation changes after Sars-Cov-2 Infection. An In vivo Confocal Microscopy Study OPEN ACCESS

Alberto Barros; Javier Lozano-Sanroma; Juan Queiruga Piñeiro; Ignacio Alcalde; Arancha Poo López; Luis Fernandez-Vega Cueto-Felgueroso; Jesus Merayo-Lloves

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1202 – A0202. doi:

Corneal sensitivity with non-contact air jet esthesiometry compared with mechanical esthesiometry. OPEN ACCESS

Jesus Merayo-Lloves; Javier Lozano-Sanroma; Alberto Barros; Juan Queiruga Piñeiro; Arancha Poo López; Ignacio Alcalde; Luis Fernandez-Vega Cueto-Felgueroso

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1201 – A0201. doi:

Interocular retinal nerve fiber layer thickness in Parkinson disease OPEN ACCESS

Mariana Nadais Aidar; Camila Matsuura Endo; Patrick Israel Fligelman Kanas; Lisângela Morimoto; Diovani Costa Madeira; Yasmin Tourmer Boppre; Andrea Cotait Kara-José; Henrique Ballalai Ferraz; Roberta Arb Saba; Eric Pinheiro Andrade; Ivan Maynart Tavares

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 119 – A0281. doi:

Human retinal pigment epithelium cells can be imaged *in vivo* with a novel adaptive optics camera using transscleral illumination OPEN ACCESS

Sonja Simon-Zoula; Laura Kowalczuk; R dornier; Mathieu Kunzi; Antonio Iskandar; Zuzana Misutkova; Aurélia Gryczka; Aurélie Navarro; Fanny Jeunet; Irmela Mantel; Francine F Behar-Cohen; Timothé Laforest; Christophe Moser

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1056 – F0303. doi:

High-density and >20-degree field-of-view *en-face* and three-dimensional posterior eye imaging by Lissajous scan optical coherence tomography and angiography OPEN ACCESS

Shuichi Makita; Masahiro Miura; Shinnosuke Azuma; Toshihiro Mino; Tatsuo Yamaguchi; Yoshiaki Yasuno

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1055 – F0302. doi:

Pseudo-degree-of-polarization-uniformity image generated from OCT intensity using deep neural network OPEN ACCESS

Yoshiaki Yasuno; Kensuke Oikawa; Masahiro Miura; Takuya Iwasaki; Tatsuo Yamaguchi; Toshihiro Mino; Shuichi Makita

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1044 – F0291. doi:

Correlation of Paravascular Inner Retinal Defects with Posterior Vitreous Detachment Using En Face OCT OPEN ACCESS

Veronica Romero Morales; Elodie Bousquet; swathi somisetty; Ahmad Santina; Neda Abraham; Anthony Lu; Meira Fogel Levin; Timothy J. Peirs; Brian Lee; David Sarraf

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1009 – F0256. doi:

Utility of Remote Point-Of-Care Tele-Retinal Imaging for Screening and Diagnosis of Diabetic Retinopathy: A Pilot Study OPEN ACCESS

Megh Ketur Shah; Roger Henry; Bernard Szirth; Neelakshi Bhagat

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1008 – F0255. doi:

Assessing choroidal nevi, melanomas and indeterminate melanocytic lesions using multimodal imaging – a retrospective chart review OPEN ACCESS

Sandrine Zweifel; Fredy Geiger; Sadiq Said; Anahita Bajka; Mario Toro; Maximilian Wiest; Daniel Barthelmes; Marc Stahel

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1005 – F0252. doi:

Diffusion tensor imaging of optic nerve integrity in mouse models of E50K optineurin mutation and optineurin deficiency OPEN ACCESS

Carlos Parra; Muneeb A. Faiq; Crystal Liu; Vishnu Adi; Melissa L Cooper; Giles Hamilton-Fletcher; Henry Tseng; Kevin C. Chan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 941 – A0410. doi:

Quantification of fibrovascular ridge thickness in retinopathy of prematurity using swept-source optical coherence tomography OPEN ACCESS

Thanh-Tin P Nguyen; Shuibin Ni; Shanjida Khan; Xiang Wei; Susan R Ostmo; Michael F Chiang; Yali Jia; David Huang; Yifan Jian; J. Peter Campbell

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 802 – F0361. doi:

Oral teriflunomide effect on visual function in multiple sclerosis: multifocal electroretinogram responses after 12 months of treatment. OPEN ACCESS

Anna Camos-Carreras; Marc Figueras-Roca; Manna Dotti-Boada; Salut Alba-Arbalat; Sara Llufriu; Albert Saiz; Pablo Villoslada; Bernardo Sanchez-Dalmau

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 755 – F0407. doi:

Wearable Light Isolating Medical Device to Perform Electroretinography OPEN ACCESS

Colin Korlesky; James N Ver Hoeve; Bikash R Pattnaik

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 744 – F0396. doi:

Outbreak of Acute and Subacute Post-Injection Endophthalmitis caused by Pseudomonas aeruginosa OPEN ACCESS

Margaret McDougal Runner; Tedi Begaj; Drew Scoles; Matthew Trese; Jong Park; Kimberly A Drenser; George A. Williams; Sandeep Randhawa; Alan J. Ruby

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 710 – F0235. doi:

Intravitreal injection dead volume varies significantly with different forces applied to TB, ranibizumab, and aflibercept syringes OPEN ACCESS

Colin Andrew Lemire; Efren Gonzalez; Joseph James Raevis

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 701 – F0226. doi:

Longitudinal Imaging Reveals Patterns of Neurodegenerative Inflammation in Rotenone-Induced Retinal Neurotoxicity OPEN ACCESS

Jonathan David Luisi; Wenbo Zhang; Massoud Motamedi; Bill T Ameredes

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 691 – F0145. doi:

Does sclera deform under electric field? OPEN ACCESS

Hamed Hatami-Marbini; Jafar Arash Mehr

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 644 – A0384. doi:

Focal Loss Analysis of Peripapillary Nerve Fiber Layer Reflectance for Glaucoma Diagnosis OPEN ACCESS

Ou Tan; Dongseok Choi; Aiyin Chen; Brian Francis; Joel S Schuman; Rohit Varma; David S Greenfield; David Huang

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 643 – A0383. doi:

Automated video assessment of the eyelids OPEN ACCESS

Chris Schulz; Holly Clarke; Sarith Makuloluwe; Swan Kang

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 599 – A0300. doi:

Periocular melanoma in situ treated by Mohs micrographic surgery compared to wide

Periocular melanoma in situ treated by Mohs micrographic surgery compared to wide local excision OPEN ACCESS

Amanda Miller; Alice C Jiang; Alyson Endicott; Meleha Ahmad; Robert Kersten; Bryan Winn; Reza Vagefi; Seanna R Grob

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 597 – A0298. doi:

Participatory Evaluation of Framework Outlining Barriers to and Facilitators of Diabetic Retinopathy Screening Utilization in a High-Risk Population OPEN ACCESS

Joana Andoh; Althea Norcott; Elizabeth Fairless; Kristen Harris Nwanyanwu

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 592 – A0157. doi:

Sustained release of EOBO rewetting agent from a new silicone hydrogel contact lens material OPEN ACCESS

Ying Zheng; Jinbo Dou; Young Hyun Kim; Clayton J Radke; James Wu

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 523 – A0221. doi:

Whole genome sequencing for rare variants and imaging analyses in model organisms identify *SLC16A8* as a significant contributor for AMD risk OPEN ACCESS

Navid Nouri; Amy Stockwell; Bailey Hannon; TOM TRUONG; Yann Malato; Kristen Browder; Abdoulaye Sene; Mark Mccarthy; Emily Y Chew; Shawnta Y Chaney; Heinrich Jasper; Brian Yaspan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 489 – A0066. doi:

Pilot study to evaluate the impact of exogenous cannabinoids on the human visual system OPEN ACCESS

Fargol Mostofian; Melanie Renee Lalonde; Hong-An Nguyen; Stuart Glenn Coupland; Rustum Karanjia

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4592 – F0454. doi:

Automated identification of ganglion and amacrine cell types in a large primate retina dataset OPEN ACCESS

Sam Cooler; Alexandra Kling; Eric Wu; Colleen Rhoades; Nora Brackbill; Alexander Sher; Alan Litke; EJ Chichilnisky

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4564 – F0426. doi:

Clinical utility of quantitative pupillometry (QP) for the detection of afferent pupillary defects (APDs) OPEN ACCESS

Brian Lemanski; Nicole Lemanski; Mabel Cheng

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4545 – F0459. doi:

Non-invasive ultrasound retinal stimulation for vision restoration and its frequency-dependent efficiency OPEN ACCESS

Gengxi Lu; Xuejun Qian; Runze Li; Yushun Zeng; Biju Thomas; Mark S Humayun; Qifa Zhou

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4535 – F0322. doi:

Effects of Stimulus Parameters on Phosphene Appearance in Epiretinal Prostheses OPEN ACCESS

Jacob Granley; Yuchen Hou; Tanya Bhatia; Byron Johnson; Michael Beyeler

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4525 – F0312. doi:

Relative Scaling for the Creation of Simulated Phosphene Maps OPEN ACCESS

Haichun Sun; Liancheng Yang; Arathy Kartha; Roksana Sadeghi; Gislin Dagnelie

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4524 – F0311. doi:

Risk factors and outcomes of glaucoma following cataract surgery in infancy for persistent fetal vasculature (PFV)-related cataract OPEN ACCESS

Christine Xu; Deborah Vanderveen; Bharti Gangwani; Isdin Oke

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4473 – A0183. doi:

Gender Disparities in the American Association for Pediatric Ophthalmology and Strabismus OPEN ACCESS

Tatiana Rosenblatt; Amee D Azad; Andrea Lora Kossler

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4472 – A0182. doi:

A NOVEL TRACKING SCANNING LASER OPTHALMOSCOPE (TSLO) SYSTEM FOR FIXATION AND SACCADE QUANTIFICATION OPEN ACCESS

Mark Mackanos; Jason Karp; Scott Liddle; Nathan Luck; Daniel Gray; Christy Sheehy

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4455 – F0134. doi:

Phenotypic Differences of Punctate Inner Choroidopathy (PIC) and Multifocal Choroiditis (MFC) Utilizing Fluorescence Lifetime Imaging Ophthalmoscopy (FLIO) OPEN ACCESS

Alexandra Vitale; Sean Collon; Lydia Sauer; Paul S Bernstein

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4444 – F0123. doi:

Persistent Subclinical Photoreceptor Loss in a Patient with Acute Posterior Multifocal Placoid Pigment Epitheliopathy After Reactivation of Symptoms post COVID Vaccine OPEN ACCESS

Laura J Kopplin; Kimberly E Stepien; Nickie Stangel; Jeremy Rogers

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4438 – F0117. doi:

Decreased cone density in circular retinal regions at the outer edge of full thickness macular hole edema in adaptive optics imaging OPEN ACCESS

LINA CHEN

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4436 – F0115. doi:

In vivo measurement of the light distribution in the focal plane of an AOSLO focused at inner and outer retina OPEN ACCESS

Jeremy Rogers; Nickie Stangel; Alfredo Dubra

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4432 – F0111. doi:

Characterization of retinal morphology in the naturally occurring hypopigmented 13-lined ground squirrel OPEN ACCESS

Chloe Guillaume; Ching Tzu Yu; Hannah M Follett; Owen Bowie; Phyllis Summerfelt; Joseph Carroll; Dana Merriman

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4426 – F0105. doi:

Laser-Induced Choroidal Neovascularization in pigmented rabbits OPEN ACCESS

Jessica Henry; Van Phuc Nguyen; Yanxiu Li; Yannis Mantas Paulus

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4423 – F0102. doi:

Quantification of long anterior zonules in late-onset retinal degeneration OPEN ACCESS

Leonardo Lando; Anne Xuan-Lan Nguyen; Randa Li; Roly Megaw; Baljean Dhillon; Shyamanga Borooah

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4408 – F0087. doi:

Statistical Accuracy of fMRI Retinotopic Mapping in Patients with Altered Neurovascular Function with different Stimulus Presentation OPEN ACCESS

Gauri Patil; Colleen L. Schneider; Bradford Z. Mahon

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4396 – F0075. doi:

Assessing the Test-Retest Reproducibility of the Ocular Photosensitivity Analyzer to Quantify Visual Photosensitivity OPEN ACCESS

Rhiya Mittal; Mariela C. Aguilar; Alex Gonzalez; Victoria Graham; Katherine Leviste; Paula A. Sepulveda Beltran; Esdras Arrieta; Bianca Maceo Heilman; William J Feuer; Gemayaret Alvarez; Barry Hurwitz; Byron L Lam; Elizabeth Felix; Jean-Marie Parel; Anat Galor

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4233 – A0161. doi:

Automated Assessment of Visual Photosensitivity in Healthy and Traumatic Brain Injury Study Participants OPEN ACCESS

Mariela C. Aguilar; Rhiya Mittal; Alex Gonzalez; Victoria Graham; Paula A. Sepulveda Beltran; Katherine Leviste; Esdras Arrieta; Bianca Maceo Heilman; William J Feuer; Gemayaret Alvarez; Barry Hurwitz; Byron L Lam; Elizabeth Felix; Anat Galor; Jean-Marie Parel

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4231 – A0159. doi:

Association of Lifetime Major Depressive Episode with Significant Visual Impairment or Blindness OPEN ACCESS

Asad Loya; Zain S Hussain; Joana Andoh; Ben J. Harvey

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4230 – A0158. doi:

Neurodevelopmental outcomes in patients screened for retinopathy of prematurity. OPEN ACCESS

Jamie E Anderson; Patricia Blasco; Aaron S Coyner; Peter Campbell

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4202 – F0262. doi:

Quantitative comparison of retinal vascular changes by quadrants after treatment of retinopathy of prematurity OPEN ACCESS

WEILIANG Wang; Sharon Freedman; David Wallace; S. Grace Prakalapakorn

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4200 – F0260. doi:

Ophthalmic Biopharmaceutics Classification System (oBCS): *in vitro in silico* relationship (IVISR) for comparability risk assessment in topical eye drop formulations OPEN ACCESS

Hovhannes John Gukasyan; Xavier Faraj; Melissa Martinez; Ian S Haworth

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4169 – F0161. doi:

Role of the vitreous in ocular biomechanics OPEN ACCESS

João Heitor Marques; Pedro Manuel Baptista; João Miguel Coelho; Maria João Menéres; Angelina Meireles; João Melo Beirão

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4147 – F0384. doi:

The impact of unconjugated hyperbilirubinemia on angiogenic and oxidative stress genes in the neonatal rat retina exposed to LPS. OPEN ACCESS

Mandkhai Molomjamts; Katie Satrom; Tate Gisslen; Ellen Coley Ingolfsland

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4145 – F0382. doi:

Evaluating the influence of stimulation parameters on phosphene detectability for epiretinal prostheses OPEN ACCESS

Breanne Christie; Roksana Sadeghi; Arathy Kartha; Avi Caspi; Roberta L Klatzky; Francesco Tenore; Seth Billings; Gislin Dagnelie

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4069 – F0033. doi:

Physiology-enhanced data analysis of the Thessaloniki Eye Study: relationship between intraocular pressure and venous resistance OPEN ACCESS

Rajat Rai; Giovanna Guidoboni; James Keller; Daphne Zou; Christopher Wikle; Erin L. Robinson; Maggie Lin; Roberto Nunez; Brent A Siesky; Alice Verticchio; Barbara M Wirostko; Dimitrios Giannoulis; Vassilis Kilintzis; Fotis Topouzis; Alon Harris

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 4033 – A0418. doi:

Volumetric analysis of orbital fat and extraocular muscles in TED patients vs. normal controls using a novel fully automated atlas-based segmentation method. OPEN ACCESS

Shirley Li; Joy Li; Jonathan Lee; Anandh Rajamohan; Jay Acharya; Alexander Lerner; Kimberly Gokoffski; Vivek Patel; Sandy Zhang-Nunes; Vishal Patel; Jessica Chang

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3998 – A0340. doi:

Volumetric Analysis of Orbital Soft Tissues in Thyroid Eye Disease: Correlations With Clinical Characteristics OPEN ACCESS

Joy Li; Shirley Li; Jonathan Lee; Anandh Rajamohan; Jay Acharya; Alexander Lerner; Kimberly Gokoffski; Vivek Patel; Sandy Zhang-Nunes; Vishal Patel; Jessica Chang

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3996 – A0338. doi:

Transscleral optical imaging in non-neovascular age-related macular degeneration. OPEN ACCESS

Irmela Mantel; Leonidas Solomos; Zuzana Misutkova; Antonio Iskandar; Aurélia Gryczka; Aurélie Navarro; Fanny Jeunet; Laura Kowalczuk; Rémy Dormier; Francine F Behar-Cohen; Christophe Moser

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 392 – F0430. doi:

In vivo characterization of erythrocyte supply in the human retinal capillaries OPEN ACCESS

Yuhua Zhang; Xiaolin Wang; Boyu Gu

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 390 – F0428. doi:

Essential role of *ELOVL2* in maintenance of membrane structure in ARPE19 cells OPEN ACCESS

Fangyuan Gao; Emily Tom; Qianlan Xu; Dorota Skowronska-Krawczyk

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3886 – A0088. doi:

ADAPTIVE OPTICS AND MULTIMODAL IMAGING FOR INFLAMMATORY VITREORETINAL INTERFACE ABNORMALITIES OPEN ACCESS

Marie-Helene Errera; Emmanuelle Satcho; Valerie Snyder; Kunal K Dansingani; Iman AHMAD; Adam THOMPSON A; Nikita KEDIA; Jay Chhablani; Jose Alain Sahel; Michel Paques; Ethan A Rossi

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 387 – F0425. doi:

Deep learning assisted prediction of long-term visual outcome after 3 monthly anti-vascular endothelial growth factor injections in patients with central-involved diabetic macular edema OPEN ACCESS

Yu-Chieh Ko; Chih-Wei Peng; Hshin-Chi Ho; Shih-Hwa Chiu; Shih Jen Chen; Chen-Yi Lee

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3778 – F0199. doi:

Epigenetic Regulation of Neural Progenitor Multipotency OPEN ACCESS
Sujay Shah; Alex Fernandes; Pierre Mattar
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3739 – F0345. doi:

Response of Drusen Volume to Curcumin is Correlated with Risk Alleles for Age-Related Macular Degeneration OPEN ACCESS
Nicholas Pfahler; Indre Bielskus; Nicholas J Volpe; Stephanie Aman; Zibute Zaparackas; Paul A Knepper
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 372 – F0203. doi:

Prompt Primary Cyclophotocoagulation with Subsequent Aqueous Shunt as Needed for Neovascular Glaucoma with Synechial Angle Closure OPEN ACCESS
Jessie Wang; Mary Qiu
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3714 – A0399. doi:

Comparing Phenotype of Subretinal Drusenoid Deposits in Age Related Macular Degeneration (AMD) with *ARMS2* Risk Alleles versus High Risk Vascular Disease OPEN ACCESS
Joshua Chazaro; Robert Thomson; Arielle Coughlin; Yuehong Tong; Katy Tai; Oscar Otero; Harriet Lloyd; R. Theodore Smith
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 371 – F0202. doi:

A Two-Year, Phase 1 Study to Evaluate the Efficacy of Oral Curcumin on Drusen Volume OPEN ACCESS
Paul A Knepper; Nicholas Pfahler; Indre Bielskus; Nicholas J Volpe; Stephanie Aman; Zibute Zaparackas
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 369 – F0200. doi:

Profile of age-related macular degeneration in Bhutan: Should screening be considered? OPEN ACCESS
Bhim Bahadur Rai; Michael G. Morley; Paul S Bernstein; Ted Maddess
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 368 – F0199. doi:

Clearing up the causes of corneal clouding in aniridia-related keratopathy OPEN ACCESS
Diana Knight Scavuzzo; James D Lauderdale
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3648 – A0213. doi:

Creation of Grafts with Bioengineered Descemet Membrane for Corneal Lamellar Keratoplasty OPEN ACCESS
Mikhail Tsurkan; Simone Arndt; Sarah Tsurkan; Angela Gomez Bedoya; Alfonso L. Sabater
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3636 – A0201. doi:

Hyperglycemia promotes mitophagy and thereby mitigates hyperglycemia-induced damage OPEN ACCESS
Anara Serikbaeva; Ruth Zelkha; Destiny Ogbu; Yueru Li; Andrius Kazlauskas
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3621 – A0076. doi:

Identification of pericyte biomarkers in aqueous and vitreous humor reflecting diabetic retinopathy severity OPEN ACCESS
Stephanie Hartouni; Irene Tom; Daphne Yang; Ricardo Lamy; Joshua Wu; Jay M. Stewart; Michael Chang
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3618 – A0073. doi:

Non-Neovascular Fluid in Age Related Macular Degeneration: Observe and Extend OPEN ACCESS
Ahmad Santina; Veronica Romero Morales; Neda Abraham; Swathi Somisetty; Meira Fogel Levin; Elodie Bousquet; Eric Nudleman; Srinivas R Sadda; David Sarraf
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 360 – F0191. doi:

Cyclin D1 Expression and Molecular Genetic Findings in Periocular Histiocytic-Dendritic Neoplasms OPEN ACCESS
Roger Henry; Maya Eiger-Moscovich; Tatyana Milman
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3585 – A0014. doi:

Fallacy of Disease: Equivocation OPEN ACCESS
May Ameri; David Thomas Szynkarski; Ray Cortez; Daniel S Gombos; Sapna P Patel; Nagham S Al-Zubidi
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3583 – A0012. doi:

Comparing targeted azithromycin treatment strategies in a trachoma hyperendemic area OPEN ACCESS
Hamidah Mahmud; Berhan Ayele Haile; Zerihun Tadesse; Sintayehu Gebresillasie; Ayalew Shiferaw; Mulat Zerihun; Jeremy D Keenan; Tom Lietman
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3565 – A0452. doi:

A cross-sectional study of gender differences in trachomatous scarring in a formerly trachoma hyperendemic district in Tanzania OPEN ACCESS
Meraf A Wolle; Glory Mgboji; Beatriz Munoz; Fahd Naufal; Michael Saheb Kashaf; Sheila K West
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3551 – A0131. doi:

Retinal Displacement On Fundus Autofluorescence Imaging: Only The Tip Of the Iceberg OPEN ACCESS
Aditya Bansal; Eudardo Roditi; Koby Brosh; Rajeev Hemant Muni
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3465 – F0365. doi:

Posterior vitreous detachment increases macrophage-like cell density OPEN ACCESS
Jacob M Wang; Janice Xin-Yee Ong; Peter L. Nesper; Amani A Fawzi; Jeremy Lavine
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3460 – F0360. doi:

Outcomes of Eyes Undergoing Silicone Oil Removal Following Complex Rhegmatogenous Retinal Detachment Repair OPEN ACCESS
Emma C. Stenz; Charles Clifton Wykoff; Sagar B. Patel
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3447 – F0347. doi:

Primary Care Provider Familiarity with Preferred Practice Patterns for Comprehensive Eye Examinations OPEN ACCESS
Daniel Lee Liebman; Giannis A. Moustafa; Alice Lorch; Ryan Vasan; Lipika Samal; Steven Crawford; Nora Osman; Carolyn Kloek
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3393 – A0180. doi:

Social Determinants of Health, Medication Adherence, and Glaucoma in Vulnerable Patients OPEN ACCESS

Kailyn Amanda Ramirez; Maria Ines Vega Garces; Maria Suarez; Bart Holland; Albert Khouri

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3390 – A0177. doi:

Patterns of Pediatric Visual Impairment in the Public Sector of Barbados OPEN ACCESS

Kirsten Da Silva; Michelle Dowell; Eleonore Savatovsky; David Callender; Mike Campbell; Ian Hambleton; Hounsh Munshi; Alana L Grajewski; Dawn Grosvenor

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3386 – A0173. doi:

Referral Patterns for Pediatric Eye Care within the Public Sector of Barbados OPEN ACCESS

Michelle Dowell; Kirsten Da Silva; Hounsh Munshi; David Callender; Mike Campbell; Ian Hambleton; Eleonore Savatovsky; Alana L Grajewski; Dawn Grosvenor

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3385 – A0172. doi:

Relationships between the Optic Nerve Head in Optical Coherence Tomography and Optic Nerve Volume in Magnetic Resonance Imaging in Glaucoma OPEN ACCESS

Zain Khera; Ronald Zambrano; Eitan Shemuelian; Lei Zheng; Vivek Trivedi; Hiroshi Ishikawa; Joel S Schuman; Kevin C. Chan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3362 – F0171. doi:

Bacillary layer detachment in Vogt-Koyanagi-Harada disease: a biomarker with prognostic value OPEN ACCESS

Ruy Felippe Missaka; Mauro Goldbaum; Cleide Guimarães Machado; Fernanda Maria Silveira Souto; Priscilla Figueiredo Nóbrega; Marcelo Mendes Lavezzo; Viviane Mayumi Sakata; Maria Kiyoko Oyamada; Carlos Eduardo Hirata; Joyce H Yamamoto

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3361 – F0170. doi:

Macular GCL vs. IPL Rates of Change in Eyes with Suspected and Established Glaucoma OPEN ACCESS

Massood Mohammadi; Leila Chew; Erica Su; Robert E Weiss; Joseph Caprioli; Kouros Nouri-Mahdavi

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3360 – F0169. doi:

Improving Circumpapillary Retinal Nerve Fiber Layer Thickness (RNFLT) Norms with Retinal Anatomy OPEN ACCESS

Mengyu Wang; Tobias Elze; Thomas Peschel; Louis R Pasquale; Lucy Q. Shen; Kerstin Wirkner; Joachim Thiery; Markus Loeffler; Christoph Engel; Toralf Kirsten; Franziska G Rauscher

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3357 – F0168. doi:

Prospective Cross-sectional Study to Assess the Association between the Time of Peak Intraocular Pressure Occurs in the Water Drinking Test and the Severity of Glaucoma OPEN ACCESS

Carolina Susanna; Bianca Susanna; Marina Affonso dos Santos Fonseca Ribeiro; Rodrigo Mota; Remo Susanna Jr; Vagner Lima

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3308 – A0408. doi:

Clinical Efficacy of Multiple Small Incision Sub-Tenon Ab Interno Xen Implantation in Patients with Primary Open-Angle Glaucoma (POAG) OPEN ACCESS

Jacob Bear; Matthew Baum; Aaron Roschke; Brianna Graham; James Lee

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3307 – A0407. doi:

Utility of the red reflex test for detecting posterior ophthalmic pathology in the pediatric population OPEN ACCESS

Isabelle Dortonne; Monica Manrique; Sohel Rana; William Madigan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3274 – A0326. doi:

Referral patterns and visual sequelae in children with newly diagnosed primary brain tumors OPEN ACCESS

casey smith; Lauren C. Mehner

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3273 – A0325. doi:

The Impact of subconjunctival injections of Humanin-G loaded microspheres on RCS rat model of retinal degeneration OPEN ACCESS

Kevin Schneider; Mustafa Ozgul; Vasilica Narcisa Ianopol; Shari Atilano; Bin Lin; Magdalene J Seiler; M.Cristina Kenney

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3162 – F0436. doi:

Utility of UW-based solutions for reducing apoptotic signaling and retinal ganglionic cell death in a whole eye transplantation rodent model OPEN ACCESS

Neil J Khatter; Charles R Owens; Bing Li; Yong Wang; Alkesh Jani; Christene Huang; Robert W Nickells; An-Jey Su; Kia M Washington

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3158 – F0432. doi:

A novel perfusion system for modeling the outer retina-RPE-choriocapillaris unit *in vitro* OPEN ACCESS

Nicholas Edwin Stone; Arwin Shrestha; Kelly Mulfaul; Robert F Mullins; Budd A. Tucker

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3156 – F0430. doi:

Continuously tunable attenuator for vision care with unprecedented contrast ratio OPEN ACCESS

Guoqiang Li; Tiantian Dai; Yongqiang Sun

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3080 – F0552. doi:

Age-dependence of the objective optical and mechanical accommodative response measured using a combined dynamic autorefractor and OCT system OPEN ACCESS

Bianca Maceo Heilman; Heather Durkee; Marco Ruggeri; Leana Rohman; Arthur Ho; Jean-Marie Parel; Fabrice Manns

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3068 – F0540. doi:

Combined System for Dynamic Refraction and Ocular Biometry During Accommodation OPEN ACCESS

Heather Durkee; Marco Ruggeri; Arthur Ho; Siobhan Williams; Jean-Marie Parel; Fabrice Manns

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3067 – F0539. doi:

Artificial intelligence to identify conventional treatment patterns in neovascular age-related macular degeneration in a real-world population OPEN ACCESS

VIRGINIA DE SOUZA LEOLINO MARES; Hrvoje Bogunovic; Oliver Leingang; Daniel Barthelmes; Gregor Sebastian Reiter; Ursula Schmidt-Erfurth

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3014 – F0284. doi:

An end-to-end deep learning method for predicting retinal layer thickness from Optical Coherence Tomography (OCT) images in patients with clinical progression of Age-related Macular Degen... OPEN ACCESS

Qitong Gao; Joshua Amason; Amanda Del Risco; Praruj Pant; Terry Lee; Justin Ma; Jennifer Minjia Chang-Wolf; Jay Rathinavelu; Aditya Kotla; Miroslav Pajic; Majda Hadziahmetovic

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3008 – F0278. doi:

Can the eye be a window to the lungs? AI predicts Bronchopulmonary Dysplasia through Retinal Fundus Photographs OPEN ACCESS

Praveer Singh; Aaron S Coyner; Brian K Jordan; Robison Vernon Paul Chan; Susan R Ostmo; Kemal Sonmez; Deniz Erdogmus; Cindy McEvoy; Michael F Chiang; J. Peter Campbell; Jayashree Kalpathy-Cramer

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2985 – F0255. doi:

TNF-α stimulation enhances the neuroprotective effects of gingival MSCs derived exosomes in retinal ischemia-reperfusion injury via the MEG3/miR-21a-5p axis OPEN ACCESS

Ziyu Yu; Yehong Zhuo

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2975 – F0216. doi:

Identification and characterization of microaneurysm in OCT and OCT angiography OPEN ACCESS

Min Gao; Tristan Hormel; Yukun Guo; Steven T. Bailey; Christina J Flaxel; David Huang; Thomas S Hwang; Yali Jia

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2899 – F0052. doi:

Relation between type I diabetes duration and capillary density in the macula OPEN ACCESS

Marie Elise Wistrup Torm; Jesper Johannesen; Thomas W. Gardner; Javad Hajari; Oliver Niels Klefter; Michael Larsen

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2895 – F0048. doi:

The Importance of Bruch's Membrane Segmentation in Choriocapillaris Measurements Underlying Drusen in Eyes with Age-Related Macular Degeneration OPEN ACCESS

Giovanni Gregori; Jianqing Li; Mengxu Shen; Yingying Shi; Hao Zhou; Qinqin Zhang; Yuxuan Cheng; Rita Laiginhas; Jeremy Liu; Ruikang K Wang; Philip J Rosenfeld

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2893 – F0046. doi:

Terminal e-Beam sterilization of Densomeres™ retains structural integrity and sustained bioactivity of bevacizumab in rabbit cornea model OPEN ACCESS

Jan S Peterson; WeiLiam Chen; Peter K Kaiser; Barry M. Libin; Jeffrey M Liebmann

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 288 – F0091. doi:

Cat-12 Risk Stratification for Conventional and Femtosecond Laser-assisted Cataract Surgery OPEN ACCESS

Sancy Low; Ayushi Gupta; Catherine McGurk; John Tran; Harry Roberts; Vijay Waigh; David O'Brart

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2872 – F0009. doi:

The Effect of Blue-light-blocking Intraocular Lenses on Sleep, Mood, and Circadian Rhythm in Diabetic Patients OPEN ACCESS

Nolan Adams; Ryan Hakim; Omer Iqbal; Michael Wesolowski; James McDonnell

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2870 – F0007. doi:

Retinal incorporation and turnover of *bis*-allylic deuterated docosahexaenoic acid (D-DHA) - a new dry AMD drug candidate: a comprehensive tissue uptake and elimination survey and comparis... OPEN ACCESS

Genevieve James

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 287 – F0090. doi:

Racial Differences in the Rates of Pseudophakic Cystoid Macular Edema after Routine Phacoemulsification Cataract Surgery OPEN ACCESS

Sunil Bellur; Haig Pakhchanian; Masumi Asahi; Rahul Raiker; Monica Dalal; H Nida Sen

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2869 – F0006. doi:

A new mode of gene therapy to subdue the limitations of the allotopic method: an analytic approach OPEN ACCESS

sindhu velmurugan; Tsung-Han Chou; Jeremy D. Eastwood; Diego Alba; Vittorio Porciatti; John Guy; Hong Yu

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2830 – A0346. doi:

Patient Health Literacy Levels Across Different Ophthalmology Specialty Clinics and Patient Education Levels OPEN ACCESS

Saif Hamdan; Jonathan Siktberg; Tyler Pfister; Sapna Gangaputra

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2818 – A0148. doi:

An Analysis of Patient Satisfaction after Double Eyelid Surgery using Social Media Reviews OPEN ACCESS

Benjamin Zhou; Jasmine Mahajan; Christopher Tseng; Roger Henry; Paul D Langer

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2817 – A0147. doi:

Proptosis secondary to poor ocular tethering from congenital aplasia / hypoplasia of multiple extraocular muscles OPEN ACCESS

Sameera Nadimpalli; Jeffrey Yu; Lev Prasov; Pamela Williams; Adam Jacobson

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2773 – A0308. doi:

Improvement of eye-tracking based metrics in children with arteriovenous malformation rupture OPEN ACCESS

Nazia M Alam; Scott W. J. Mooney; Glen Thomas Prusky

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2772 – A0307. doi:

Simultaneous Assessment of the Whole Eye Biomechanics Using High Frequency Ultrasonic Elastography OPEN ACCESS

Runze Li; Xuejun Qian; Chen Gong; Ying Liu; Junhang Zhang; Benjamin Xu; Mark S Humayun; Qifa Zhou

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2732 – A0096. doi:

Systemic Nicotinamide Riboside Treatment Protects Retinal Ganglion Cells in an Aged Optic Nerve Crush Mouse Model OPEN ACCESS

Nan Zhang; Ying Li; Xian Zhang; Micah Chrenek; Jiaxing Wang; Brenner Charles; Eldon E Geisert; John M Nickerson; Jeffrey H Boatright

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2717 – A0081. doi:

Repeatability assessment of monocular and binocular visual field measurements with a head mounted display OPEN ACCESS

Ahmed Sayed; Vatookarn Roongpoovapatr; Taher Eleiwa; Mohamed Abou Shousha; Richard K Parrish II

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2570 – F0524. doi:

Disability Glare Quantified Rapidly with AIM (Angular Indication Measurement) Glare Acuity OPEN ACCESS

Jan Skerswetat; Anna Borowiack; Peter J Bex

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2558 – F0512. doi:

Modeling the relationship between VA measured with Snellen and ETDRS standards
OPEN ACCESS

Michael Dorr; Yukai Zhao; Luis A Lesmes; Zhong-Lin Lu

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2554 – F0508. doi:

Epiretinal Membrane in Patients with Diabetic Macular Edema: To Peel or not to Peel?
OPEN ACCESS

Shulamit Schwartz; Anat Loewenstein; Gilad Rabina

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2520 – F0246. doi:

Absence of PP2A accelerates retinal degeneration in GRK1- and Arr1-deficient mice
OPEN ACCESS

Jennings Luu; Alexander Kolesnikov; Hui Jin; Krzysztof Palczewski; Vladimir J Kefalov

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2498 – F0205. doi:

Impact of Fear of Falling in Adults with Low Vision During the Task of Gait Initiation
OPEN ACCESS

Pranati Ahuja; Praveena Gupta; Gregory Brusola; Tony Chao; Rodney Welsh; Mary E Schmitz-Brown; Mansoo Ko

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2459 – F0036. doi:

Characterization of Danon disease human induced pluripotent stem cell derived retinal pigment epithelial cells OPEN ACCESS

Shyamanga Ram Borooah; Paul Bushway; Joshua Fong; Yasmin Yacoubian; Kristyn Huffman; Eric Adler

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2446 – F0390. doi:

Optic Nerve Head, Choroidal Thickness and Individual Macular Layers Measurements with Optical Coherence Tomography in Normal and Glaucoma Eyes with Distinct Peripapillary Atrophy Areas OPEN ACCESS

Fabio Lavinsky; Valentina Mostardeiro Lubisco; Henrique Bohn; Alessandra Tofani de Barros; Fernanda Mari Fagundes Fujihara; Luciano Porto Bellini; Rodrigo Leivas Lindenmeyer; Helena Messinger Pakter; Jaco Lavinsky; Egidio Picetti; Daniel Lavinsky; Paulo Augusto de Arruda Mello

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2424 – A0358. doi:

Foreground-background registration for angiography fundus images OPEN ACCESS

Hugang Ren; Susan Su; Archana Kolli; Neil D'Souza; Niranchana Manivannan

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 241 – F0088. doi:

Multimodal optical elastography assessment of a murine collagen XII knockout
OPEN ACCESS

Achuth Nair; Yogeshwari Sanjayrao Ambekar; Christian Zevallos-Delgado; Manmohan Singh; Fernando Zvietcovich; Taye Mekonnen; Salavat Aglyamov; Manuel Koch; Edgar M Espana; Kirill Larin

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2400 – A0203. doi:

In vivo Characterization of Corneal Shear Modulus Under Localized Cross-linking Using Confocal Air-coupled Optical Coherence Elastography OPEN ACCESS

Kirill Larin; Fernando Zvietcovich; Achuth Nair; Manmohan Singh; Salavat Aglyamov; Michael D Twa

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2399 – A0202. doi:

In vivo determination of the human corneal elastic modulus by VOCT OPEN ACCESS

Marcos A Crespo; Hiram Jimenez; Tanmay Deshmukh; Jose S Pulido; Frederick H Silver; Dominick Benedetto; Christopher J Rapuano; Zeba A Syed

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2397 – A0200. doi:

Commercially available, unmodified Octopus perimeters can characterize rod-photoreceptor function in two-color dark-adapted perimetry OPEN ACCESS

Lesley Everett; Austin David Igelman; Jason Changbum Park; Robert Alexander Hyde; J Jason McAnany; Paul Yang; Mark E Pennesi

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2246 – F0454. doi:

Detecting Cataract from Color Fundus Photographs Using Explainable Deep Learning
OPEN ACCESS

Amr Elsawy; Tiarnan D L Keenan; Qingyu Chen; Alisa T Thavikulwat; Sanjeeb Bhandari; Emily Y Chew; Zhiyong Lu

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 217 – F0064. doi:

Texture-transformer-based deep-learning (DL) network for enhancing image-quality of OCT-angiography images with lower-resolution OPEN ACCESS

Carol Yim-lui Cheung; Hao Chen; Yuyan RUAN; Weiwen Zhang; Dawei Gabriel YANG

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 215 – F0062. doi:

Pharmacokinetics of a Hydrogel-based Besifloxacin Intracanalicular Insert in Canines
OPEN ACCESS

Megan Priem; Ankita Desai; Chintan Patel; Charles D Blizzard; Peter K Jarrett; Michael Goldstein

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2128 – F0144. doi:

Generative-adversarial-learning-based biomarker activation map for improving the interpretability of deep-learning-aided diabetic retinopathy screening OPEN ACCESS

Pengxiao Zang; Tristan Hormel; Jie Wang; Steven T. Bailey; Christina J Flaxel; David Huang; Thomas S Hwang; Yali Jia

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 211 – F0058. doi:

Combining OCT Corneal Topography and Thickness Maps to Diagnose Keratoconus Using a Convolutional Neural Network OPEN ACCESS

Elias Pavlatos; David Huang; Yan Li

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2109 – F0098. doi:

Deep-learning based diagnostic quality assessment of choroid layer in OCT scans
OPEN ACCESS

Kiran Kumar Vupparaboina; Shanmukh Reddy Manne; Surya Prakash Koidala; Kalah Ozimba; Abdul Rasheed Mohammed; SARFORAZ BIN BASHAR; Jose Alain Sahel; Soumya Jana; Jay Chhablani

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2107 – F0096. doi:

Automatic identification and quantification of retinal cysts in optical coherence tomography images using deep residual encoder-decoder architecture. OPEN ACCESS

Shanmukh Reddy Manne; Amrish Selvam; Manan Patel; Arnim Kuchhal; Jose Alain Sahel; Jay Chhablani; Kiran Kumar Vupparaboina; Soumya Jana

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2082 – F0071. doi:

A Validation Study of An Automated Artificial Intelligence-based Detection Model for Disc Hemorrhage Using Color Fundus Imaging OPEN ACCESS
Arun Govindaiah; Oscar Otero-Marquez; Louis Pasquale; Aaron C Brown; R. Theodore Smith; Alauddin Bhuiyan
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 2042 – A0483. doi:

A Novel Study of the Extraocular Recti Muscle Degree Orientation: A Cadaveric Approach OPEN ACCESS
Andrew Barton; Viren Rana; Eric Kim; Joshua Tanzer; Jamie Schaefer
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1878 – A0007. doi:

Corneal Permeability of Pilocarpine HCl 1.25% with Varying pH Formulations OPEN ACCESS
Mile Brujic; Jaya Giyanani; William Chang; Vrushali Waknis; Weston Pack; Yumna Shabaik; Jennifer Seal; Anu V Gore; Kelly K Nichols
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1814 – F0430. doi:

Development of Noregen, a novel regenerative ocular therapeutic medicine OPEN ACCESS
Wendy A Dailey; Kenneth P Mitton; Michael Thomas Trese; Kimberly A Drenser
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1754 – F0214. doi:

Tube Shunt Surgery for Glaucoma Management: 12-year data OPEN ACCESS
Ryan Lamrani; Jae-Chiang Wong; Daniel Lee; Jonathan S Myers
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1662 – A0157. doi:

The Impact of Inflammatory Markers on the Ganglion Cell Complex in Non-Glaucoma Subjects OPEN ACCESS
Mojtaba Fazli; Franziska G Rauscher; Kerstin Wirkner; Christoph Engel; Toralf Kirsten; Markus Loeffler; Joachim Thiery; Tobias Elze; Thomas Ebert; Mengyu Wang
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1661 – A0156. doi:

The Impact of Race on the Relationship Between Cup-To-Disc Ratio and Glaucomatous Visual Field Loss OPEN ACCESS
Pingping Zhao; Yangjiani Li; Mohammad Eslami; Saber Kazeminasab; Mojtaba Fazli; Vishal Sharma; Omar Halawa; Nazlee Zebardast; Mengyu Wang; Tobias Elze
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1660 – A0155. doi:

Effectiveness of TearCare System in Improvement Dry Eye Disease Symptoms in Meibomian Gland Dysfunction OPEN ACCESS
Marc Bloomenstein; Jennifer Loh; Kavita Dhamdhere
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1567 – A0292. doi:

Comparing the efficacy between 0.09% cyclosporine, 0.05% cyclosporine, and 5% lifitegrast in patients with dry eye disease OPEN ACCESS
Ajay Kolluru; Annie Nguyen
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1565 – A0290. doi:

Association of hyperopia reserve with the severity of parental refractive status in pre-school Chinese children–Beijing Hyperopia reserve study OPEN ACCESS
Yonghong Jiao; Jianing Pu; Yuxin Fang; Zhen Zhou; Wei Chen; Jianping Hu; Shanshan Jin; Xinli Liu; Lihua Wang; Jingjing Feng; Huan Tong; Shanshan Xing
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1427 – F0385. doi:

Telemedicine Vision Threatening Diseases and Wellness Screenings in Uninsured Latino Community During COVID-19 OPEN ACCESS
Maria Ines Vega Garces; Priya Tailor; Aretha Zhu; Rashika Verma; Bernard Szirth; Albert Khouri; Miriam Habiel
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1421 – A0117. doi:

Personalized patient interface for optimal alignment with ophthalmic devices for remote monitoring OPEN ACCESS
Mahsa Darvishzadeh Varcheie; Simon Antonio Bello; Gabrielle Zacks; Kabir Arianta; Jochen Straub
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1415 – A0111. doi:

A Novel Tissue Bioreactor for Retinal Organoid Microenvironmental Control OPEN ACCESS
Emma Drabbe; Timothy Arcari; Emmanuel Rippes; Ashutosh Agarwal; Daniel Pelaez
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1361 – F0292. doi:

Modelling and measuring the viscoelastic properties of the in vivo rat eye OPEN ACCESS
Youssef H Mohamed; Christopher L Passaglia
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1294 – F0109. doi:

Theoretical investigation of Na+/K+-ATPase activity regulation on aqueous humor production OPEN ACCESS
Riccardo Sacco; Greta Chiaravalle; Giovanna Guidoboni; Brent A Siesky; Alice Verticchio; Alon Harris
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1292 – F0107. doi:

Clinically practical measurement of standard error in bundled visual field tests OPEN ACCESS
Benjamin T Backus; Michael Deiner; Zer Keen Chia; Marcus Lawrence Turner; Bertil Damato; James Blaha; Yvonne Ou
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1283 – A0423. doi:

Repeatability and correlation of a virtual reality perimeter with standard automated perimetry in glaucoma patients OPEN ACCESS
Anisa Fatima Chaudhry; Andrew Raphael Berneshawi; Jocelyn Liu; Ann Shue; Dolly Chang; Julia Kim; Robert T. Chang
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1279 – A0419. doi:

Comparison of portable perimetry tests with the Humphrey Field Analyzer OPEN ACCESS
Michael Lin; Yan Zhao; Sandra Freeman; Joyce Kang; Sofia De Arrigunaga; David S Friedman; Daniel Lee Liebman; Ana M. Roldan; Dolly Chang; Tobias Elze
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1278 – A0418. doi:

Eye-Hand Movement Latency for Grasping Objects under Crowded Conditions in Early Glaucoma OPEN ACCESS
Runjie Bill Shi; Ewa Niechwiej-Szwedo; Graham E Trope; Galia Issashar Leibovitzh; Ziad Butty; Luminita Tarita-Nistor
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1277 – A0417. doi:

Decrease in Returning Pediatric Amblyopia Patients and Potential Impact on Visual Outcomes OPEN ACCESS
Earnest Kim; Leah G Reznick; Kellyn N Bellsmith; Tosha Zaback; Abigail Lucero; Christa J Prentiss; Michelle Hribar
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1240 – A0348. doi:

Utility of Intraoperative Optical Coherence Tomography In Optimizing Air Fill for Endothelial Keratoplasty OPEN ACCESS
Carla Berkowitz; Abhijit Ramaprasad; Michael Tseng; Surendra Basti
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1207 – A0207. doi:

Spectacle: A Platform for Interacting with Over 1.5 Million Single-Cell Expression Profiles from the Eye OPEN ACCESS
Andrew P Voigt; Nicholas D Lessing; Edwin M Stone; Budd A. Tucker; Robert F Mullins; Todd E Scheetz
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1172 – A0026. doi:

Program Directors of Accredited Pediatric Ophthalmology Programs: A Descriptive Analysis OPEN ACCESS
Jared Moon; Eileen Bowden; Eric Crowell; Megan Geloneck
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1088 – A0183. doi:

United States Retina Fellowship Program Characteristics and Trends: 2010 to 2019 OPEN ACCESS
Nguyen S Nguyen; Rodney C Guiseppi; Ali Allahdina; Leslie S Jones; Salman J Yousuf
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1086 – A0181. doi:

Toward longitudinal evaluations of biological processes in transgenic mice models using an integrated cellular-resolution optical coherence microscopy and fluorescence microscopy. OPEN ACCESS
Reddikumar Maddipatla; Chia-Yang Liu; Patrice Tankam
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 107 – A0205. doi:

Comparison between Drusen Volume Calculations on Heidelberg OCT using Automated vs Manually Adjusted Segmentation for Intermediate AMD and Its Association with Retinal Pigment Epithelium ... OPEN ACCESS
Thomas Koch; Archana Nigalye; Shrinivas Pundlik; Gregory Tsougranis; Raviv Katz; Itika Garg; Hannah Wescott; Deeba Husain; John B Miller
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1052 – F0299. doi:

Single cell transcriptomic analyses of human cornea organoids reveal cell lineages of a developing cornea OPEN ACCESS
George Maiti; Maithe Rocha Monteiro de Barros; Karl J Wahlin; Shukti Chakravarti
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 102 – A0200. doi:

Usefulness of ultra-wide field retinography using confocal scanning laser ophthalmoscopy (cSLO) in patients with retinal tears and retinal detachments OPEN ACCESS
Gonzalo Elías Quezada Peralta; Isabel Fabelo Hidalgo; Nicolás Pérez-Llombet Quintana; Consuelo Fernández-Núñez; Oswaldo Esteban Durán Carrasco; Marcelino Campos Nazer; Ruymán Rodríguez Gil; María Antonia Gil Hernández; Rodrigo Abreu
Investigative Ophthalmology & Visual Science June 2022, Vol.63, 1010 – F0257. doi:

IOVS investigative ophthalmology & visual science an ARVO journal
Follow @ARVOiovs
IOVS Home
Issues
Topics
For Authors
About
Editorial Board
Online ISSN: 1552-5783

ARVO JOURNALS
Investigative Ophthalmology & Visual Science
Journal of Vision
Translational Vision Science & Technology
JOURNALS HOME
TOPICS
ABOUT ARVO JOURNALS
Rights & Permissions
Privacy Statement
Advertising
Submit a Manuscript
Disclaimer
Contact Us
ARVO.org

ARVO The Association for Research in Vision and Ophthalmology
Powered by SILVERCHAIR INFORMATION SYSTEMS
Copyright © 2024 Association for Research in Vision and Ophthalmology.

iovs investigative ophthalmology & visual science
an ARVO journal



June 2024
Vol: 65, Issue 7

ALERTS

In This Issue

ARVO Annual Meeting Abstract

Advertisement

ARVO Annual Meeting Abstract

Advancing Diagnostic Accuracy: Role of Novel AI tools in Automated Disease Detection OPEN ACCESS
Cecilia S Lee
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1. doi:

Advancing Diagnostic Accuracy: Role of image generation in Automated Disease Detection OPEN ACCESS
Aaron Y Lee
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 2. doi:

Unleashing the Power of AI: Enhancing Surgical Planning and Outcomes in Ophthalmology OPEN ACCESS
Vishali Gupta
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 3. doi:

Bridging Gaps: AI's Role in Remote Ophthalmic Screening and Care OPEN ACCESS
Rupesh Vijay Agrawal
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 4. doi:

Transforming Ophthalmology with AI - Going from Code to Clinic OPEN ACCESS
Pearse Andrew Keane
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 5. doi:

Transforming Patient Experience: Harnessing AI-Powered Virtual Assistants in Ophthalmology OPEN ACCESS
Sally Liu Baxter
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 6. doi:

Eye on Genome Editing OPEN ACCESS
Krzysztof Palczewski
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 7. doi:

Developing iPSC-derived RPE cell replacement therapy for the treatment of AMD OPEN ACCESS
Ruchi Sharma
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 8. doi:

Safety and efficacy of ATSN-101 in patients with Leber congenital amaurosis caused by biallelicmutations in GUCY2D (LCA1) OPEN ACCESS
Shannon Elizabeth Boye
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 9. doi:

Advancing stem cell-derived photoreceptor replacement therapy OPEN ACCESS
Rachael A. Pearson
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 10. doi:

Targeting mitochondrial genetic defects by gene therapy: lessons learned from LHON trials OPEN ACCESS
Jose Alain Sahel
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 11. doi:

Guiding stem-cell derived neurons to their fate: the effect of retinal microenvironment on the transplantation outcome OPEN ACCESS
Petr Y Baranov
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 12. doi:

Live-cell imaging of dynamic cellular events in RPE cells OPEN ACCESS
David S Williams
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 13. doi:

Monitoring subcellular dynamics of in vitro retinal organoids with dynamic full field OCT OPEN ACCESS
Kate Grieve
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 14. doi:

Dynamic OCT as a contrast enhancement for retinal imaging in animal models and beyond OPEN ACCESS
Robert J Zawadzki
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 15. doi:

Mononuclear phagocytes in the retina: from inflammatory biomarkers to therapy targets OPEN ACCESS
Thomas Langmann
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 16. doi:

Cellular imaging in clinical practice using adaptive optics SLO interpretations of

commercial OCT features OPEN ACCESS
Richard B Rosen
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 17. doi:

Approaches to measure retinal blood flow - current capabilities and clinical requirements
OPEN ACCESS
Leopold Schmetterer
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 18. doi:

Visually evoked retinal blood flow dynamics in the healthy and diseased retina
OPEN ACCESS
Kostadinka K Bizheva
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 19. doi:

Corneal Epithelial Cells Predominantly Secrete TIMP2, which has Anti-Inflammatory and Pro-Wound Healing Functions OPEN ACCESS
Olufemi Samuel Folorunso; Nishant R. Sinha; Vinay Kumar Pulimamidi; Lei Xi; Rahul Kumar Verma; Sunil Chauhan
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 20. doi:

Thrombomodulin Domain 1 (TMD1): A Potential Therapeutic Agent for Corneal Chemical Burn OPEN ACCESS
Yi-Hsun Huang
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 21. doi:

Development of a novel regenerative bioadhesive for the treatment of infected corneal ulcers. OPEN ACCESS
Kuldeep Suhas Dole; Yashoda Chandorkar; Annina Mittelholzer; Kongchang Wei; Shilpa Joshi; Simon Pot; Markus Rottmar
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 22. doi:

Acute Calcific Band Keratopathy After Cenegermin Use for Neurotrophic Keratitis
OPEN ACCESS
David Morcos; Olivia L Lee; Maria Del Valle Estopinal
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 23. doi:

Effects of Histatin 5 on corneal neovascularization following acute alkali burn OPEN ACCESS
GUNNAM NA; Sang Min Lee; Dhara Shah; Kyuyeon Han; Kyung-No Son; Vinay Kumar Aakalu
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 24. doi:

Human Urine-Derived Stem Cells for Personalized Corneal Repair: Autologous Stratified Epithelial Construction OPEN ACCESS
Yuanyuan Zhang; Tony Hainan Zhu; Eddie Pengfei Yu; Carol Bosholm; Jian-Xing (Jay) Ma; Qian Wan
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 25. doi:

Clinical and Pathologic Characterization of a Mouse Model of Graded Limbal Stem Cell Deficiency OPEN ACCESS
Chunyi Shao; Fei Fang; Yao Fu
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 26. doi:

The Regulatory Role PRMT5 in Corneal Epithelial Wound Healing OPEN ACCESS
Dongsheng Yan; Qiongjie Cao; Wenji Xu; Peter Reinach
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 27. doi:

Live cell imaging and immunohistochemistry used to investigate calcium signaling and motility in corneal wound healing OPEN ACCESS
Dylan Lahrs; Kristen Segars; Nicholas Azzari; Celeste Rich; Vickery E Trinkaus-Randall
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 28. doi:

Inhibition of TRPV4 Attenuates the Corneal Wound Response OPEN ACCESS
Kyle Bulloch; Kristen Segars; Nicholas Azzari; Celeste Rich; Vickery E Trinkaus-Randall
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 29. doi:

Outcomes of using the Biovance® 3L Ocular Human Amniotic Membrane Allograft for corneal epithelial defects OPEN ACCESS
Enchi Chang; Nandini Venkateswaran
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 30. doi:

Effects of TRRA1 in the Neurotrophic Keratopathy mouse model OPEN ACCESS
Yuka Okada; Makoto Tominaga; Satomi Chiken; Kenta Kobayashi; Atsushi Nambu; Takayoshi Sumioka; Shizuya Saika
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 31. doi:

Umbilical cord derived mesenchymal stem cells modulates corneal limbal niche
OPEN ACCESS
Wei Li; Juan Li; Shangkun Ou; Zuguo Liu; Chengyou Zuo
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 32. doi:

Human serum-derived extracellular vesicles support corneal epithelial wound healing *in vitro* OPEN ACCESS
Ashkon Seyed-safi; Keya Jafari; Sajjad Ahmad
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 33. doi:

Comparison of calcium signaling profiles in diabetic and healthy corneal epithelium using *in vitro* and *ex vivo* models. OPEN ACCESS
Nicholas Azzari; Kristen Segars; Celeste Rich; Vickery E Trinkaus-Randall
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 34. doi:

Trephine injury of mouse intraepithelial corneal nerves (ICNs) increases axonal mitochondrial transport to nerve terminals and enhances transfer of metabolically active mitochondria to co... OPEN ACCESS
Mary Ann Stepp; Himani Datta-Majumdar; Beverly Karpinski; Wentao Liang; Jian-Xing (Jay) Ma; Sonali Pal-Ghosh
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 35. doi:

Development and optimization of an ophthalmic hydrogel to promote corneal wound healing OPEN ACCESS
Heather L Chandler; Sara Moradi; Luxi Zhang; Zhentao Zhang; Christopher Madden; Poulami Ghosh; Hua Zhu; Katelyn E Swindle-Reilly
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 36. doi:

Characterization of TRPM8 expression in trideminal ganglia and cornea OPEN ACCESS

Rebecca Jung; Bianca Bigit; Qiang Zhou; Peter Toth; Victor H Guaiquil; Jin-Hong Chang; Mark Rosenblatt

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 37. doi:

Dynamics of Corneal Citrullination in Nitrogen Mustard Ocular Injury OPEN ACCESS

Alexander Zafiris; Paola Bargagna-Mohan; Royce Mohan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 38. doi:

Short-Term UVB Irradiation Causes Persistent DNA Damage in Corneal Limbal Epithelial Stem Cells OPEN ACCESS

Thomas Volatier; Karina Hadrian; Bjoern Schumacher; Maria Notara; Claus Cursiefen

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 39. doi:

Efficacy of a new hydroxypropyl-gamma-cyclodextrin-based eyedrop of spironolactone in a rat model of corneal wound healing OPEN ACCESS

Daniela Rodrigues-Braz; Linxin Zhu; Emmanuelle Gélizé; Jean-Pierre Clarin; Xavier Chatagnon; Youcef Benzine; Philippe Rampignon; Jean-Louis Bourgès; Francine F Behar-Cohen; Min Zhao

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 40. doi:

CDCP1 signaling regulates corneal epithelial wound healing via modulating growth factor production OPEN ACCESS

Anand Bhushan; Yan Beck; Jonathan Chan; Lingjun Zhang; Feng Lin; Connie Tam

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 41. doi:

Compound 3-120, a CBL E3 ubiquitin ligase antagonist, enhances EGFR-mediated corneal re-epithelialization OPEN ACCESS

Brian P Ceresa; Kate Tarvestad-Laise

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 42. doi:

Inhibition of c-Cbl/Cbl-b in murine corneal epithelium modulates growth factor receptor signaling OPEN ACCESS

Kate Tarvestad-Laise; Brian P Ceresa

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 44. doi:

Mucoadhesive Micellar Eyedrop for Sustained Delivery of Anti-inflammatory Drugs to Injured Eyes OPEN ACCESS

Liangju Kuang; Yimin Gu; Yuting Zheng; Yavuz OZ; Ann Yung; Amirreza Naderi; Francesca Kahale; Akitomo Narimatsu; Reza Dana; Nasim Annabi

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 45. doi:

Effects of perfluorohexyloctane on corneal healing in an ex vivo study of rabbit corneas OPEN ACCESS

Adam Alexander; Johannes Korward; Jason Vittitow; Patrick Vollmer; Ralf Dutescu; Claudia Panfil; Norbert Schrage; Jai G Parekh

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 46. doi:

Different Approaches for Delivering Growth Factors to the cornea: Assessing EphrinB2's role *in vivo* OPEN ACCESS

Daniel Lara-Newman; Cissy Xiao; Qiang Zhou; Tara Nguyen; Mark Rosenblatt; Victor H Guaiquil

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 47. doi:

Real-time Imaging of Corneal Epithelial Wound Healing Following Mechanical Debridement OPEN ACCESS

Anne Chan; Zhongqiao Lu; Jonathan Lin; Massoud Motamedi; Wenbo Zhang; Hua Liu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 49. doi:

Clinical outcomes of Simple limbal epithelial transplant (SLET) for limbal stem cell deficiency in Mexican population. OPEN ACCESS

Luis Felipe Palomino De Anda; Guillermo Raul Vera-Duarte; Braulio Velasco-Sepulveda; Nicolas Kahuam-Lopez; Adolfo Muller Morales; Alejandro Navas; Arturo J Ramirez-Miranda; Enrique O Graue-Hernandez

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 50. doi:

RGD-Modified Hydrogel Maintains Cell Growth in Mechanically-Induced Limbal Stem Cell Deficient Mouse Model OPEN ACCESS

Houri Esmaeilkhanian; Aditi Swarup; Noah Eckman; Hala Shakib Dhowre; Ozlem Ercal; Athar Shadmani; Eric Appel; Albert Y. Wu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 51. doi:

Host defense peptide mediated corneal wound healing *in vitro* and *in vivo* OPEN ACCESS

Sanhita Roy; Priyasha Mishra; Srijita Kundu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 52. doi:

The Role of SLIT3–ROBO4 Signaling in Endoplasmic Reticulum Stress–Induced Delayed Corneal Epithelial and Nerve Regeneration OPEN ACCESS

Yang Lingling; Rong Chen; Yao Wang; Qingjun Zhou

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 54. doi:

Small Extracellular Vesicles Derived From Pre-Activated Mesenchymal Stromal Cells For Treatment Of Ocular Inflammation And Injury. OPEN ACCESS

Thomas Ritter; Jiemin Wang; Ellen Donohoe; Manon Jammes; Trung Bach; Aoife Canning; Aideen Ryan; Seyedmohammad Moosavizadeh

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 55. doi:

Insulin for treatment of neurotrophic ulcers: Clinical evidence and potential mechanism OPEN ACCESS

Victoria Elisabeth Birgit Zeisberg; Matthias Zenkel; Andreas Gießl; Ursula Schlötzer-Schrehardt; Theofilos Tourtas; Julia M Weller; Victor A. Augustin; Friedrich E Kruse

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 56. doi:

Targeting Ca2+-dependent pathways to promote corneal epithelial wound healing induced by CISD2 deficiency OPEN ACCESS

Chi-Chin Sun; Shao-Yun Lee; Li-Hsien Chen; Jia-Hui Lai; Zhao-Qing Shen; Nan Ni Chen; Wen-Tai Chiu; Ting-Fen Tsai

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 57. doi:

Topical Insulin for Persistent Corneal Epithelial Defects in Neurotrophic Keratopathy OPEN ACCESS

Enrique O Graue-Hernandez; Fabiola Anaya-Barragan; Guillermo Raul Vera-Duarte; Alejandro Lichtinger-Dondish; Alejandro Navas; Arturo J Ramirez-Miranda

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 58. doi:

Anti-inflammatory and anti-fibrotic effect of biomaterial and exosomes (kuragenx) in

corneal ulceration model in rabbits OPEN ACCESS

Virender Singh Sangwan; Mehak Vohra; Anil Tiwari; Abha Gour; Parinita Agrawal; Ritu Raj; Nisha P P R; Arun Chandru; Tuhin Bhowmick

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 59. doi:

Cell Populations and Gene Expression in Cornea and Limbus Relevant to Nerve Regeneration using Single Cell Transcriptomics OPEN ACCESS

Abhilash Ponnath; Surjyadipta Bhattacharjee; William C Gordon; Nicolas G Bazan; Haydee E P Bazan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 60. doi:

Pigment-Epithelium-Derived-Factor Derived Short Peptide Promotes Cell Proliferation and Wound Healing OPEN ACCESS

Luis Alberto Rodriguez; Yalang Huang; Erin Chang; Frank Lee; Victor L Perez; Wen Chyi Shyu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 61. doi:

The hyaluronan (HA) receptor CD44 is required for corneal regeneration OPEN ACCESS

Vivien Jane Coulson-Thomas; Sudhir Verma; Isabel Yi Moreno; Cassio Prinholato da Silva; Tarsis Ferreira

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 62. doi:

In-vivo analysis of the effect of epidermal growth factor-loaded collagen gels on corneal regeneration OPEN ACCESS

Youngyoon Amy Seo; Naewon Kang; Kevin Jackson; David Myung

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 63. doi:

MMC and Rock Inhibitor (RI) Impact Mitochondrial Activation and Cell Velocity in Human Corneal Epithelial Cells (HCLEs): Implications for Cell Adhesion and Senescence During Wound Healing OPEN ACCESS

Himani Datta Majumdar; Beverly Karpinski; Soneha Datta; Shelly Dimri; Sonali Pal-Ghosh; Mary Ann Stepp

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 64. doi:

Nitrogen Mustard Induces Premature Senescence in Human Corneal Epithelial and Stromal Cells OPEN ACCESS

Ali R Djalilian; Mohammad Soleimani; Mahbod Baharnoori; Mohammad Javad Ashraf; Khandaker N Anwar; Seungwon An; Mahmood Ghassemi

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 65. doi:

Corneal wound healing in the cell model OPEN ACCESS

Lama Hanbali; Yongqing Liu; Xiaoqin Lu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 66. doi:

Regulatory T cells promotes corneal epithelial wound healing through exosomal CD47 OPEN ACCESS

Chao Wei; Yaoyao Yu; Shengqian Dou; Li Ma; Weiyun Shi

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 67. doi:

Unravelling Nuclear and Mitochondrial Contributions in Leber's Hereditary Optic Neuropathy OPEN ACCESS

Periasamy Sundaresan; Prakash Chermakani; Shanmugam Mahesh kumar

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 69. doi:

Peripapillary Retinal Nerve Fiber Layer Relation in Autosomal Dominant Optic Atrophy OPEN ACCESS

Christina Eckmann-Hansen; Toke Bek; Birgit Sander; Isabelle Meunier; Béatrice Bocquet; Xavier Zanlonghi; Guy Lenaers; Michael Larsen

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 70. doi:

Tracking Ophthalmic Outcomes After Venous Sinus Stenting For Idiopathic Intracranial Hypertension OPEN ACCESS

Ali Khodor; Yi Ling Dai; Gabriella Schreiner; Raul E. Ruiz-Lozano; Yosbelkys Martin-Paez; Thomas Hedges; Adel Malek; Laurel N. Vuong

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 71. doi:

Correlation between visual biomarkers and motor-sensory deficits in a model of multiple sclerosis OPEN ACCESS

Oliver W Gramlich; Benjamin W Elwood; Jeffrey Anders; Randy H Kardon

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 72. doi:

Analysis of RNFL Thickness and Color Contrast in Patients with End-Stage Renal Disease OPEN ACCESS

Kamal Pandit; Bivek Wagle; Pratap karki

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 73. doi:

Neuroradiology for the ophthalmology resident: Evaluation of a self-directed online curriculum. OPEN ACCESS

Eugenia Custo Greig; Saras Ramanathan; Nailyn Rasool

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 74. doi:

Recurrence-independent Progressive Inner Retinal Thinning after Acute Optic Neuritis: A Longitudinal Study OPEN ACCESS

JAE HO JUNG; Jae Ryong Song; Yeji Moon

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 75. doi:

Novel Percentage Loss Sectoral Patterns between Multiple Sclerosis and Glaucoma in Disc and Macular OCT OPEN ACCESS

Po-Han Yeh; Ou Tan; Aiyin Chen; Eliesa Ing; Elizabeth Silbermann; David Huang

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 76. doi:

Emergency Department Non-Mydriatic Fundus Photography Expediates Care For Patients Referred For "Papilledema" OPEN ACCESS

Amy (Mung Yan) Lin; Hetal Ray; Andrew Pendley; Avital Lily Okrent Smolar; Mariana Duran; Mariam Torres Soto; Gabriele Berman; Beau Bruce; David Wright; Nancy J. Newman; Valerie Biousse

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 77. doi:

Association between pre-operative fluid cuff and visual outcomes after optic nerve sheath fenestration OPEN ACCESS

Sabrina Bulas; Jasmine Brown; Jocelyn He; Gui-Shuang Ying; Alfredo Lucas; Gabriela Lahaie Luna; William Katowitz

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 78. doi:

The Effect of Transcranial Direct Current Stimulation of Area MT+ on Visual Evoked Responses within Area V1 OPEN ACCESS

Adrienne Caitlyn Quan; Lauren Byars; Nozrul Miah; Abigail Anderson; Arijit Chakraborty

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 79. doi:

Etiologies and Outcomes of Granulomatosis with Polyangiitis Associated Optic Neuropathy: A Case Series and Review of the Literature OPEN ACCESS

Abdul-Rahman Salman; Minjun Hur; Kenneth Warrington; Matthew Koster; Kevin Chodnicki; Deena Tajfirouz; John J. Chen

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 80. doi:

Chronic stage mild traumatic brain injury subjects have visual system deficits regardless of self-reported vision problems. OPEN ACCESS

Marselle Alejandro Rasdall; Amy Stahl; David Tovar; Patrick Lavin; Cailey Kerley; Qingxia Chen; Xiangyu Ji; Marcus Colyer; Lucas Groves; Reid Longmuir; Amy Chomsky; Martin Gallagher; Adam Anderson; Mark Wallace; Bennett Landman; Tonia S Rex

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 81. doi:

Comparison of comorbidities in people with eye pain due to dry eye and eye pain due to other ocular causes in a tertiary care Neuro-Ophthalmolgy practice OPEN ACCESS

Pooja Parthasarathi; Heather Moss; Sylvia Elizabeth Villarreal Navarro

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 82. doi:

Diagnostic power of rapid multifocal objective perimetry in Alzheimer's OPEN ACCESS

Ted Maddess; Emilie Marie Francoise Rohan; Mary Ann Kulh; Joshua van Kleef; Bhim Bahadur Rai; Corinne Carle

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 83. doi:

Diagnostic power of multifocal objective perimetry in concussion OPEN ACCESS

Emilie Marie Francoise Rohan; Corinne Carle; Ted Maddess; Josh van Kleef; Bhim Bahadur Rai; Faran Sabeti

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 84. doi:

Effect of optogenetic activation of superior salivatory nucleus on the choroidal thickness OPEN ACCESS

Ziyan Ma; Heonuk Jeong; Tetsu Yoshida; Kam Yan KWOK; Kazuno Negishi; Kenji F Tanaka; Kazuo Tsubota; Toshihide Kurihara

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 85. doi:

Assessment of Visual Field Loss Progression for DOA and Wolfram Syndrome employing a DOA-*OPA1* Archetypal Analysis Model OPEN ACCESS

Catarina Coutinho; Ferdinando Zanchetta; Michele Carbonelli; Alice Galzignato; Marco Battista; Giulia Amore; Valerio Carelli; Luigi Brotto; Paolo Nuzoi; Lisa Checchin; Giacomo Savini; Francesco Bandello; Chiara La Morgia; Rita Fioresi; Maria Lucia Cascavilla; Piero Barboni

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 86. doi:

Leber's Hereditary Optic Neuropathy visual field loss characterization by machine learning OPEN ACCESS

Alice Galzignato; Catarina Coutinho; Ferdinando Zanchetta; Michele Carbonelli; Marco Battista; Giulia Amore; Valerio Carelli; Luigi Brotto; Paolo Nuzoi; Lisa Checchin; Giacomo Savini; Francesco Bandello; Chiara La Morgia; Maria Lucia Cascavilla; Rita Fioresi; Piero Barboni

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 87. doi:

OSPREY: An Open-label Study to Investigate Safety, Tolerability, and Exposure of the Antisense Oligonucleotide (ASO) STK-002 in Patients with Autosomal Dominant Optic Atrophy (ADOA) OPEN ACCESS

Marcela Votruba; Patrick Yu-Wai-Man; Kelly Saluti; Yuw Wang; Barry Ticho; Steven Gross

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 88. doi:

Predicting clinical outcomes in optic neuritis: Implications for clinical care and trial design OPEN ACCESS

Sebastian Kuechlin; Wolf A. Lagrèze

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 89. doi:

Circadian Rhythm Disruption in the Pathogenesis of Optic Neuritis Associated with Multiple Sclerosis OPEN ACCESS

Julia Joo; Anushka Shah; Minzhong Yu; Sujata Rao

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 90. doi:

Measurement of force changes along visual pathway in a biofidelic instrumented headform (BIH) during exposure to blasts OPEN ACCESS

Sariah Elanna D'Empaire-Salomon; Janette Meyer; Eric Spivey; Katherine Rodak; Amy Stahl; Garrett Thorne; Douglas Adams; Tonia S Rex

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 92. doi:

Ga^{68} GADOTATE PET/TC IS USEFUL TO CONFIRM DIAGNOSIS OF OPTIC NERVE SHEATH MENINGIOMA OPEN ACCESS

Bernardo Francisco F Sánchez Dalmau; Andres Penissinotti; Rafel Alcubierre; Saray Catalan; Xavier Nogues; Laura Sanchez-Vela; Josep Rosinés; Anna Camos-Carreras

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 93. doi:

Autosomal recessive Leber hereditary optic neuropathy: a single center experience OPEN ACCESS

Petra Liskova; Bohdan Kousal; Marie Vajter; Silvie Kelifova; Tomas Honzik; Martin Meliska; Marketa Tesarova

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 94. doi:

Method for Simulating the Impact of Subject Specific Photoreceptor Shadowing on a Photoreceptor Photon Absorption Map OPEN ACCESS

David Buickians; Aubrey Hargrave; Heather Moss

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 95. doi:

Role of methylglyoxal on retinal changes and neuronal loss in a photochemically induced animal model of anterior ischemic optic neuropathy OPEN ACCESS

Tazbir Ahmed; Ali Shariati; Liping Liu; Yaping Joyce Liao

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 96. doi:

Visual Outcomes of Optic Disc Drusen and Structural Changes in Optic Nerve Head OPEN ACCESS

Xia Gong; Sangeethabalasri Pugazhendhi; Ping Zhu; Cassie Ludwig; Sophia Wang; Yaping Joyce Liao

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 97. doi:

The relationship between intracranial pressure (ICP) and visual field loss (VFL) in paediatric patients presenting with idiopathic intracranial hypertension (IIH) at a tertiary

referral C... OPEN ACCESS

Rahul Shah; Robert Thomas Brady; Pooja Harijan; Deepa Krishnakumar; Brinda Muthusamy

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 98. doi:

Optic nerve edema and pseudo-edema differentiation analysis using automated segmentation of fiber layer and blood vessels OPEN ACCESS

Marco Battista; Jonathan Oakley; Michele Carbonelli; Catarina Coutinho; Alice Galzignato; Luigi Brotto; Giulia Amore; Lisa Checchin; Paolo Nucci; Leonardo Bottazzi; Valerio Carelli; Francesco Bandello; Chiara La Morgia; Maria Lucia Cascavilla; Piero Barboni

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 99. doi:

Association between Fundoscopic Lesions and CNS Injuries Identified in Children with Congenital Zika Syndrome OPEN ACCESS

Leticia Freitas de Aquino; Marcos Adriano Garcia Campos; Paulo Henrique Simoes da Silva; Elaine de Paula Fiod Costa

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 100. doi:

LEBER HEREDITARY OPTICAL NEUROPATHY (LHON) IN PEDIATRIC POPULATION OPEN ACCESS

Pablo Tomas Romero; Eguzki Mena; Claudio Araya; Herrera Luisa; Mauricio Moraga

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 101. doi:

Retinal, Optic Disc, and Optic Nerve Changes in a Post-Hemorrhagic Hydrocephalus Rat Model OPEN ACCESS

Teri L Belecky-Adams; Lauren Jantzie

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 102. doi:

Plasma proteomics of non-arteritic ischemic optic neuropathy reveals potential biomarkers and interaction with retinal cells OPEN ACCESS

Louise Mesentier-Louro; Miaomiao Yu; Barbara Rangel; Sangeethabalasri Pugazhendhi; Ali Shariati; Roopa Dalal; Yaping Joyce Liao

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 103. doi:

Blood-born biomarkers for optic disc drusen OPEN ACCESS

Yiting Zhang; Xia Gong; Heather Moss; Shannon J. Beres; Sophia Y Wang; Yaping Joyce Liao

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 104. doi:

Comparison of visual field using standard automated and kinetic perimetry in patients with chiasmal compression. Correlation with peripapillary retinal nerve fiber layer OPEN ACCESS

Mario L R Monteiro; Arthur Andrade Nascimento Rocha; Luiz Guilherme Marchesi Mello; Thais De Souza Benassi; Leonardo Provetti Cunha; Leandro Cabral Zacharias; Rony Carlos Preti; Kenzo Hokazono

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 105. doi:

Retinal vascular fractal analysis in cognitively intact individuals at risk for Alzheimer's Disease OPEN ACCESS

Jordan Taylor Graff; Amro Badr; Bryan Woodruff; Richard Caselli; Xin Li; Jacob Sobczak; John J. Chen; Yalin Wang; Oana Dumitrascu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 106. doi:

Ocular Biomechanical Responses to Long-Duration Spaceflight in astronauts OPEN ACCESS

Marisse Masis; Remy Dumas; Mark R Lesk; Santiago Costantino

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 107. doi:

Ischemic Optic Neuropathy Etiologies: Analysis of Causes and Distribution in Patients Evaluated at a Tertiary Care Center in the U.S. OPEN ACCESS

Joseph F Rizzo; Madhura Shah; Drenushe Krasniqi; Jimena Tatiana Carreno-Galeano

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 108. doi:

Navigating the Vascular Terrain of the Human Optic Nerve in 3D OPEN ACCESS

Drenushe Krasniqi; Tatjana C Jakobs; Joseph F Rizzo

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 109. doi:

Bruch's membrane opening-minimum rim width and peripapillary retinal nerve fiber layer in eyes affected by MOG-associated disease or neuromyelitis optica spectrum disorder with positive a... OPEN ACCESS

Thais De Souza Benassi; Clarissa Pereira; Leonardo Eleuterio Ariello; Ana Beatriz Ayroza Galvão Ribeiro Gomes; Samira Luisa dos Apostolos Pereira; Dagoberto Callegaro; Mario Luiz Ribeiro Monteiro

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 111. doi:

Proteomics Biomarkers of Optic Nerve Stroke with and without Optic Disc Drusen OPEN ACCESS

Anas Alkhabaz; Karanvir Kaushal; Liping Liu; Yaping Joyce Liao

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 112. doi:

Comparison of Optic Nerve Blood Flow in Multiple Sclerosis and Healthy Eyes Using Laser Speckle Contrast Imaging OPEN ACCESS

He Eun Forbes; Shaiza Mansoor; Aashka Damani; Amrik Gill; Saige Oechsli; Mary Ventimiglia; Janet L Alexander; Abhishek Rege; Avigyan Sinha; Daniel Harrison; Osamah Saeedi

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 113. doi:

Directors of Accredited Neuro-ophthalmology Fellowship Programs: A Descriptive Analysis OPEN ACCESS

Carolyn Huynh; Nuha Arefin; Jared Moon; Eileen Bowden; Moe Hein Aung

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 114. doi:

Analysis of Choroidal Thickness by Optical Coherence Tomography in Patients with Multiple Sclerosis and Neuromyelitis Optica OPEN ACCESS

Natália Pellegrinelli; Luis Armando Vitorino Alves de Souza Gondim; Luiza Moschetta Zimmermann; Sergio Ferreira Santos Cruz; Fabio Ejzenbaum; Thiago Gabriel de Brito; Lorena Botelho Vergara; Laura Alves de Figueiredo

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 115. doi:

Association between Pediatric Optic Neuritis and COVID-19 OPEN ACCESS

Michelle Nguyen; Taylor Lind; Martha Schatz

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 116. doi:

Evaluation of retinal function using a full-field electroretinogram with an extended photopic protocol in patients with neuromyelitis optica spectrum. OPEN ACCESS

Renata Moreto

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 117. doi:

OCT-based Analysis of Structural Damage and Prognosis of Visual Acuity in Pediatric Optic Neuritis OPEN ACCESS

Xi Liu; Wei Shi; Li Li; Chunxia Peng

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 118. doi:

Racial disparities in the development of visual impairment in patients with idiopathic intracranial hypertension OPEN ACCESS

Noor Chahal; Patrick Zhang; Humzah Iqbal; Gisou Mohaddes

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 119. doi:

Sequential NAION: Associated Risks and Temporal Distribution of Events OPEN ACCESS

Madhura Shah; Drenushe Krasniqi; Jimena Tatiana Carreno-Galeano; Tais Estela; Joseph F Rizzo

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 120. doi:

Effective NAION neuroregenerative treatment using TXA127 OPEN ACCESS

Steven L Bernstein; Kwang Min Woo; Yan Guo; Zara Mehrabyan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 121. doi:

Comparison of OCT-measured macular thickness parameters in patients with Amyloid Alzheimer's Dementia, Mild Cognitive Impairment and Controls OPEN ACCESS

Leonardo Eleuterio Aniello; Thais De Souza Benassi; Luiz Guilherme Marchesi Mello; Leonardo Provetti Cunha; Mario L R Monteiro

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 122. doi:

Quantifying Ocular Stresses in Badminton-Related Eye Injuries OPEN ACCESS

Andrew Suh; Alex Suh; Jose Alejandro Colmenarez; Matthew Lam; Pengfei Dong; Annette K Hoskin; Kourosh Shahraki; Rupesh Vijay Agrawal; Linxia Gu; Donny W Suh

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 123. doi:

Myopia control with spectacle lenses with positive power and negative power lenslets: a 1-year randomized clinical trial OPEN ACCESS

Jun Jiang; Binbin Su; Jingwei Zheng

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 124. doi:

Influence of first-time correction on myopia progression and axial elongation in myopic children wearing spectacle lenses with and without aspherical lenslets OPEN ACCESS

Yee Ling Wong; Yingying Huang; XUE LI; Ee Woon Lim; Adeline Yang; Bjorn Drobe; Hao Chen; Jinhua Bao

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 125. doi:

Long-term Axial Length Shortening in Myopic Orthokeratology: Incident Probability, Time Course, and Influencing Factors OPEN ACCESS

Yin Hu; Xiao Yang

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 126. doi:

Myopia control efficacy through Emmetropic Progression Ratio:1-year of spectacle wear with cylindrical annular refractive elements (CARE) OPEN ACCESS

Arne Ohlendorf; Katharina Rifai; Christina Boeck-Maier; Judith Ungewiss; Christian Lappe; Lihua Li; Xiaoqin Chen; Min Wu; Cui Yu; Sankaridurg Padmaja; Siegfried Wahl

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 127. doi:

Bright Light and Combination of Myopic Defocus for Myopia Control: Study Design and Demographic Data OPEN ACCESS

Ying Hon; Rachel Ka-Man Chun; Kin Kwok Cheung; Man Kit Lam; Lai Ming Ho; Wai Ching Lam; Thomas Chuen Lam; Carly S Y Lam; Christopher Kai-Shun Leung; Jin Xiao Lian; Ian George Morgan; Chi Ho To; Dennis Yan-Yin Tse

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 128. doi:

Effect of Outdoor Scene Classrooms on Myopia Prevention and Control: One-year Result from a Randomized Clinical Trial OPEN ACCESS

Weizhong Lan; Wei Pan; Longbo Wen; Zhiwei Luo; Ian Flitcroft; Zhikuan Yang

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 129. doi:

Myopia control efficacy of Spectacle Lenses with Highly Aspherical Lenslets: results of a 5-year follow-up study OPEN ACCESS

XUE LI; Yingying Huang; Chenyao Liu; Ziang Yin; Zaifeng Cui; Ee Woon Lim; Bjorn Drobe; Hao Chen; Jinhua Bao

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 131. doi:

Effective refractive error coverage (eREC) in NSW Australia: the Australian Eye and Ear Health Survey OPEN ACCESS

Lisa Keay; Timothy R Fricke; Richard Kha; Colina Waddell; Vu Quang Do; Gerald Liew; Jessie Huang-Lung; Bamini Gopinath; Eleanor Yang; Paul Mitchell

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 132. doi:

Efficacy of a next-generation design of ophthalmic lenses for myopia control: Six-month results of the CEME Study OPEN ACCESS

Cristina Alvarez-Peregrina; Miguel Angel Sanchez-Tena; Cesar Villa-Collar; Clara Martinez-Perez; Sankaridurg Padmaja; Arne Ohlendorf

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 133. doi:

Assessing the 2-year Efficacy of Atropine, Orthokeratology, and Combined Therapies: Myopia Control and Choroidal change – Insights from an Age-stratified Randomized Controlled Trial OPEN ACCESS

Shengsong Xu; Yin Hu; Xiao Yang

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 134. doi:

Is physiological axial length growth achieved with DIMS spectacle lenses in myopic children? A retrospective analysis of real-life results in a German clinical setting OPEN ACCESS

Hakan Kaymak; Birte Graff; Kai Neller; Ann-Isabel Mattern; Machteld Devenijn; Achim Langenbucher; Berthold Seitz; Hartmut Schwahn

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 135. doi:

Eye shape deformity predicts myopic maculopathy progression among highly myopic participants: a 4-year longitudinal study OPEN ACCESS

Cong Li; Ou Xiao; Zhixi Li; Mingguang He

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 136. doi:

Reduced myopia progression and high myopia incidence after termination of academic high school education in Chinese adolescents OPEN ACCESS

high school education in Chinese adolescents OPEN ACCESS
Xiaohu Ding; Ian George Morgan; Mingguang He
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 138. doi:

Increased prevalence of myopia in the United States between 1971-1972 and 1999-2004—A reappraisal and model OPEN ACCESS
Mark A Bullimore; Noel A Brennan
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 139. doi:

Tolerability and Short-Term Effects of Low-Concentration Atropine Eye Drops on Ocular Outcomes in Myopic Young Adults OPEN ACCESS
Eoin Kerin; Gareth Lingham; Alicia Gomez Sanchez; James Loughman; Ian Flitcroft
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 140. doi:

Eye care practitioner self-identified confidence and barriers in myopia management from 2019 to 2023 OPEN ACCESS
Kate Gifford; Paul Gifford
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 141. doi:

Biometrically defining myopia with the Refractive Mechanism Map: Relationship with myopia progression and treatment efficacy. OPEN ACCESS
Ernest Kyei Nkansah; Gareth Lingham; James Loughman; Emmanuel Kobia-Acquah; Ian Flitcroft
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 142. doi:

Binocular visual function on the progression of myopia in children aged 6 to 10 years under different refractive states OPEN ACCESS
Lihua Li; mengdi Li; Xiaoyan Yang
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 143. doi:

Probability of surviving fast progression and eye growth reversal after 1-year of spectacle wear with cylindrical annular refractive elements OPEN ACCESS
Padmaja Sankaridurg; Xiaoqin Chen; Katharina Rifai; Min Wu; Cui Yu; Arne Ohlendorf; Christina Boeck-Maier; Siegfried Wahl; Youhua Yang; Yi Zhu; Lihua Li
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 144. doi:

Subjective acceptance of spectacle lenses with cylindrical annular refractive elements (CARE) in Chinese children with myopia OPEN ACCESS
Katharina Rifai; Padmaja Sankaridurg; Arne Ohlendorf; Christina Boeck-Maier; Youhua Yang; Yi Zhu; Xiaoqin Chen; Min Wu; Cui Yu; Siegfried Wahl; Lihua Li
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 145. doi:

Impact of parental myopia on myopia control efficacy of spectacle lenses with cylindrical annular refractive elements (CARE) OPEN ACCESS
Christina Boeck-Maier; Padmaja Sankaridurg; Arne Ohlendorf; Katharina Rifai; Siegfried Wahl; Xiaoqin Chen; Cui Yu; Min Wu; Yi Zhu; Youhua Yang; Lihua Li
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 146. doi:

Myopia prevalence among Hong Kong students living in sub-divided units and the relationship with unfavorably small living space OPEN ACCESS
Natalie Yu-yan Chan; Kaiyip Choi; Henry Ho-lung Chan
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 147. doi:

Association of Attention-Deficit / Hyperactivity Disorder Traits with Myopia among School Children OPEN ACCESS
Xiunian Chen; Xiu Juan Zhang; Yuzhou Zhang; Fangyao Tang; Ka Wai Kam; Mandy P.H. NG; Patrick IP; Ian CK Wong; Wei Zhang; Alvin L. Young; Clement C. Tham; Calvin C P Pang; Li Jia Chen; Jason C.S. Yam
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 148. doi:

Interaction of higher-frequency flickering ERG with refractive error in preschool children OPEN ACCESS
Sonia Seen-hang Chan; Kaiyip Choi; Henry Ho-lung Chan
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 150. doi:

Dietary Omega-3 Polyunsaturated Fatty Acids as a Protective Factor of Myopia: Hong Kong Children Eye Study OPEN ACCESS
Yuzhou Zhang; Xiu Juan Zhang; Ka Wai Kam; Fangyao Tang; Clement C. Tham; Li Jia Chen; Calvin C P Pang; Jason YAM
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 151. doi:

Effect of outdoors activities measured by biomarker CUVAF in a cohort of 2616 children (7-12 years old) of Madrid. OPEN ACCESS
Sergio Recalde; Miriam de la Puente; Maria Hernandez; Aura Sofia Ortega; Macarena Dosal; David Piñero; Laura Batres-Valderas; JUAN GONZALO CARRACEDO-RODRIGUEZ; Javier Garcia; Jesús Barrio; Alfredo Garcia-Layana; Patricia Fernandez
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 152. doi:

The role of lens in early refractive development: evidence from a large cohort of Chinese children OPEN ACCESS
Xiaotong Han; Ruilin Xiong; Ling Jin; Shuai Chang; Qianyun Chen; Decai Wang; Xiang Chen; Yabin Qu; Weijia Liu; Mingguang He; Ian George Morgan; Yangfa Zeng; Yizhi Liu
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 153. doi:

Macular Ridges: Prevalence and Associated Factors. The Beijing Eye Study OPEN ACCESS
Jost B. Jonas; Songhomitra Panda-Jonas; Jie Xu; Wen-bin Wei; Ya Xing Wang
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 154. doi:

Genome-wide association study for refractive error imputed from fundus photographs via deep learning OPEN ACCESS
Keina Sado; Masahiro Miyake; Takuro Kamei; Yuki Mori; Kazuya Morino; Hiroshi Tamura; Akitaka Tsujikawa
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 155. doi:

Long-Term Study Reveals Astigmatism's Effect on Eye Development OPEN ACCESS
Dong LIANG; Ruihua Wei; Bei Du; Qiang Su; Tsz Wing Leung; Chea-Su Kee
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 156. doi:

Correlation between building density and myopia for Chinese children: a multi-center and cross-sectional study OPEN ACCESS
danqi zeng; Yahan Yang; Yang Tang; Duoru Lin; Haotian Lin
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 157. doi:

Myopia management with atropine in toddlers – necessity or ethical dilemma?

OPEN ACCESS

Jan Roelof Polling; H Zebari; Emily T.C. Tan; Sjoukje E Loudon; Willem Tideman; Caroline C W Klaver

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 158. doi:

One-year changes in choroidal thickness and axial length in highly myopic children fitted with orthokeratology lenses OPEN ACCESS

Yajing Yang; Stephen J Vincent; Sin Wan Cheung; Pauline Cho; Henry Ho-lung Chan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 159. doi:

Two-year changes in cylinder power in myopic children wearing spectacle lenses with highly aspherical lenslets and single-vision spectacle lenses OPEN ACCESS

Jinhua Bao; Yingying Huang; Xue Li; Ee Woon Lim; Bjorn Drobe; Hao Chen

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 160. doi:

Predictive factors associated with incident myopia in childhood OPEN ACCESS

Nina Tahhan; Xiangui He; Kathryn Jill Saunders; Pelsin Demir; Antonio Macedo; Rebecca Leighton; Karthikeyan Baskaran; Sara Jayne McCullough; Karen Breslin; Thomas Naduvilath

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 161. doi:

Monitoring myopia and axial length in a student cohort of young adults OPEN ACCESS

Sophie Coverdale; Matthew Cuffin; Edward Mallen; Neema Ghorbani-Mojarrad

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 163. doi:

A Century of Myopia in the Netherlands: Unveiling the Emerging Epidemic OPEN ACCESS

Sander Kneepkens; Willem Tideman; Jan Roelof Polling; Caroline C W Klaver

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 164. doi:

Seasonal Variation in Myopia Control in The Bifocal Lenses in Nearsighted Kids (BLINK) Study OPEN ACCESS

Mora Boatman; Jeffrey J Walline; Mathew L Robich; Lisa Jordan; Catherine McDaniel; David A Berntsen; Maria Walker; Justina Raouf Assaad; Elizabeth Day; Moriah A Chandler; Kimberly J Shaw; Jill A Myers; Donald O Mutti

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 165. doi:

Myopia Progression in Children with Stickler Syndrome: a Longitudinal Cohort Study OPEN ACCESS

Nisha Nixon; Kelly Hoi Lee Cheng; Allan Richards; Howard Martin; Martin Snead; Brinda Muthusamy

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 166. doi:

Refractive error in probands and siblings from the Systematic Pediatric Eye Care through Sibling Screening Strategies (SPECSSS) Project OPEN ACCESS

Neelam Pawar; Nambi Nallasamy; MEENAKSHI RAVINDRAN; FATHIMA A

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 167. doi:

Systematic Review and Meta-Analysis of childhood myopia and high myopia prevalence in China from 2010 to 2020 OPEN ACCESS

Wei Pan; Weizhong Lan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 168. doi:

Myopia in practice (MIP) study OPEN ACCESS

Shalu Pal; Stephanie Fromstein; Angela DiMarco; Mira Acs; Barbara Caffery; Sarah Guthrie; Stephanie Ramdass; Vishakha Thakrar; Matthew Zeidenberg; Deborah Jones; Amy Chow

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 169. doi:

Incidence and progression of myopia in young adults OPEN ACCESS

Michael Moore; Ian Flitcroft; Gareth Lingham; Eoin Kerin; Ernest Kyei Nkansah; Matilda Biba; James Loughman

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 171. doi:

The effect of mount location on the quantification of light intensity in myopia study OPEN ACCESS

Longbo Wen; Weizhong Lan; Zhikuan Yang

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 172. doi:

Myopia progression trends from 1980 to 2020 OPEN ACCESS

Safal Khanal; Rohit Dhakal

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 173. doi:

Lifestyle measures related to myopia in a young adult population of undergraduate students OPEN ACCESS

Neema Ghorbani Mojarrad; Sophie Coverdale; Edward Mallen; Matthew Cuffin

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 174. doi:

Near work and myopia development in a longitudinal cohort of Australian schoolchildren OPEN ACCESS

Amanda French; Kathryn Ailsa Rose

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 175. doi:

The Impact of the Integrated People-Centered Eye Care Model on Myopia Control among Children and Adolescents in China OPEN ACCESS

wei he; Xingru He; Sile YU

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 178. doi:

Can a Handheld, Infrared Vision Screener be Used in Dispensing Spectacles in Children with Myopia. OPEN ACCESS

Peter Williamson; Nicola S Logan; Raquel Gil-Cazorla; Valldeflors Vinuela Navarro

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 179. doi:

Association of Rhegmatogenous Retinal Detachment Incidence with Myopia Prevalence in China OPEN ACCESS

Yueyuan Xu; You Wu; Ya Xing Wang; Tien Y Wong

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 180. doi:

Clinical Management of Myopia in Hong Kong OPEN ACCESS

Han Yu Zhang; Fang Yu Xu; Yan Pui Chan; Kenneth Ka King Liu; Amy Chow; Deborah Jones; Carly S Y Lam

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 182. doi:

Modeling AMD-Relevant Metabolism in RPE Cultures Using a Novel Device for Measuring Long-Term Oxygen Consumption Rates OPEN ACCESS

Jason Matthew Lewis Miller; Qitao Zhang; Gillian Autterson; Daniel Hass; James Hurley; Richard Bryant; Daisy Y Shu; Kaitlyn Digsby; John Yeong Se Han

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 184. doi:

Exploring the role of Adiponectin Receptor 1 in the dynamics of omega-3 fatty acid metabolism OPEN ACCESS

Dominik Lewandowski; Fangyuan Gao; Sanae Imanishi; Aleksander Tworak; Marco Bassetto; Zhiqian Dong; Antonio FM Pinto; Marcin Tabaka; Philip David Kiser; Yoshikazu Imanishi; Dorota Skowronska-Krawczyk; Krzysztof Palczewski

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 185. doi:

PNPLA3 deficiency increases 11-*cis*-retinal regeneration in the visual cycle OPEN ACCESS

Miwa Hara; Volha V. Malechka; Wenjing Lily wu; Yusuke Takahashi; Jian-Xing (Jay) Ma; Gennadiy P Moiseyev

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 186. doi:

Do RPE cells have a preferred ketogenic substrate? OPEN ACCESS

Kriti Pandey; Daniel Hass; Gillian Autterson; Jason Matthew Lewis Miller; James Hurley

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 187. doi:

Longitudinal assessment of the retinal phenotype in patients with Fabry disease undergoing enzyme replacement and/or chaperone therapy OPEN ACCESS

Jan Einar Wildner; Simon Dulz; Johannes Birtel; Nicole Muschol; Yevgeniya Atiskova

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 188. doi:

The Role of Lipid Droplets in RPE Lipid Handling OPEN ACCESS

John Yeong Se Han; Gillian Autterson; Qitao Zhang; Aaron Dendekker; Kaitlyn Digsby; Jason Matthew Lewis Miller

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 189. doi:

Early metabolic signature of the eye and brain in Alzheimer's disease OPEN ACCESS

Yimiao Xiang; Rachel McNeel; Tuan Ngo; Meghashn Saravanan; Yekai Wang; Mark Emmhzer; Saira Rizwan; Audrey Anderson; Jianhai Du

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 190. doi:

Elovanoids sustain retinal pigment epithelial cell survival by suppressing lipid peroxidation OPEN ACCESS

Rasangi Perera; Jorgelina Muriel Calandria; Nicolas G Bazan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 191. doi:

Media nutrient composition alters RPE metabolism OPEN ACCESS

Rayne Lim; Yekai Wang; Emily Zhao; Sheldon Niernberger; Jianhai Du; Jennifer R Chao

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 192. doi:

Glutaminase-driven glutamine catabolism supports cone photoreceptor metabolism, function, and structure OPEN ACCESS

Shubha Subramanya; Moloy Goswami; Eric Weh; Nicholas Miller; Sraboni Chaudhury; Heather Hager; Trieu Duc Vu; Anthony Andren; Thanh Hoang; Costas Lyssiotis; Cagri Besirli; Thomas J Wubben

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 193. doi:

Optimization of iPSC-RPE oxidative stress model to be used as screening tool for novel AMD drug discovery OPEN ACCESS

Anita K. Ghosh; Anni Kolehmainen; Olga Vergun; Jenni J. Hakkarainen

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 194. doi:

SCO-116 exhibits potent, selective activation of NRF2 suitable for use in treatment of ocular diseases OPEN ACCESS

Ralph Henry; Dave Flory; Brooks Gentry; Yuko Katayama; Ryokichi Koyama; Shigemitsu Matsumoto; Yasuke Moritoh; Misty Stevens; Masanori Watanabe; Keith Ward

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 195. doi:

An Endothelin-1 receptor antagonist PER-001 improved maladaptive neovascularization at equal efficacy as aflibercept in an oxygen-induced retinopathy mouse model. OPEN ACCESS

Heather Schmitt; Maria Zaretskaia; Angela Glendenning; Chris Romeo; Cheng-Wen Lin; Sevgi Gurkan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 196. doi:

ERM-123 is an orally bioavailable bi-specific RBP4 inhibitor that stabilizes TTR similarly to Tafamidis OPEN ACCESS

Kevin McLure; Dejian Xie; Rafal Farjo

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 197. doi:

Ocular and systemic safety of PER-001 Intravitreal Implant after single administration in rabbits and monkeys OPEN ACCESS

Maria Zaretskaia; Angela Glendenning; Karen E. Brennan; Heather Schmitt; Chris Romeo; Andrew Mellie; Michelle Chen; Phillip Lai; Cheng-Wen Lin; Sevgi Gurkan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 198. doi:

PER-001 Ocular Tissue Distribution and Duration of Release Following Intravitreal Administration of PER-001 Sustained Release Intravitreal Implants in Rabbits OPEN ACCESS

Angie Glendenning; Maria Zaretskaia; Heather Schmitt; Karen E. Brennan; Chris Romeo; Pratap Challa; Cheng-Wen Lin; Sevgi Gurkan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 199. doi:

Pirfenidone Modulates the Secretion of Soluble Factors by Induced Pluripotent Stem Cell-Derived Retinal Pigment Epithelium in an *In Vitro* Model of Proliferative Vitreoretinopathy OPEN ACCESS

Shoulei Jiang; Christina L. Rettinger; Annette Rodriguez; Marcus H. Colyer; Heuy-Ching Hetty Wang

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 200. doi:

Pharmacokinetics and Safety of Suprachoroidal Delivery of AAV.BMI1 in C57/B6 Mice OPEN ACCESS

Zhongyang Lu; Andy Whitlock; Ram Ramkumar; Hema Ramkumar

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 201. doi:

Knocking down liver transthyretin (TTR) *via* RNAi leads to decreased A2E in the eyes of *Abca4*$^{-/-}$*Rdh8*$^{-/-}$ mice, a model of Stargardt disease OPEN ACCESS

Grazyna Palczewska; Simina Ticau; Elena Castellanos-Rizaldos; David Erbe; Krzysztof Palczewski

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 202. doi:

A first-in-class therapeutic for the treatment of visual loss in Retinitis Pigmentosa Type 11 patients OPEN ACCESS

Carla Jackson; Wissam Chiha; Caitlyn Richworth; Jørn-Ove Schjølberg; Mirta Mittelstedt Leal de Sousa; Richard Francis; Bridget Flis; Clarissa McDonagh; Laura Florez; Jess Nichols; Mana Kerfoot; Sue Fletcher; Magnar Bjørås; Josephine Prener Holtan; Fred Kuanfu Chen; Janya Grainok

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 203. doi:

Recombinant human complement factor H CPV-101 and CPV-104 dampen microglia reactivity and attenuate light-induced retinal degeneration OPEN ACCESS

Anne Wolf; Mandy Hector; Verena Behnke; Paulina Dabrowska-Schlepp; Andreas Busch; Andreas Schaaf; Thomas Langmann

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 204. doi:

Lycium barbarum Glycopeptide alleviated retinal inflammation via NF-κB/MAPK pathways in microglial cells OPEN ACCESS

yiwen ou; Jacey Hongjie Ma; Shibo Tang; zhexiong yu; Shan Liu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 205. doi:

A novel small molecule reduces cell death and improves mitochondrial structure and function in models of genetic and age-related retinal degeneration OPEN ACCESS

Baerbel Rohrer; Masaaki Ishii; Elisabeth O'Quinn; Christopher Charles Lindsey; Craig Beeson

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 206. doi:

The Endogenous Expression of BMI1 in Adult Human Eyes OPEN ACCESS

Hema Ramkumar; Zhongyang Lu; Maria Gabriela Morales; Ram Ramkumar

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 207. doi:

Intraocular bioerodible implant of carboxyamidotriazole in rabbit models of proliferative retinopathy OPEN ACCESS

Ayaka Fujihashi; Sergio Li Calzi; Yvonne Adu-Agyeiwaah; Bob Katz; Alan Franklin; Maria B Grant

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 209. doi:

Impact of Consistent Foundation Funding for On-label Intraocular Pharmaceuticals OPEN ACCESS

Cassie Rae Papproth; Chase Miller; Esa Rhee Malik; Christina Mccrossin; Harrison Dean Sciulli

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 210. doi:

Presenting nAMD Options to Improve Patient Adherence: Video-Based Case Simulation Can Significantly Improve Ophthalmologists' Competence and Confidence OPEN ACCESS

Amy Hellem

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 211. doi:

Bim expression and responsiveness to exudative AMD treatment modalities OPEN ACCESS

Christine M Sorenson; Yong-Seok Song; Nader Sheibani

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 212. doi:

From the Human Blood Metabolome to an Interventional Murine CNV Model: Unveiling Saccharin's Protective Effect on Neovascular AMD OPEN ACCESS

Steffen Emil Künzel; Inga-Marie Pompös; Leonie T.M. Flesch; Dominik P. Frentzel; Vitus A. Knecht; Sergej Skosyrski; Anne Rübsam; Felix Dreher; Norbert Kociok; Alexandre Dubrac; Bodo Lange; Marie-Laure Yaspo; Hans Lehrach; Olaf Strauss; Antonia M. Joussen; Oliver Zeitz

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 213. doi:

A comparative analysis of brolucizumab and photodynamic therapy as second-line therapy for polypoidal choroidal vasculopathy OPEN ACCESS

Ryoh Funatsu; Hiroto Terasaki; Naohisa Mihara; Shozo Sonoda; hideki shihara; Taiji Sakamoto

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 214. doi:

Efficacy of Faricimab-svoa on Visual Acuity and Central Subfield Thickness in post Pars Plana Vitrectomy eyes with Neovascular Macular Degeneration OPEN ACCESS

Zachary Ziccardi; Jovana Hanna; Harrison Dean Sciulli; David G Miller; Joseph M Coney; Llewelyn Rao

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 215. doi:

Real World Incidence of Intraocular Inflammation and its Risk Factors in Patients Treated with Brolucizumab: A Nationwide Cohort Study OPEN ACCESS

Hyo Song Park; Yong Joon Kim; Sung Soo Kim

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 216. doi:

Pooled safety analysis of the CANDELA, PHOTON, and PULSAR trials up to 96 weeks demonstrates comparable safety profiles with aflibercept 8 mg and 2 mg OPEN ACCESS

Andreas Stahl; Eric Schneider; Ursula Maria Schmidt-Ott; Claudia Tueckmantel; Andrea Schulze; Alyson J Berliner; Karen W Chu; Robert Vitti; Kimberly Reed; xin Zhang; Peter Morgan-Warren; Rohini Rao; Sergio Leal

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 217. doi:

Anatomical and functional outcome after anti-VEGF therapy in patients diagnosed with pachychoroid neovasculopathy OPEN ACCESS

Vasilena Sitnilska; Maximilian Pohl; Lebriz Altay

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 218. doi:

Aflibercept 8 mg monotherapy shows maintained efficacy over 96 weeks, with the ability to extend dosing intervals beyond every 16 weeks, in patients with PCV in the PULSAR Phase 3 trial OPEN ACCESS

Rufino Silva; Tien Y Wong; Gemmy Cheung; Jeffrey S Heier; Won Ki Lee; Tomohiro Iida; xin Zhang; Tobias Machewitz; Andrea Schulze; Sergio Leal

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 219. doi:

Comparable efficacy with aflibercept 8 mg at extended dosing intervals beyond q16 versus 2 mg q8 in Asian patients with nAMD in PULSAR through Week 96 OPEN ACCESS

Xiaodong Sun; Shih-Jen Chen; xin Zhang; Andrea Schulze; Tobias Machewitz; Min Zhao; Sergio Leal

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 220. doi:

Frequency of anti-VEGF injections before and after pars plana vitrectomy in eyes with neovascular age-related macular degeneration OPEN ACCESS

Turner Wibbelsman; Bita Momenaei; Roselind Ni; Anthony Obeid; Sandy Wong; Michael Cohen

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 221. doi:

Intravitreal Biologics and Vitreous Detachment OPEN ACCESS

Abhishek Ramini; Roshni Koul; Connor Baharozian; Meriam Ben Hadj Tahar; Susan Vierling; Bruce Ira Gaynes

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 222. doi:

Anti-vascular endothelial growth factor (anti-VEGF) biosimilars in people with neovascular

AMD (nAMD) – a systematic review and meta-analysis OPEN ACCESS

Sueko Ng; Tomiko Sunagja; Masayuki Maeda; Rosella Saulle; Miki Takenaka Sato; Takeshi Hasegawa; Andrew Mason; Hisashi Noma; Erika Ota

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 223. doi:

Changes in blood flow one year after treatment with aflibercept or brolucizumab for neovascular age-related macular degeneration OPEN ACCESS

Takeyasu Yamada; Rie Osaka; Junichiro Akimitsu; Hirokazu Kojima; Yukiko Miyoshi; Ayana Yamashita; Yuki Nakano; Kiyoshi Suzuma

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 224. doi:

Effectiveness of intravitreal faricimab in a United States Veteran population OPEN ACCESS

Daniel Fraser; Sydney Roston; Christina Ryu; Karen R Armbrust

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 225. doi:

Brolucizumab stimulates context-dependent inflammatory responses in human retinal endothelial cells and monocytes. OPEN ACCESS

Yulim Kim; Soo Jin Kim; Young Hee Yoon; Junyeop Lee

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 226. doi:

Evaluation of Ethylene-vinyl acetate (EVA) Retinal Implant for Tyrosine Kinase Inhibitor (TKI) Release in simulated vitreous humor OPEN ACCESS

Harsh Patel; Gerald Ferrara; Edward Dobrzykowski; Brian Wilson; cyonna holmes; Jeffery Haley

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 227. doi:

Machine Learning (ML) Models for Predicting Development of Geographic Atrophy (GA) and Scar in the Comparison of Age-related Macular Degeneration (AMD) Treatment Trials (CATT) OPEN ACCESS

Rajat Chandra; Gui-Shuang Ying

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 228. doi:

AMD Injection Frequency: Effects of Distance Traveled and Travel Support OPEN ACCESS

Frank Brodie; Elana Meer; Sonia Targ; Ning Zhang; Katherine Hoggatt; Kala Mehta

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 229. doi:

Faricimab for highly resistant CNV in wet age-related macular degeneration- 7 months observations using artificial intelligence OPEN ACCESS

William R Freeman; Anna Heinke; Alexandra Warter; Ines Nagel; Akshay Prashant Agnihotri; Fritz Gerald Paguiligan Kalaw; Carlo Galang; Daniel Deussen; Dirk-Uwe G Bartsch; Lingyun Cheng

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 230. doi:

Evaluation of Faricimab binding affinity, chemical stability and sterility after compounding and storage in two different polypropylene syringes OPEN ACCESS

Sebastian M Waldstein; Alexander Taschauer; Arthur Sedivy; Haider Sami; Daniel Egger; Reinhard Angermann; Claudia Wunder

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 231. doi:

Investigating Risk of Stroke with Anti-VEGF in the Management of Neovascular AMD OPEN ACCESS

David Donghan Cheng; Sophie Yue; Isaiah Murray; Thomas Cuchta; James Raynor; Jacqueline K. Shaia; Jonathan Markle; Rishi Singh; Katherine Talcott

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 232. doi:

Efficacy of bi-specific antibody/OCUL101 and Eylea/PC by intravitreal injection in PRNV (DL-AAA) rabbit model OPEN ACCESS

Chiung-Kuang Jack Chen; Yong Li

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 233. doi:

Real-world efficacy of switching to faricimab therapy in patients with longstanding neovascular age-related macular degeneration OPEN ACCESS

Long Phan; Jennifer Chin; Thomas Hong; Andrew Chang

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 234. doi:

Effects of long-term intravitreal aflibercept treatments in mouse retina OPEN ACCESS

WAI KIT CHU; Linbin Zhou; Clement C. Tham; Calvin C P Pang

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 235. doi:

siRNA-mediated gene silencing of Vascular Endothelial Growth factor (VEGF) for the treatment of neovascular pathologies of the eye. OPEN ACCESS

Ilana Silverstein; Adrienne Conza; Delaney Giguere; Julia Alterman; Dimas Echeverria; Katherine Gross; Shun-Yun cheng; Anastasia Khvorova; Claudio Punzo

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 236. doi:

Periocular injection of AIV007 in the Treatment of Macular Edema due to Neovascular Age-related Macular Degeneration (nAMD) or Diabetic Macular Edema (DME): Preliminary Results of the Pha... OPEN ACCESS

Hannah Hershoff; Darlene Deecher; Jennifer Wang; Diane DS Tang-Liu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 237. doi:

Impact of Time to First Anti-Vascular Endothelial Growth Factor Injection on Visual Acuity in Treatment-naïve Patients with Neovascular Age-Related Macular Degeneration OPEN ACCESS

Helia Ashourizadeh; Nicole Grinspan; Elizabeth J Rossin; Nimesh Patel; John B Miller; Deeba Husain; Justin Keener; David M Wu; Demetrios Vavvas; Joan W Miller; Saghar Bagheri; Grayson Armstrong

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 238. doi:

Structural OCT biomarkers, trends, and early detection in fellow eyes of patients receiving Intravitreal injections for neovascular age-related macular degeneration (nAMD) over a 5-year p... OPEN ACCESS

Sneha Melmane; Savithri Sreekala; Lekshmi Thankachan; Harbhajan Arora; Geeta Menon; Karima Nesnas; Manju Chandran

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 239. doi:

Subretinal fibrosis and after anti-VEGF therapy for macular neovascularization associated with drusen and/or pachychoroid phenotype OPEN ACCESS

Akari Oka; Ryuya Murakami; Akira Machida; Sugao Miyagi; Eiko Tsuiki; Junko Kurihara; Akio Oishi

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 240. doi:

Effect of anti-VEGF medication on microglia cells in animal model of laser-induced choroidal neovascularization OPEN ACCESS

Franziska Wendt; Nicole Ller; Peter Heiduschka

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 242. doi:

Real-world evidence of biosimilar Ranibizumab in management of neovascular Age-related Macular Degeneration (nAMD) and Diabetic Macula oedema (DMO): Switches and treatment naive. OPEN ACCESS

Petya Simeonova Ford; Geeta Menon; Sneha Melmane; Amy Mohan; Karima Nesnas; Lorraine North; Narendran Nair; Manju Chandran

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 243. doi:

Switching to faricimab: Outcomes following a single injection in aflibercept-resistant age-related macular degeneration OPEN ACCESS

Miklos Schneider; Jakob Bjerager; Delila Hodzic-Hadzibegovic; Oliver Niels Klefter; Yousif Subhi; Javad Nouri Hajari

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 244. doi:

Intraocular Inflammation Associated with Faricimab Therapy: The Moorfields Experience. OPEN ACCESS

Andrea Montesel; Sagnik Sen; Ella Preston; Sing Yue Sim; Praveen J Patel; Josef Christian Huemer; Robin Hamilton; Luke Nicholson; William Tucker; Ioannis Papasavvas; Ian Yeung

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 245. doi:

Real-world outcomes of faricimab injections in treatment-naïve neovascular age-related macular degeneration (nAMD) patients: The Moorfields Experience OPEN ACCESS

Sing Yue Sim; Luke Nicholson; Praveen J Patel; Bhairavi Bhatia; Evangelia Chalkiadaki; Georgios Koutsocheras; Senthil Selvam; Sobha Sivaprasad; Bishwanath Pal; Pearse Andrew Keane; Robin Hamilton

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 246. doi:

Audit of outcomes of intravitreal Faricimab therapy for treatment naïve neovascular age-related macular degeneration at a tertiary specialist macular service OPEN ACCESS

Salma Babiker; Savita Madhusudhan; Ian Pearce

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 247. doi:

Intravitreal Faricimab in Patients with Chronic Wet Age-Related Macular Degeneration: A Case Series OPEN ACCESS

HOSSEIN HASANPOUR; Astghik Ghazaryan; Maria Cristina Kenney; Andrew Browne; Mitul Mehta; Mohammad Esfahani Riazi; Stephanie Lu; Bahareh Kheiri; Adam Moosa; Baruch Kuppermann

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 248. doi:

Predictors of Visual Response after Treatment Lapse in Patients with Neovascular Age-related Macular Degeneration OPEN ACCESS

Jovana Hanna; Jonathan Markle; Christopher Maatouk; Nikhil Das; Katherine Talcott; Rishi Singh

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 249. doi:

Evaluation of Myocardial Infarction in Patients undergoing Anti-VEGF Treatment for Wet Macular Degeneration OPEN ACCESS

James Raynor; Isaiah Murray; Jonathan Markle; Jacqueline K. Shaia; David Donghan Chong; Thomas Cuchta; Sophie Yue; Katherine Talcott; Rishi Singh

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 250. doi:

Factors Associated with Injection Interval in Refractory Neovascular Age-related Macular Degeneration Patients Switched to Brolucizumab OPEN ACCESS

Lee Jeong Hyun; Jooyoung Shin; Jeeyun Ahn

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 251. doi:

Povidone-Iodine vs. Aqueous Chlorhexidine: The Impact of Aseptic Techniques on the Incidence of Endophthalmitis Following Intravitreal Injection of Anti-VEGF Agents OPEN ACCESS

John Carey Fitzpatrick; Brandon Bates; Caroline Rosanky; Jared Moon; Philip Storey

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 252. doi:

Faricimab in Treatment-Experienced Neovascular Age-Related Macular Degeneration OPEN ACCESS

Yaqoob Qaseem; Moritz Pettenkofer

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 253. doi:

Extended treatment outcomes and the potential for Q20W dosing with faricimab in nAMD: a post hoc analysis of the pivotal TENAYA/LUCERNE trials OPEN ACCESS

Philip Storey; Aude Ambresin; Adrian Hock Chaun Koh; Michael Singer; Lauren Hill; Aachal Kotecha; Philippe Margaron

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 254. doi:

Real world utilization of intravitreal faricimab in patients with neovascular age-related macular degeneration OPEN ACCESS

Brisa Garcia; Angeline Wang

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 255. doi:

Six-Month Outcomes of Switching to Faricimab in Eyes with Neovascular Age-Related Macular Degeneration OPEN ACCESS

Mark C Gillies

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 256. doi:

Switching to Intravitreal Faricimab in Treatment-Experienced Patients in Routine Clinical Practice: Efficacy, Safety and Durability Outcomes OPEN ACCESS

Amy E Yuan; Mary Claire Miller; Dwayne Ham; Kevin Quinn; David Saperstein

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 257. doi:

The use of repetitive PVPI topical solution and dry eye: a case control study OPEN ACCESS

Beatriz Oguido; José Casemiro; Raphaela Fugante; Ana P M T Oguido; Andressa Pelaquim; Antonio M B Caselia

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 258. doi:

Novel delivery vehicle for ocular siRNA gene-silencing therapy OPEN ACCESS

Amber Monteiro; Lina Liu; Heather Sheardown

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 259. doi:

Clinical outcomes of switching to brolucizumab in refractory PCV treated with aflibercept OPEN ACCESS

Min Sagong; Areum Jeong; Seung Chul Baek; Seongbin Heo; Jun Hyuk Son; Soon Cheol Cha

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 260. doi:

Real-world experience using intravitreal Faricimab for previously treated neovascular age-related macular degeneration OPEN ACCESS

Taylor Ngo; Abraham Hang; Jaipreet Virk; Kareem Moussa; Ala Moshiri; Parisa Emami Naeini; Glenn Yiu; Susanna S Park

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 261. doi:

Intravitreal injection delivered volume under different environmental and training conditions OPEN ACCESS

Gustavo Barreto Melo; Lucas Andrade Santos; Alexandre Lima Cardoso; Mateus Lins Santos; Lydianne Lumack Monte Agra

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 262. doi:

Pharmacokinetic Analysis of RO-104 in Rabbit Eye Vitreous OPEN ACCESS

Nikhil Gupta; Li Xu; Peter K Kaiser; Arshad M. Khanani; Jeffrey S Heier; Jessi Prentice; Parth Patel; Ashwin Gupta; Alina K Sinha; Megana Paidela; Isabel Ray; Yixuan Ma; Ramesh Bhatt; Ramanath Bhandari

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 263. doi:

Characterization of the Receptor-Ligand Competition of RO-104 IC50 Potencies OPEN ACCESS

Ashwin Gupta; Li Xu; Peter K Kaiser; Arshad M. Khanani; Jeffrey S Heier; Jessi Prentice; Ramesh Bhatt; Parth Patel; Alina K Sinha; Nikhil Gupta; Megana Paidela; Isabel Ray; Yixuan Ma; Ramanath Bhandari

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 264. doi:

Defining the Role of Angiopoietin-2 in Vascular Destabilization Using Primary Human Vasculature Models OPEN ACCESS

Peter D Westenskow; Roland Stoll; Alena Spielmann; Bo Kyoung Kim; Heloise Ragelle

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 266. doi:

Targeting STAT3/GPX4 Alleviates Photoreceptor Ferroptosis Induced by Red Blood Cell Leakage Following Retinal Ischemia/Reperfusion OPEN ACCESS

Xiaoyue Wei; Duoru Lin; Longhui Li; Haotian Lin

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 267. doi:

Delineating Cellular and Molecular Mechanisms of Pre-Retinal Fibrosis OPEN ACCESS

Kevin Tenerelli; Lucija Pintarić; Joseph Miller; Andrew Tran; Cayce Dorrier; Everett Han; Vedant Garg; Richard Daneman; Eric Nudleman

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 268. doi:

Decorin plays a functional role in the retina. OPEN ACCESS

Shermaine WY Low; Waylon Alvarado; Sibabalo Sokupa; Molly Rose Rasper; Shyam S Chaurasia

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 269. doi:

PROTECTIVE EFFECT OF NITRO-OLEIC ACIDS IN NEOVASCULARIZATION, GLIOSIS AND NEURODEGENERATION IN A MOUSE MODEL OF OXYGEN-INDUCED RETINOPATHY OPEN ACCESS

Maria Victoria Vaglienti; Paula Virginia Subirada; Maria Constanza Paz; Gustavo Bonacci; Maria Cecilia Sanchez

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 270. doi:

HIF stabilization by Roxadustat may condition retinal cells to withstand hyperoxic insult via metabolic adaptation. OPEN ACCESS

Andrew Dale Benos; George Hoppe; Jonathan E Sears

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 271. doi:

Atypical Vascular Inflammation in Retinal Vasculopathies: Targeting p38 Signaling OPEN ACCESS

Neil Grimsey; Sneha S Ghosh; Sanjana Gattineni; Heike Kroeger; S. Priya Narayanan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 272. doi:

Interpericyte tunneling nanotubes regrow after transient ischemia OPEN ACCESS

Jesse Wilson Gardner-Russell; Hojin Chang; Verena C Wimmer; Kelly Rogers; Bang V Bui; Peter van Wijngaarden; Keith R Martin; Luis Alarcon-Martinez

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 273. doi:

Influence of Robo1 and Slit2 in Proliferative Sickle Cell Retinopathy: Insights from a Mouse Model OPEN ACCESS

Ana Rafaela Carvalho Monte; Ana Carolina Lima Camargo; Sueli Matilde da Silva Costa; Júlia Nicoliello Pereira de Castro; Marcella Neves Dátilo; Thiago Adalton Rosa Rodrigues; Kaline Martins da Silva; Jacqueline Mendonça Lopes de Faria; Fernando Ferreira Costa; Monica B Melo

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 274. doi:

Flicker-induced retinal blood flow response in healthy individuals using Laser Speckle Flowgraphy OPEN ACCESS

Junya Hanaguri; Ruri Sugiyama; Harumasa Yokota; Satoru Yamagami; Akifumi Kushiyama; Seiyo Harino; Taiji Nagaoka

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 275. doi:

Myeloid cells contribute to blood-retinal barrier breakdown in retinal ischemia-reperfusion injury OPEN ACCESS

Lingli Zhou; Zhenhua Xu; Haining Lu; Yangyiran Xie; Grace Lee; Elia J Duh

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 276. doi:

Simple method for isolation and selective cultivation of primary porcine retinal endothelial cells and pericytes OPEN ACCESS

Anna Bøgh Lindholm; Toke Bek; Anne Louise Askou; Thomas Corydon

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 277. doi:

A key to retinal microvasculature: A characterization of Decorin OPEN ACCESS

Waylon Alvarado; Shermaine WY Low; Shyam S Chaurasia

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 278. doi:

Comparative Spatial Profiling of Mouse Retinopathy of Prematurity (ROP) Model To Elucidate Cell-Specific Interactions In Retinal Neovascularization OPEN ACCESS

Kelvin Chong; Alexander Loktev; Reza Roozafzoon; Thao-Nguyen Bach; Methodios Ximerakis; Xiaomeng Wang; Michael Thomas Wong; Alex M Tamburino; Ser Mien Chia

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 280. doi:

Deciphering the Role of Bone Morphogenetic Proteins in Pathological Retinal Neovascularization through Epigenetic Modifications OPEN ACCESS

Maria Ghishan; Nandini Koneru; Sonali Sharma; Khaled Elmasry; Mohamed Al-Sayed Al-Shabrawey

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 281. doi:

OLT1177 (Dapansutrile) Mitigates Retinal Neovascularization by Inhibiting NLRP3

Inflammasome Activation OPEN ACCESS

Peiqi Wu; Yue Xu; Xiaoling Liang

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 282. doi:

Butyrate Inhibits Retinal Neovascularization by regulating HDAC1-Mediated Sp1-HIF1α/VEGF Signaling OPEN ACCESS

Tommy Bui; John Lester; Rhydham Kamik; Ranjitsinh V Devkar; Folami Lamoke Powell; Menaka Thounaojam; Pamela M Martin; Ravirajsinh Jadeja

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 283. doi:

Reduction of pathological retinal neovascularization, vessel obliteration and artery tortuosity by PEDF protein-based therapeutic in an oxygen-induced ischemic retinopathy rat model OPEN ACCESS

SHIYING ZHAO; Alexander Tschulakow; Subha Karthikeyan; Kun Wang; Stefan Kochanek; Ulrich Schraermeyer; Sylvie Julien-Schraermeyer

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 284. doi:

Porcine model of chronic retinal neovascularization and vascular leakage induced by DL-2-aminoadipic acid OPEN ACCESS

Sandeep Kumar; Xiaohui Zhang,; Sudan Puri; Jenny Walter; James Lee; Vivian Trenti; Vatsala Naageshwaran; Glenwood G Gum

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 286. doi:

Proteomic profiling of tear fluid: Implications for onset and severity of retinopathy of prematurity OPEN ACCESS

Takashi Baba; Ryu Uotani; Kodai Inata; Shin-ichi Sasaki; Yumiko Shimizu; Mazumi Miura; Yoshitsugu Inoue; Dai Miyazaki

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 289. doi:

Examination of the impact of anti- VEGF and antioxidants on angiogenesis inhibition in D. rerio Fli-1a laboratory model. OPEN ACCESS

Marta Maciocha; Anna Swiech; Mateusz Winiarczyk; Jerzy Mackiewicz

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 290. doi:

Elucidating the role of MEMO1 in EPO-triggered signaling in retinal microvascular endothelial cells OPEN ACCESS

Aniket Ramshekar; Bright Asare-Bediako; Jasmine Nguyen; Arundhathy Suresh; Mary Elizabeth Hartnett

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 291. doi:

CYP46A1 Activation Ameliorates Pathological Neovascularization in A Mouse Model of Oxygen-Induced Retinopathy OPEN ACCESS

Josephine Rudd Zhong Manis; Shubhra Rajpurohit; Alliston Oxenrider; Ravirajsinh Jadeja; Menaka Thounaojam

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 292. doi:

Oral Supplementation of Lutein-in-extra-virgin-olive-oil Improved Retinal Function in Oxygen-Induced Retinopathy Mouse Model OPEN ACCESS

Xiaoyuan YE; Nicholas Siu Kay Fung; Wai Ching Lam; Amy Cy Lo

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 293. doi:

A/J Mice Protection from OIR is Associated with Aryl Hydrocarbon Receptor Activity OPEN ACCESS

Kevin Fung; George Hoppe; Demiana Hanna; Ke Jiang; Andrew Dale Benos; Jonathan E Sears

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 294. doi:

DJ-1 mitigates hypoxic stress in oxygen-induced retinopathy mouse model OPEN ACCESS

Mala Upadhyay; Paul Freedman; George Hoppe; Jonathan E Sears; Vera L Bonilha

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 295. doi:

Anti-Scg3 therapy of oxygen-induced retinopathy in a canine model OPEN ACCESS

Bojun Zhang; Chengchi Huang; Goldman Julia Louise; Devine Jackson; Prabuddha Waduge; Remya Ammassam Veettil; Xiao Lin; Avinash Kaur; Hong Tian; Keith Webster; Wei Li

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 296. doi:

Maternal dietary deuterated docosahexaenoic acid protects against hyperoxia induced retinal vascular arrest OPEN ACCESS

Faizah N Bhatti; Viktoria Stewart; Martin-Paul Gameli Agbaga; Neeraj Kumar Chauhan; Asa Brown; Karsten Schmidt; tom brenna; Peter Vitiello; Mikhail Shchepinov; Henry Song; Mathew Meaders; Robert E Anderson

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 297. doi:

Bruton's tyrosine kinase inhibition suppresses pathological retinal angiogenesis OPEN ACCESS

Siyue Chen; Xiaohong Wang; Qiang Liu; Hua Yan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 298. doi:

Preferential oxidative metabolic activity of retinal pericytes contributes to their enhanced sensitivity to high glucose conditions OPEN ACCESS

Yong-Seok Song; Christine M Sorenson; Nader Sheibani

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 299. doi:

Effect of Fluocinolone Acetonide on Müller Cell Function in a Hyperglycemic Environment OPEN ACCESS

Brett Thomas Trombley; Susanne Mohr

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 300. doi:

Effect of Co-enzyme Q10 eyedrops on neurodegeneration and mitochondrial dysfunction in the retina of a type 2 diabetic mice model OPEN ACCESS

Hang I Christie Lam; Dennis Yan-Yin Tse

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 301. doi:

Extracellular Vesicles from the Vitreous Humor Diabetic Patients Contain Claudin-5 and Exhibit Inflammatory Properties OPEN ACCESS

Shengshuai Shan; Abdulaziz Alanazi; Yohan Han; Yutao Liu; Duo Zhang; Somanath Shenoy; S. Priya Narayanan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 302. doi:

Norrin induced phosphorylation of disheveled-1 promotes an open conformation and interaction with claudin-5 OPEN ACCESS

Laura Gonzalez; Monica Diaz Corangüez; David A Antonetti

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 303. doi:

Central Overexpression of BMAL1 Improves Circadian Rhythm and Retinal Health in

db/db mice OPEN ACCESS
Ashay D Bhatwadekar; Jodi Lukkes; Neha Mahajan; Surabhi Abhyankar; Andrei Molosh; Qianyi Luo
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 304. doi:

Claudin-17 loss Compromises Blood-Retinal Barrier Integrity: Implications for Ischemic Retinopathies OPEN ACCESS
Somanath Shenoy; Fang Liu; Shengshuai Shan; Abdulaziz Alanazi; S. Priya Narayanan
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 305. doi:

Elevated mTORC1 function in retinal ganglion cells boosts visual acuity in both normal and diabetic mice OPEN ACCESS
Dejuan Kong; Lynda Elghazi; Heather Hager; Patrice E Fort; Steven F Abcouwer
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 306. doi:

Relationships between retinal microvasculature and coronary microvascular function in women with ischemia and no obstructive coronary artery disease OPEN ACCESS
Katherine Hampilos; C Noel Bairey Merz; Martha Gulati; Janet Wei; Galen Cook-Wiens; Oana Dumitrascu
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 307. doi:

Inner Retinal Vascular Integrity In Retinitis Pigmentosa OPEN ACCESS
Rory Holohan; Kieva Byrne; Jeffrey O'Callaghan; Matthew O'Riordan; Natalie Hudson; Paul Kenna; Emma Duignan; Mark Cahill; Matthew Campbell
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 309. doi:

LDOPA provides sustained visual function benefit in diabetic mice following treatment cessation OPEN ACCESS
Eli Chlan; Nikita Savant; Ashley Prichard; Machelle T Pardue
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 310. doi:

A Frizzled4/LRP5 agonist restores retinal pericyte coverage and reduces hemorrhage in a genetic model of pericyte loss OPEN ACCESS
Jacklyn Levey; Kaia Douglas; Ha-Neul Jo; Lingling Zhang; Somasekar Seshagiri; Stephane Angers; Harald J Junge
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 311. doi:

Predictive markers for retinopathy of prematurity development and progression. OPEN ACCESS
Saurabh Kumar; Neha Sharma; Smriti Singh Yadav; Ramesh Kekunnaya; Rohan Nalawade; Alimeru M; Vijayalakshmi B; Smriti Priya; Subhabrata Chakrabarti; Subhadra Jalali; Inderjeet Kaur
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 312. doi:

Melanopsin: A potential therapeutic target for retinopathy of prematurity OPEN ACCESS
Adina Radu; Gabriella S. Danziger; Shweta Modgil; Maya Shah; Cyprian Dumas; Huayue Zhang; Micah A Chrenek; Jana T Sellers; Richard A. Lang; Jeffrey H Boatright; P. Michael Iuvone
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 313. doi:

Automating mouse retinal cell identification and quantification using machine learning OPEN ACCESS
Cammi Valdez; Luis Vazquez; anne Martin; Madison Whitekiller; Lauren Wilcox; Joshua Butcher
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 314. doi:

Occludin carboxy terminus is a dynein adaptor required for mouse embryonic development OPEN ACCESS
Xuwen Liu; Cheng-Mao Lin; Alyssa Ashleigh Dreffs; Enming Joe Su; Daniel A. Lawrence; David A Antonetti
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 315. doi:

The link between DNA methylation and homocysteine in the development of diabetic retinopathy OPEN ACCESS
Pooja B Malaviya; Renu A Kowluru
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 316. doi:

Ex vivo ligandomics to profile diabetic vs. healthy retinal cells for drug target discovery OPEN ACCESS
Wei Li; Prabuddha Waduge; Chengchi Huang; Yumei Li; Jin Li
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 317. doi:

Utility of STZ-diabetic Townes humanized mice to study diverse phenotypes in diabetic retinopathy OPEN ACCESS
Malita Jones; Ronny Amamoo; Samantha Jones; Folami Lamoke Powell; Menaka Thounaojam; Ravirajsinh Jadeja; Pamela M Martin
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 318. doi:

Identifying PLVAP-associated proteins involved in breakdown of the blood-retinal barrier in DME OPEN ACCESS
Mathilda van Breest Smallenburg; Reinier O. Schlingemann; Cornelis J.F. van Noorden; Ingeborg Klaassen
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 319. doi:

Intranasal Insulin Reduces Diabetic Retinal Neurodegeneration by Improving Neuronal Function and Decreasing Cell Death and Reactive Gliosis in Mouse Eyes OPEN ACCESS
Sally Ong; Mallory Kristen Suarez; Joseph Rigdon; Jian-Xing (Jay) Ma; Rebecca M Sappington
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 320. doi:

Modeling the Progression of Diabetic Retinopathy Using the BXD79 Mouse Strain OPEN ACCESS
Jazz I James; XiangDi Wang; Lu Lu; Robert W Williams; TJ Hollingsworth; Monica M Jablonski
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 321. doi:

CXCL1/Neutrophil Signaling Pathway contributes to the development of Retinal Endothelial Mesenchymal Transition (EndoMT) and Fibrosis in an in vivo model of Diabetic Retinopathy. OPEN ACCESS
Finny Monickaraj; Jane Smoake; Arup Das
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 322. doi:

An engineered probiotic expressing Ang1-7 minimizes the risk of developing diabetic retinopathy in db/db mice OPEN ACCESS
Sarbodeep Paul; Ram Prasad; Yvonne Adu-Agyeiwaah; Edgar L Ready V; Rati Sharma; Iuliia Dorofeeva; Jason Floyd; Aayush Rohella; Sergio Li Calzi; Qiuhong Li; Maria B Grant
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 323. doi:

Pathological Features of Diabetic Retinopathy in Lund MetS rats OPEN ACCESS

Anna Duarri; Maria José Cairz; Jordi Huerta; Helena Isla-Magrané; Maddalen Zufiaurre-Seijo; Julia B Torres; Cristina Hernández; Rafa Simó; Jose Garcia-Arumí; José Raúl Herance; Patricia Bogdanov

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 324. doi:

The calvarium bone marrow responds to acute retinal injury and is resilient to chronic diabetes compared to long bone marrow. OPEN ACCESS

Sergio Li Calzi; Bright Asare-Bediako; Ram Prasad; Yvonne Adu-Agyeiwaah; Robert F Rosencrans; Jason Floyd; Denise Stanford; Anna Lin; Todd A Lydic; Michael Boulton; Julia Busik; Maria B Grant

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 325. doi:

Overcoming mitochondrial hyperfusion as a novel therapeutic target for retinal neuroprotection in diabetes OPEN ACCESS

Jose R Hombrebueno; Aidan Anderson; Nada Alfahad; Dulani Wimalachandra; Kaouthar Bouzinab; Paula Rudzinska; Heather Wood; Heping Xu; Timothy Lyons; Nicholas Barnes; Parth Narendran; Janet Lord; Saaeha Rauz; Ian Ganley; Timothy Curtis; Graham R Wallace

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 326. doi:

Impact of Maternal Diabetes on Retinal Thickness and Vascular Density in Offspring: A Developmental Study OPEN ACCESS

Jonathan Blake; Mohamed Moustafa; Min Young Kim; Mohamed Al-Sayed Al-Shabrawey

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 327. doi:

In Vitro Characterisation of Endothelial Colony-Forming Cells (ECFCs) from a Cohort of Patients with Diabetic Retinopathy OPEN ACCESS

Jason Lee; Jessica Eyre; Philip Burgess; Emine Bilir; Samantha Moss; Shane D'Souza; Alia Alt; Robyn Maitland; Simon P Harding; Rachel Williams; Hannah Jane Levis

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 328. doi:

Exploring the Regulatory Role of Bone Morphogenetic Proteins on Retinal Proteomes in Experimental Diabetes OPEN ACCESS

Nandini Koneru; Maria Ghishan; Julia Humble; Anusha Reddy; Khaled Elmasry; Mohamed Al-Sayed Al-Shabrawey

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 329. doi:

Assessing vascular pathology in diabetes using retinal neurovascular imaging OPEN ACCESS

Daniel Y Tso; Brianna Taylor

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 331. doi:

Validating injectable anesthesia for the streptozotocin-induced diabetic retinopathy rat model OPEN ACCESS

Anni Tenhunen; Leena Tähtivaara; Heidi Koskenniemi; Anna Mari Koponen; Birgitta Lappeteläinen; Päivi Partanen; Xavier Ekolle; Satu Mering; Hanna-Marja Voipio; Marc Cerrada-Gimenez

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 332. doi:

Shared pathophysiology in the neurovascular unit of the human retina and Alzheimer's brain in type 2 diabetes OPEN ACCESS

Noëlle Bakker; Cornelis J.F. van Noorden; Reinier O. Schlingemann; Ingeborg Klaassen

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 333. doi:

Retinal Dysfunction in Alzheimer's Disease (AD): A Dual Investigation into the Impact of *APOE4* and Diabetes OPEN ACCESS

Surabhi Abhyankar; Qianyi Luo; Neha Mahajan; Gabriella Hartman; Timothy William Corson; Adrian Oblak; Bruce Lamb; Ashay D Bhatwadekar

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 334. doi:

Streptozotocin injection combined with retinal *Vhl*KO induced a mouse model of proliferative diabetic retinopathy OPEN ACCESS

Xiangyu Fu; Xiang Ren; Danian Chen

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 335. doi:

Targeting VEGFB signaling to reduce early changes in the retina during diabetes OPEN ACCESS

Erica L Fletcher; Kiana Kakavand; Gene Venables; Magda Montgomery; Elena Velkoska; Pierre Scotney; Una Greferath; Andrew Ian Jobling

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 336. doi:

Utilization of a large language model-powered chatbot to identify congenital glaucoma from other ocular etiologies OPEN ACCESS

Nur Cardakli; Courtney L. Kraus

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 337. doi:

Enhancing Amblyopia Identification Using NLP: A Study of BioClinical BERT and Flan-T5 Models OPEN ACCESS

Wei-Chun Lin; Caleb Reznick; Leah Reznick; Abigail Lucero; J. Peter Campbell; Hiroshi Ishikawa; Michelle Hribar

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 338. doi:

Assessing the Accuracy of ChatGPT in Diagnosing Ocular Disease OPEN ACCESS

Belinda Ikpoh; Jee-young Moon; Viral Juthani

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 339. doi:

Can ChatGPT Write like an Ophthalmologist? Assessment of ChatGPT-generated Clinical Discussions OPEN ACCESS

Akshay Reddy; Jimmy Chen; Malvika Arya; Zachary Koretz; Eman Al-Sharif; Marissa Shoji; Fritz Gerald Kalaw; Medi Eslani; Justin Arnett; Aliya Rogniel; Jiun Do; Jolene Rudell; Shira Robbins; Sally Baxter; Robert Weinreb; David Granet

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 340. doi:

Evaluation of Learning Model Advice Regarding Common Ocular Symptoms OPEN ACCESS

Sanjana Harihar; Anindya Samanta; Amer Alsoudi; Kieran Lyons; Chris Allen; Austin Williams; Elham Sadeghi; Jay Chhablani

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 341. doi:

Determining the utility of large language models in generating the ICD-10 code for uveitis and uveitis related conditions OPEN ACCESS

Pelin Celiker; Parisa Emami Naeini

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 342. doi:

Evaluating the Authenticity and Readability of AI-Generated Abstracts: An Intriguing Survey Among Ophthalmologists OPEN ACCESS

Paras Vora; Max Benningfield; Michelle Abou-Jaoude

Evaluating the efficacy of a large language model in screening ophthalmology articles for systematic reviews OPEN ACCESS
Erkin Ötles; Rithambara Ramachandran; Ming-Chen Lu; Paula Anne Newman-Casey
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 344. doi:

Employing Large Language Models (LLMs) for study candidate selection and clinical data extraction in the context of retinal research. OPEN ACCESS
Luis Hernandez; Hugo Quiroz-Mercado; Jans Fromow-Guerra
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 345. doi:

Role of artificial intelligence in systematic literature review writing OPEN ACCESS
Laura Antonia Meliante; Giulia Coco; Gianluca Manni
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 346. doi:

Large Language Models: A New Frontier in Pediatric Cataract Patient Education OPEN ACCESS
Andrew David Brown; Qais Dihan; Muhammad Z Chauhan; Taher K Eleiwa; Amr K Hassan; Ahmed B Sallam; Abdelrahman M Elhusseiny
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 347. doi:

Comparative Assessment of AI-Driven Chatbots for Ophthalmic Patient Information: Inaccuracies in Chatbots' Answers to Patient Questions OPEN ACCESS
Michael Oca; Alomi Parikh; Jordan Conger; Allison McCoy; Leo Meller; Katherine Wilson; Sandy Zhang-Nunes
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 348. doi:

Evaluation of ChatGPT for Use in Patient Education OPEN ACCESS
Aurora Rodriguez; Matthew Lam; Leslie Kanda; Laura Kueny; Jack Sipperley
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 349. doi:

Leveraging AI Chatbots to Transform Patient Education on Idiopathic Intracranial Hypertension OPEN ACCESS
Qais Dihan; Andrew David Brown; Ana Zaldivar; Muhammad Z Chauhan; Taher K Eleiwa; Amr K Hassan; Ahmed B Sallam; Abdelrahman M Elhusseiny
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 350. doi:

Can AI Chat Bots Outperform Educational Content from the AAO Website?: A Comparison of Readability in Ophthalmic Patient Education Materials OPEN ACCESS
Ami Patel; Celine Eid; Alen Eid; James Dossett; Christine Clavell; Nicole Pumariega; John Nguyen
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 351. doi:

Racial and Gender Bias in Artificial Intelligence Generated Ophthalmologic Educational Material OPEN ACCESS
Gabriela Georgina Lee; Deniz Goodman; Ta Chen Chang
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 352. doi:

Assessing the Utility of ChatGPT in Simplifying Text Complexity of Patient Educational Materials OPEN ACCESS
Shreya Gupta; Rasika Sudharshan; Alena Shen; Sandy Zhang-Nunes
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 353. doi:

The Role of Chat GPT in Improving the Readability of Glaucoma Patient Education Materials in Spanish OPEN ACCESS
Kailyn Amanda Ramirez; Anna Dos Santos; Angela Magahis; Alexandra Sanchez; Maria Vega Garces; Kimberly Cartagena; Marko Oydanich; Albert S Khouri
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 354. doi:

Evaluation of the appropriateness and readability of ChatGPT responses to patient queries on uveitis OPEN ACCESS
Saeed Mohammadi; Anadi Khatri K C; Tanya Jain; Zheng Xian Thng; Woong-Sun Yoo; Negin Yavari; Azadeh Mobasserian; Vahid Bazojoo; Amir Akhavanrezayat; Anh Ngoc Tram Tran; Cigdem Yasar; Osama Elaraby; Ankur Sudhir Gupta; Jia-Horung Hung; Dalia El Feky; Quan Dong Nguyen
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 355. doi:

Utilization of Artificial Intelligence to Increase Usability of Cataract Surgery Patient Education Websites OPEN ACCESS
David Cui; Gavin Li; Michael Lin; Priya Mathews; Esen K Akpek
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 356. doi:

Addressing Health-Care Disparities in Patient Comprehension Using GPT-4 OPEN ACCESS
Pirooz Fereydouni; Aidin Spina; Jordan Tang; Saman Andalib; Bryce Picton; Austin Fox
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 357. doi:

Performance of "Bard", Google's Artificial Intelligence Chatbot, on Ophthalmology Board Exam Practice Questions OPEN ACCESS
Monica Botross; Seyed Omid Mohammadi; Kendall Montgomery
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 358. doi:

Analyzing the Role of AI in Medical Education: An Evaluation on the Performance of ChatGPT on Ophthalmology Trainee Examination Questions OPEN ACCESS
Carolina J. Ramos; Kimberly Cartagena; Kailyn Amanda Ramirez; Alexandra Sanchez; Maria Vega Garces; Marko Oydanich; Albert S Khouri
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 359. doi:

GPT Wars: Creating and Detecting Fake Datasets with Artificial Intelligence OPEN ACCESS
Andrea Taloni; Giulia Coco; Marco Pellegrini; Vincenzo Scorcia; Giuseppe Giannaccare
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 360. doi:

Standardize clinical trials monitoring with Large Language Model (LLM)-enhanced FAQ management OPEN ACCESS
Jason K Lai; Nicolas Delporte; Brian Tung; Youshi Zhang; Chisom Madu; Daniyar Douletbekov; Carlos Quezada Ruiz; Jian Dai
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 361. doi:

Large Language Models in Medicine: Addressing Ethical Challenges OPEN ACCESS
Yin-Hsi Chang; Jasmine Chiat Ling Ong; Waqaswa William; Atul J Butte; Nigam H Shah; Lita Sui Tjien Chew; Nan Liu; Finale Doshi-Velez; Wei Lu; Julian Savulescu; Daniel Ting
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 362. doi:

Classifying Mouse RPE Morphometric Heterogeneity Using REShAPE – an AI-based Image Analysis Tool OPEN ACCESS
Dylan Walmsley; Dominik Reichert; Huirong Li; Kapil Bharti; ruchi Fnu; Davide Ortolan
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 363. doi:

Measurements of membrane potential in retinal pigment epithelium during phagocytosis OPEN ACCESS
Vivi Karema-Jokinen; Teemu Ihalainen; Soile Nymark
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 364. doi:

Age- and sex- divergent translatomic responses of the retinal pigmented epithelium OPEN ACCESS
Ana J Chucair-Elliott; Sarah R Ocanas; Kevin Pham; Scott Plafker; Michael Stout; Michael H Elliott; Willard Freeman
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 365. doi:

YAP Activation Reverses Senescence in Retinal Pigment Epithelium Driven by Cell-Matrix Adhesion Dysregulation OPEN ACCESS
Hyewon Chung; Gyuri Kim; Chanok Son; Hyo Kyung Lee; Chul-Woo Park; Yujeong Oh; Semin Lee; Jiwon Jang
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 366. doi:

In vivo assessment of NUR77 deficiency on retinal pigment epithelial (RPE) function and biology OPEN ACCESS
TANU PARMAR; Goldis Malek
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 367. doi:

Gene therapy for oculocutaneous albinism type 1 OPEN ACCESS
Alessandra Larimer-Picciani; Leah Byrne
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 368. doi:

Serine and Glycine Deprivation Causes Disease Relevant Changes in the RPE/choroid Transcriptome OPEN ACCESS
Caleb Bates; Regis Fallon; Roberto Bonelli; Martin Friedlander; Marin Gantner
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 369. doi:

Harnessing Optic Nerve Head Structural Information for AI-Based Classification of Glaucoma and Myopia OPEN ACCESS
swati sharma; Tun Tin; Thanadet Chuangsuwanich; Fabian Braeu; Quan V Hoang; Rachel Chong; Tin Aung; Michael J A Girard
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 370. doi:

Individualized Baseline of Retinal Nerve Fiber Layer Thickness Using Generative Deep Learning OPEN ACCESS
Ou Tan; Keke Liu; Aiyin Chen; Dongseok Choi; Ian Y.H. Wong; David Huang
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 371. doi:

Development and Validation of a Deep Learning Algorithm to Automate Detection of Referable Glaucoma in a Safety Net Teleretinal Program OPEN ACCESS
Haroon Rasheed; Sreenidhi Iyengar; Van Nguyen; Zhiwei Li; Aniket Kumar; Aidan Lee; Andrew Duong; Brandon Wong; Jeffrey Gluckstein; Kendra Hong; Kent Nguyen; Rahul Dhodapkar; Carl Kesselman; Lauren Daskivich; Michael Pazzani; Benjamin Y. Xu
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 372. doi:

How Far in the Future Can a Deep Learning Model Forecast Pointwise Visual Field (VF) Data Based Solely on One VF Data Input OPEN ACCESS
Hiroshi Ishikawa; Ashkan Abbasi; Sowjanya Gowrisankaran; Bhavna Josephine Antony; Xubo Song; Gadi Wollstein; Joel S Schuman
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 373. doi:

Forecasting glaucoma from multimodal data using deep learning models OPEN ACCESS
Xiaoqin Huang; Asma Poursoroush; Yeganeh Madadi; Hina Raja; Mohammad Delsoz; Louis R. Pasquale; Michael V. Boland; Chris A Johnson; Nazlee Zebardast; Siamak Yousefi
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 374. doi:

A new structural metascore across four imaging platforms to measure long-term progression in glaucoma OPEN ACCESS
Sangwook Jin; Daniela Andrea Khalilyeh Yarur; Esteban Morales; Ella Bouris; Joseph Caprioli
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 375. doi:

Understanding Equity in Vision-and-Language Learning for Glaucoma Diagnosis with Deep Learning OPEN ACCESS
Yan Luo; Min Shi; Yu Tian; Mohammad Eslami; Saber Kazeminasab Hashemabad; Hannah Rana; Tobias Elze; Lucy Q Shen; Louis R. Pasquale; Nazlee Zebardast; Michael V. Boland; David S Friedman; Mengyu Wang
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 376. doi:

Metformin protects against new-onset *ICD* coding of geographic atrophy: findings from a national case-control study OPEN ACCESS
John Moir; Max Hyman; Andrea Flores; Seenu Hariprasad; Dimitra Skondra
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 377. doi:

Associations between structural phenotype and pathway-specific polygenic risk scores in intermediate age-related macular degeneration – a MACUSTAR report OPEN ACCESS
Lukas Schloesser; Jan Henrik Terheyden; Charlotte Behning; Hannah Klinkhammer; Davide Garzone; Marlene Sassmannshausen; Steffen Schmitz-Valckenberg; Carel C B Hoyng; Clarisa Sanchez; Ulrich F O Luhmann; Klaus-Peter Moll; Sergio Leal; Matthias Schmid; Frank G Holz; Robert Finger
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 378. doi:

Photobiomodulation Using the Valeda Multiwavelength Light Delivery System Demonstrates Significant Reduction in Risk for Vision Loss and Onset of Geographic Atrophy in Dry Age-Related Mac... OPEN ACCESS
Todd Schneiderman; Victor H Gonzalez; David S Boyer; Richard B Rosen; Samantha Xavier; Allen Hu; David Warrow; Eleonora M Lad; Diana V Do; Allen Ho; Glenn J Jaffe; Marion Ronit Munk; Cindy Croissant; Stephanie Tedford; Rene Ruckert; Clark Tedford
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 379. doi:

Long-term efficacy and safety of pegcetacoplan over 36 months including 12-month results of the GALE open-label extension study OPEN ACCESS
Ashkan Michael Abbey; Charles C Wykoff; Jeffrey S Heier; Chao Li; Felix Yemanyi; Gabriela Dieckmann; Daniel Pereira; Min Tsubor; Caroline Baumal
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 380. doi:

Assessing Mediterranean diet adherence in AMD patients using proteomics: AMD-Life OPEN ACCESS

Joelle Vergroesen; Gülistan Önsesveren; Sheila A.P.M. Backus; Joyce van Meurs; Caroline C W Klaver; Magda A. Meester

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 381. doi:

Functional Microperimetric Correlates of OCT Structural Features in Intermediate Age-related Macular Degeneration OPEN ACCESS

Giulia Corradetti; Louay Almidani; Maria Cristina Savastano; Valentina Cestrone; Filippo Amore; Valeria Silvestri; Alireza Mahmoudi; Jiwon Baek; Ye He; Stanislao Rizzo; Yuhua Zhang; SriniVas R Sadda

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 382. doi:

Real World Experience with Intravitreal Pegcetacoplan for Treating Geographic Atrophy in AMD OPEN ACCESS

Mengxi Shen; Farhan Hiya; Alessandro Berni; Jeremy Liu; Gissel Herrera; Robert O'Brien; Maura Di Nicola; Zohar Yehoshua; Sander R Dubovy; Giovanni Gregori; Philip J Rosenfeld

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 383. doi:

Effect of BCOR loss in Xenopus laevis and tropicalis: Insights for retinal development OPEN ACCESS

Samantha McLaughlin; Michelle Zhang; Dawn Owens; Nicole Jones; J William Harbour; Daniel Pelaez

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 384. doi:

Functional dissection of *Atoh7* cis-regulatory elements in genesis of retinal ganglion cells OPEN ACCESS

Kamakshi Mehta; Marwa Daghsni; Silvia Liu; Takaaki Kuwajima; Issam Al Diri

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 385. doi:

Mechanisms of microglial-mediated elimination of newborn retinal ganglion cells OPEN ACCESS

Navita Lopez; Sarah R Anderson; Monica Vetter

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 386. doi:

Inducible CreER^{T2} mouse lines for study of retinal bipolar cell subtypes OPEN ACCESS

Ebenezer Quainoo; Xiaoling Xie; Shuchun Li; Lotem Kol; Lin Gan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 387. doi:

Geckos as a new model system to understand fovea genesis OPEN ACCESS

Andrew Edward Wegerski; Chelsey Grasham; Kira Yates; Maya Johnson; Aaron H Griffing; Brian P Brooks; Ashley M Rasys; Robert B Hufnagel

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 388. doi:

Evolutionary and Developmental Specialization of Foveal Cell Types in the Marmoset OPEN ACCESS

Lin Zhang; Martina Cavallini; Junqiang Wang; Ruiqi Xin; Qiangge Zhang; Guoping Feng; Joshua Sanes; Yi-Rong Peng

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 389. doi:

Single cell profiling of H3K27me3 reveals dynamic heterochromatin regulation during neuronal differentiation OPEN ACCESS

Kiara Eldred; Matthew Wooten; Derek Janssens; Steven Henikoff; Thomas A Reh

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 390. doi:

Examining retinal ganglion cell susceptibility to acute ocular hypertension in *Mthfr*$^{677C>T}$ mice OPEN ACCESS

Alaina Reagan; Olivia J. Marola; Travis Cossette; Mike Sasner; Gareth R Howell

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 391. doi:

Elevated IOP reduces lamina cribrosa oxygenation both directly through capillary distortion and indirectly by reducing perfusion from the posterior ciliary arteries OPEN ACCESS

Yuankai Lu; Hasan Banna; Hua Yi; Hannah Schilpp; Mingna Liu; Fuqiang Zhong; Bingrui Wang; Andrew theophanous; Shaharoz Tahir; Po-Yi Lee; Joel R Palko; Ian A Sigal

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 392. doi:

Restoration of Blood-Retinal Barrier Integrity Prevents Neurodegeneration in Glaucoma OPEN ACCESS

Isaac Alejandro Vidal Paredes; Jorge Luis Cueva Vargas; Nicolas Belforte; Yukihiro Shiga; Florence Dotigny; Heberto Quintero; Adriana Di Polo

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 393. doi:

Retinal vascular resistance increases, then later decreases, as glaucoma progresses OPEN ACCESS

Stuart Keith Gardiner; Brad Fortune; Steven L Mansberger; Grant Cull

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 394. doi:

Repeatability of Fractal Analysis for Optical Coherence Tomography Angiography Vascular Density of the Optic Nerve Head Region OPEN ACCESS

Gustavo Rosa Gameiro; Alessandro Jammal; Jianhua Wang; Felipe Medeiros

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 395. doi:

Calculating Traction Forces in Normal and Glaucomatous Trabecular Meshwork Cells in an Active 3D Fluid-Structure Interaction Culture Setting OPEN ACCESS

Alireza Karimi; Mini Aga; Taaha Khan; Siddharth Daniel D'costa; Omkar C Thaware; Mary J Kelley; Haiyan Gong; Ted S Acott

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 396. doi:

Cultured media from adipose derived stem cells promote corneal epithelial wound healing via increased cell proliferation and DNA metabolic process OPEN ACCESS

MAKO OKAMOTO; Yuichi Okumura; Takenori Inomata; Maria Miura; Keiichi Fujimoto; Kunihiko Hirosawa; Ken Nagino; yuki moroka; Fumihiro Hara; Shintaro Nakao

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 397. doi:

The Role of Mesenchymal Stem/Stromal Cells in Corneal Wound Healing: A Comparative Study of Different Sources and Delivery Routes OPEN ACCESS

Allison Kufta; Mohammad Soleimani; Kiasra Cheraqpour; Seyed Mahbod Baharnoori; Hamed Massoumi; Mohammad Javad Ashraf; Raghuram Kogant; Mahmood Ghassemi; Khandaker N Anwar; Elmira Jalilian; Ali R Djalilian

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 398. doi:

Combined epigenetic treatment of human organ-cultured diabetic corneas with targeted nanoconjugate and a DNA demethylating agent ameliorates epithelial wound healing and stem cell marker ... OPEN ACCESS

Alexander V Ljubimov; Andrei A Kramerov; Rameshwar Patil; Cynthia Amador; Onkar Sawant; Mehrnoosh Saghizadeh; Ruchi

Shan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 399. doi:

Activation of limbal epithelial proliferation, is controlled, in part, by an ACE2/Lcn2 pathway OPEN ACCESS

Han Peng; Huimin Jiang; Min Liu; Wending Yang; Elif Kayaalp Nalbant; Elwin D. Clutter; Nihal Kaplan; Robert M Lavker

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 400. doi:

Local Plasmacytoid Dendritic Cells Promote Corneal Epithelial Wound Healing OPEN ACCESS

Fangfang Qiu; Brendan Kenyon; Deshea L Harris; Pedram Hamrah

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 401. doi:

The Mechanism of Nerve Growth Factor Signaling in Corneal Epithelial Renewal OPEN ACCESS

Konstantin Feinberg; Kaveh Mirmoeini; Kiana Tajdaran; Arif Hussain; Chilando Mulenga; Jordan Crabtree; Mario Henriquez; Gregory H Borschel

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 402. doi:

Cellular and molecular changes in retinal microglia contributes to neurodegeneration in AMD OPEN ACCESS

Rinki Ratnapriya; Khang Ma; Arko Barman

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 403. doi:

Optic disc drusen in Pseudoxanthoma elasticum are associated with the extent of Bruch's membrane calcification OPEN ACCESS

Kristin Raming; Sandrine H. Künzel; Maximilian Pfau; Doris Hendig; Frank G Holz; Kristina Pfau

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 404. doi:

Longitudinal Change in Cone Structure and Retinal Sensitivity in Choroideremia OPEN ACCESS

Liangbo Linus Shen; Yi Zhang; Jessica Wong; Katharina G. Foote; Travis Porco; Ruikang K Wang; Austin Roorda; Jacque L Duncan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 405. doi:

OCU400 Nuclear Hormone Receptor-Based Gene Modifier Therapy: Safety and Efficacy from Phase 1/2 Clinical Trial for Retinitis Pigmentosa Associated with *NR2E3* and *RHO* Mutations OPEN ACCESS

Byron L Lam; Arun K Upadhyay; Shankar Musunuri; Murthy Chavali; Sahar Matloob; Nalin Mehta; David G Birch; Paul Yang; Benjamin Bakall; Neeraj Jain; Jose S. Pulido; Borooah Shyamanga

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 406. doi:

Synthetic phototransduction with a light-responsive molecule (KIO-301) in advanced retinitis pigmentosa: the ABACUS-1 phase 1/2 trial OPEN ACCESS

Robert James Casson; Eric Daniels; Christen Barras; Andrew Dwyer; Brian Strem; Charles Clifton Wykoff; Russell N Van Gelder

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 407. doi:

Digital eye: single-cell multiomics simulation to model and study cell-cell-interactions during development, regeneration and in the pathogenesis of retinal and optic nerve diseases OPEN ACCESS

Emil Kriukov; Petr Y Baranov

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 408. doi:

Graft cell expansion from hiPSC-RPE strip after transplantation in primate eyes with or without RPE damage OPEN ACCESS

Michiko Mandai; Keisuke Kajita; Mitsuhiro Nishida; Yasuo Kurimoto; Satoshi Yokota; Sunao Sugita; Atsuta Ozaki; Yoko Miura; Masayo Takahashi

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 409. doi:

Magnitude and Predictors of Placebo Effects in Dry Eye Assessment and Management (DREAM) Study OPEN ACCESS

Katherine Han; Yinxi Yu; Penny A Asbell; Gui-Shuang Ying

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 410. doi:

AI-based clinical stratification using tear film biomarkers in DED to identify sub-clinical disease OPEN ACCESS

Pooja Khamar; Raghav Narashiman; Rohit Shetty; Arkasubhra Ghosh; Swaminathan Sethu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 411. doi:

Conjunctival transcriptome changes in Sjögren Syndrome and non-Sjögren Syndrome aqueous-tear-deficient dry eye OPEN ACCESS

Cintia S De Paiva; Stephen C Pflugfelder; Zhiyuan Yu; Robert Britton; Laura Schaefer; Kaitlin Scholand

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 412. doi:

Biophysical interactions between hydrophilic silicon quantum dots and lubricant dry eye formulations OPEN ACCESS

Maitreyee Roy; Sidra Sarwat; Mark Wilcox; Richard Tilley; Fiona Stapleton

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 413. doi:

Longitudinal Analysis of Tear Cytokine Ratios in Association with Dry Eye Signs and Symptoms in the Dry Eye Assessment and Management (DREAM) Study OPEN ACCESS

Cindy Siyang Zhao; Yimeng Chen; Gui-Shuang Ying; Penny A Asbell

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 415. doi:

Treatment Options For Acute/Subacute Patients With m.11778G>A *MT-ND4* Leber Hereditary Optic Neuropathy: A Meta-Analysis OPEN ACCESS

Patrick Yu-Wai-Man; Nancy J. Newman; Valerio Carelli; Valerie Biousse; Catherine Vignal-Clermont; François Montestruc; Magali Taiel; Jose Alain Sahel

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 416. doi:

Genome-wide Association Study of Foveal Hypoplasia OPEN ACCESS

Callum Hunt; Ha-Jun Yoon; Zhanhan Tu; Manjiri Patil; Girish Varma; Jinu Han; Helen Kuht; Gail Maconachie; Will Norton; Jun Wang; Zhen Zuo; Rui Chen; Martin Tobin; Chiara Batini; Mervyn George Thomas

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 417. doi:

Lenadogene Nolparvovec Gene Therapy for Leber Hereditary Optic Neuropathy in the Real-Life Setting OPEN ACCESS

Jose Alain Sahel; Catherine Vignal-Clermont; Valerio Carelli; Chiara La Morgia; Mark L. Moster; Robert C Sergott; Sean P. Donahue; Helene Dollfus; Thomas Klopstock; Rabih Hage; Vasily Smirnov; Catherine Cochard; Francis Munier; Pauline Zoppe; Magali Taiel; Patrick Yu-Wai-Man

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 419. doi:

SIRT1-Based Gene Therapy Targets a Gene Program Involved in Mitochondrial Turnover in Experimental Autoimmune Encephalomyelitis OPEN ACCESS
Brahim Chaqour; Kimberly Dine; Ahmara Gibbons Ross; Kenneth S Shindler
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 420. doi:

Endogenous flavoprotein fluorescence imaging revealed increased optic disc metabolic stress in optic neuropathies OPEN ACCESS
Yaping Joyce Liao; Rishita Pujari; Ping Zhu; Collin Rich; Miaomiao Yu; Sangeethabalasri Pugazhendhi
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 421. doi:

Degree Of Optic Disk Swelling Does Not Affect Venous Pulsation Estimation of Intracranial Pressure. OPEN ACCESS
Ying Jo Khoo; Chandra Balaratnasingam; Dao Yi Yu; William Morgan
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 422. doi:

Association of Myopia with Higher Risk of Incident Visual Impairment in a Multi-ethnic Asian Population: the Singapore Epidemiology of Eye Diseases Study OPEN ACCESS
Faye Yu Ci Ng; Zhi Wei Lim; Miao Li Chee; Hengtong Li; Charumathi Sabanayagam; Ching-Yu Cheng; Yih Chung Tham
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 423. doi:

Axial growth after discontinuing soft multifocal contact lens wear in the Bifocal Lenses In Nearsighted Kids 2 (BLINK2) Study OPEN ACCESS
David A Berntsen; Loraine Sinnott; Danielle J Orr; Anita Ticak; Amber G Giannoni; Lisa Jordan; Donald O Mutti; Jeffrey J Walline
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 424. doi:

Hyperopic Reserve as a Treatment Indicator for Low-Concentration Atropine to Delay Myopia Onset in Children (LAMP 2 Study) OPEN ACCESS
Xiu Juan Zhang; Yuzhou Zhang; Ka Wai Kam; Clement C. Tham; Li Jia Chen; Calvin C P Pang; Jason C.S. Yam
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 425. doi:

Five-Year Clinical Trial of Low-concentration Atropine for Myopia Progression (LAMP) Study: Phase 4 Report OPEN ACCESS
Jason YAM; Xiujuan Zhang; Yuzhou Zhang; Ka Wai Kam; Fangyao Tang; Xiangtian Ling; Clement C. Tham; Li Jia Chen; Calvin C P Pang
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 426. doi:

The MOSAIC Study: Year 3 results of 0.01% and 0.05% Atropine treatment in a European Population OPEN ACCESS
James Loughman; Gareth Lingham; Ernest Kyei Nkansah; Emmanuel Kobia-Acquah; Ian Flitcroft
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 427. doi:

NVK002 low-dose atropine 0.01% maintains myopia control during a fourth year of dosing and discontinuation does not cause rebound myopia progression OPEN ACCESS
Karla Zadnik; Houman Hemmati; Tung Fong; Simon Chandler
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 428. doi:

Repeated Low-Level Red-Light Therapy Combined with Orthokeratology to Achieve "Glasses-off" in Daytime and Full Control of Myopia Progression: A Multicenter Randomized Controlled Trial OPEN ACCESS
Mingguang He; Ruilin Xiong; Wei Wang; Xiao Yang
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 429. doi:

Oxygen metabolic retinal function in choroideremia and retinitis pigmentosa OPEN ACCESS
Giacomo Calzetti; Dominique Prétot; Philippe Valmaggia; Giorgio Placidi; Benedetto Falsini; Fabian Fries; Nóra Szentmáry; Maria Della Volpe Waizel; Hendrik P Scholl
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 430. doi:

Glycosaminoglycan-omics of Bruch's membrane reveals elevated levels of heparan sulfate in early and intermediate Age-related Macular Degeneration OPEN ACCESS
Christopher Toomey; Savanna Pflugmacher; Kamalu Park; Jeffrey Esko
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 431. doi:

Extracellular matrix biomechanical properties can rewire RPE cell metabolism. OPEN ACCESS
Allison Grenell; Arjan Kalra; Monisha Raju; Bela Anand-Apte
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 432. doi:

Inter-organ biochemical exchanges in oxygen-induced retinopathy (OIR) OPEN ACCESS
Charandeep Singh
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 433. doi:

A tale of two substrates: Glucose and Lactate feed retina and RPE glycogen OPEN ACCESS
Daniel Hass; Lan Wang; Yiyi Chen; LuLu Callies; Timothy Joel Cherry; Nancy Philp; Francois Paquet-Durand; James Hurley
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 434. doi:

Rise in oxidative stress following lysosomal compromine of RPE cells is eliminated by acid nanoparticles OPEN ACCESS
Claire H Mitchell; Jiaqi Li; Wennan Lu
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 435. doi:

Serine and glycine physiology reversibly modulate retinal and peripheral nerve function OPEN ACCESS
Marin Gantner; Regis Fallon; Caleb Bates; Esther Lim; Yoichiro Ideguchi; Takayuki Nagasaki; Michal Handzlik; Roberto Bonelli; Rando Allikmets; Martina Wallace; Christian Metallo; Martin Friedlander
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 436. doi:

Seeing faces from a distance: critical viewing distances for identity, emotion, and visual speech in individuals with low vision OPEN ACCESS
Yingzi Xiong; Andra Mies; Karen Kendrick; Donald Fletcher
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 437. doi:

Comparison between early-onset, late-onset vision impairment and age-matched sighted controls for auditory distance estimation OPEN ACCESS
Shahina Pardhan; Brian Moore; Silvia Cirstea; Rajiv Raman; Sarika Gopalakrishnan; Andrew Kolarik
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 438. doi:

How similar is reading with central vision loss to reading in normal peripheral vision? OPEN ACCESS

Susana T L Chung; Gordon E Legge

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 439. doi:

Cognitive loading in real life navigation for the visually impaired OPEN ACCESS

Jie Ding; Jiaqing Wang; Ke Zhang; Nadim Zaro; Marco LH Chan; Venus Suen; Benjamin Thompson; Allen M Y Cheong

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 440. doi:

Differences in objective physical activity between children with visual impairment and normal sight OPEN ACCESS

Srijana Adhikari; Fleur Van Rens; Ruth van Nispen; Ellen Elsman; Brook Galna; Manish Poudel; Ger Van rens

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 441. doi:

Perceived Challenges, Information Needs, and Interaction Preferences of Blind and Visually Impaired Users When Interacting with Fully Autonomous Vehicles OPEN ACCESS

Jing Xu; Kayla Shaw

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 442. doi:

Vision-related activity difficulties in people diagnosed with neovascular age-related macular degeneration and with vision impairment. OPEN ACCESS

Antonio Macedo; Ida Nilsson; Cecilia Svanfeldt; Jeanette Melin; Camilla Mohlin; Karthikeyan Baskaran

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 443. doi:

Quantifying retinal putative gliosis in preclinical Alzheimer's disease OPEN ACCESS

Swetha Ravichandran; Peter J. Snyder; Jessica Alber; Madelyn R. Kenny; Andrew Rothstein; Keisha Brown; Charles Murchison; Olivio J. Clay; Erik D. Roberson; Edmund Arthur

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 444. doi:

Age-Related Variations in the External Limiting Membrane and the Ellipsoid Zone OPEN ACCESS

Muhammad Usman Jamil; Jungeun Won; Stefan B Ploner; Anna Marmalidou; Stephanie Kaiser; Hiroyuki Takahashi; Yunchan Hwang; Antonio Yaghy; Andreas Maier; James G. Fujimoto; Nadia K Waheed

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 445. doi:

Thinning of outer retina is associated with decreased hippocampal volume and cortical thinning in Alzheimer's disease related areas OPEN ACCESS

Yu Jiang; Thomas A. Swain; Christine Mac Donald; Ariel Rokem; Julia P Owen; Gerald McGwin; Christine A Curcio; Kenneth R Sloan; Emily H Trittschuh; Swati Rane Levendovszky; Mark E Clark; Cynthia Owsley; Cecilia S Lee

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 446. doi:

Spatial-spectral characterization and mapping of labeled drusenoid deposits in non-neovascular age-related macular degeneration OPEN ACCESS

Khaled Nassar; Heiko Niessen; Jean Daniel Arbour; Marc-André Rhéaume; Ramina Nissan; Anthea Rojewski; Patricia Soya; Lara Santucci; Shannon Campbell; Samin Sabokrohiyeh; Anudeep Konda; Claudia Chevrefils; Jean-Philippe Sylvestre

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 447. doi:

Unveiling the Genetic Landscape of Retinal Age Gap: Insights from a Genome-Wide Association Study OPEN ACCESS

Yu Huang; Mohammad Ghouse Syed; Ruiye Chen; Cong Li; Xiayin Zhang; Xueli zhang; Xianwen Shang; Muthu Rama Krishnan Mookiah; Huan Wang; Emanuele Trucco; Zhuoting Zhu; Alex S F Doney; Mingguang He

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 448. doi:

The SD-OCT correlates of fundus autofluorescence in geographic atrophy: a comprehensive point-to-point analysis of fundus autofluorescence with SD-OCT using phase 3 trials DERBY and OAKS. OPEN ACCESS

Konstantinos Balaskas; Bart Liefers; Robbert Struyven; siegfried wagner; Sophie Glinton; Gongyu Zhang; Livia Faes; Veronika Lipkova; Gunjan Naik; Pallavi Bagga; Praveen J Patel; Alex McKeown; Lukas Scheibler; Christine A Curcio; Dun Jack Fu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 449. doi:

Enriching AI-based Predictive Models from Retinal Imaging by Multi-Modal Contrastive Pre-training OPEN ACCESS

Emese Sükei; Sophie Riedl; Elisabeth Rumetshofer; Niklas Schmidinger; Andreas Mayr; Ursula Schmidt-Erfurth; Günter Klambauer; Hrvoje Bogunovic

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 450. doi:

ClinGen Ocular Domain Working Group standards for disease nomenclature and variant classification OPEN ACCESS

Robert B Hufnagel; Kristy Lee; Emily Place; Janey L Wiggs

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 451. doi:

Enhancing Variant Curation Guidelines to Optimize Clinical Genetic Testing for *ABCA4* Retinopathies Utilizing the ClinGen Framework OPEN ACCESS

Kristy Lee; Amber Waddell; C. Blair Compton; Stéphanie S. Cornelis; Amy Dameron; Marieke De Bruyne; Miriam Bauwens; Mathieu Quinodoz; Eva Lenassi; Robyn Jamieson; Claire-Marie Dhaenens; Andrea L Vincent; Abby T Fahim; Frans Cremers; Elfride De Baere; Robert Hufnagel

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 452. doi:

ClinGen X-linked Inherited Retinal Disease Variant Curation Expert Panel (XLIRD VCEP): *RPGR* Curation Progress, and Initial modified ACMG criteria for *RS1* and *CHM* OPEN ACCESS

Kim Carlyle Worley; Ma'ayan Mere; William Hankey; Lonneke Haer-Wigman; Hafiz Muhammad Jafar Hussain; Kristy Lee; Paul A Sieving; Lori S Sullivan; Christina Zeitz; Richard A Lewis; Rui Chen

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 453. doi:

Novel clinical observations and genetic spectrum in 241 patients with *PRPH2*-associated retinopathy. OPEN ACCESS

Rachael C Heath Jeffery; Andrea L Vincent; Jennifer Thompson; Johnny Lo; Enid Chelva; Sean Armstrong; Tina Lamey; Samuel McLenachan; Danial Roshandel; Terri McLaren; Fred Kuanfu Chen

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 454. doi:

Protein structure analysis of *CNGA3* variants in achromatopsia OPEN ACCESS

Ditte K Rasmussen; Young Joo Sun; Joel Andrew Franco; Aarushi Kumar; Jennifer T Vu; Vinit B Mahajan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 456. doi:

Deep mutational scanning reveals the pathogenicity and structural constraints of a comprehensive set of rhodopsin missense variants OPEN ACCESS

Kannan Vrindavan Manian; Erin Hennessey; Ha Eun; Hilary Scott; Xiaoping Yang; David E Root; Eric A Pierce; Jason Comander

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 457. doi:

Overview of diabetic retinopathy and the use of advanced imaging to understand the progression of changes in diabetes OPEN ACCESS
Amani A Fawzi
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 458. doi:

AI-Powered OCTA: Revolutionizing Diabetic Retinopathy Diagnosis and Unveiling Microvascular Pathobiology OPEN ACCESS
Yali Jia
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 459. doi:

Neurovascular coupling in diabetic retinopathy OPEN ACCESS
Leopold Schmetterer
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 460. doi:

Using ERG and psychophysics to understand early visual abnormalities in DR OPEN ACCESS
J Jason McAnany
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 461. doi:

Biomarkers of Retinal Oxygenation in Diabetic Retinopathy OPEN ACCESS
Mahnaz Shahidi
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 462. doi:

Metabolomics of retinoblastoma: Assessment of metabolic variations in patients with invasive versus non-invasive unilateral retinoblastoma OPEN ACCESS
Khushboo Gulati; Krishna Mohan Poluri; Swathi Kaliki
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 463. doi:

International Retinoblastoma Liquid Biopsy Consortium (IRB-LBC): A Multi-Center, Multi-National Collaborative Study on Aqueous Humor as a Liquid Biopsy Tool for Retinoblastoma OPEN ACCESS
Brianne Brown; Drishti Pandya; Liya Xu; Carol Shields; Hans E Grossniklaus; Andrew W Stacey; Alison Skalet; Matthew W Wilson; Janice Lasky Zeid; Armin Afshar; Brenda L Gallie; Eric Hansen; Junne Kamihara; Bhavana Chawla; Talita de Toledo Lima; Jesse L Berry
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 464. doi:

Reusable 3D-printed molds to produce ocular prosthetics for global ophthalmology OPEN ACCESS
Nikita Kedia; Maxwell Lohss; Bridget Kinneer; Emily Barbour; Zolten Glasso; Leah Byrne; Jenny Yu
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 465. doi:

Elevated Bcat1 in Retinoblastoma tumors enhances BCAA conversion and mediates autophagy modulation for tumor growth OPEN ACCESS
Arkasubhra Ghosh; Keya Katare; Gagan Dudeja
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 466. doi:

Utility of Microvascular Flow Ultrasound Imaging in Patients with Retinoblastoma Treated with Intra-Arterial Chemotherapy OPEN ACCESS
Kerri McInnis-Smith; Todd Abruzzo; Monique Riemann; Luis Goncalves; Aparna Ramasubramanian
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 467. doi:

Single-cell transcriptomic atlas reveals molecular signatures giving rise to local invasion in retinoblastoma OPEN ACCESS
Yaoming Liu; Yanjie Xie; Junjie Tang; Jiahe Nie; Rong Lu
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 468. doi:

Novel Molecularly Targeted Therapy for Retinoblastoma Through Activation of MDM4-p53 Pathway OPEN ACCESS
Keita Togashi; Kaneko Yutaka; Hidetoshi Yamashita; Masahiko Sugimoto
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 469. doi:

$Ca_V3.3$ Channels as Key Modulators for Overcoming Carboplatin Resistance in Y79 Retinoblastoma Cells OPEN ACCESS
Sooyun Kim; Chang Sik Cho; Dong Hyun Jo; Jeong Hun Kim
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 470. doi:

Heterogeneous Expression Patterns of the Minichromosome Maintenance Complex Members in Retinoblastoma Unveil its Clinical Significance OPEN ACCESS
Junjie Tang; Yaoming Liu; Yinghao Wang; Jinmiao Li; Zhihui Zhang; Rong Lu
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 471. doi:

Examining the Influence of Social Determinants on Clinic Attendance Among Children with Eye Cancer: A Retrospective Analysis OPEN ACCESS
Omer Jamal; Ashwin Mallipatna; Stephen Hwang; Helen Dimaras
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 472. doi:

Piperlongumine targeting of the NSUN2-ALYREF onco-epitranscriptomic signaling cascade in retinoblastoma OPEN ACCESS
Rajendra Gharbaran; Moira Sauane; Onyekwere Onwumere; Sual Lopez; Ertan Kastrat; Nagalaxmi Vemalapally; Enyuan Shang; Hans E Grossniklaus; Stephen Redenti; Gail M Seigel
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 473. doi:

Primary fundus screening improved the survival rate of children with retinoblastoma OPEN ACCESS
Hong Liu; Jianping Zhang; Juan Chen; Zhikuan Yang; Junyang Zhao
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 474. doi:

Identification of post-transcriptional regulators and potential miRNAs associated with retinoblastoma through bioinformatic analysis OPEN ACCESS
Karla Tovar Hernández; Marco Antonio Meraz Rios; Matilde Ruiz-Cruz; Nadia Huerta; Lenin Ochoa-de la Paz
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 475. doi:

Characteristics of Retinoblastoma Patients Presenting with Strabismus OPEN ACCESS
qinglin xu; Hong Liu; Jianping Zhang; Juan Chen; Zhikuan Yang; Junyang Zhao
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 476. doi:

Immunohistochemical expression of exosome specific and hypoxia markers in high-risk and low-risk retinoblastoma OPEN ACCESS
AZIMA FATIMA; saumya Jakati; Radhika Manukonda; Tirupathi Rao; Rani Pallavi; Dilip Kumar Mishra; Geeta K Vemuganti;

Swathi Kaliki

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 477. doi:

Thriving Beyond Diagnosis: Quality of Life in Retinoblastoma Survivors QoL Rb India study OPEN ACCESS

Krishnasri Padamandala; Geeta K Vemuganti; Surya Durga Prasad M; Santosh G Honavar

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 478. doi:

Autistic spectrum disorder and psychomotor delay in retinoblastoma patients OPEN ACCESS

Shahar Frenkel; Maya Eiger-Moscovich; Jacob Pe'Er

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 479. doi:

Unveiling the therapeutic potential of extracellular vesicles for precision drug delivery in retinoblastoma OPEN ACCESS

Sushma Mudigunda; Vincent Yeung; Amy Ross; Nikolay Boychev; Joseph B Ciolino

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 480. doi:

ALYREF Expression and Cell Growth Modulation in Retinoblastoma OPEN ACCESS

Gail M Seigel; Onyekwere Onwumere; Moira Sauane; Enyuan Shang; Stephen Redenti; Hans E Grossniklaus; Rajendra Gharbaran

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 481. doi:

Lysophosphatidic acid promotes corneal healing via upregulating corneal stromal cell-derived exosomal mir-221-3p OPEN ACCESS

Yi-Jen Hsueh; Hung-Chi Chen

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 482. doi:

Ultrastructural aspects of corneal functional recovery in rats following intrastromal keratocyte injection OPEN ACCESS

Qian Ma; Andn K Riau; Robert D Young; Olga Shebanova; Nicholas J Terrill; Gary Yam; Jodhbir S Mehta; Craig Boote

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 483. doi:

Chronic intermittent hypoxia modulates fibrosis and hormone receptor expression in the rat cornea OPEN ACCESS

Brenda Vasini; Jessica Bradshaw; Steve Mabry; Nicole E. Wilson; Brenna Sulianne Hefley; Rebecca Cunningham; Dimitrios Karamichos

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 484. doi:

Ultrastructure and morphology of healing corneal stroma in a keratocyte-specific hyaluronan synthases 2-deficient mouse OPEN ACCESS

Ai Matsushita; Takayoshi Sumioka; Yuka Okada; Hiroki Iwanishi; Masayasu Miyajima; Chia-Yang Liu; Winston Kao; Shizuya Saika

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 485. doi:

Histological Evaluation of Light-Crosslinking Tissue Adhesive on Corneal and Conjunctival Wound Healing OPEN ACCESS

yubin son; Jong-Soo Lee

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 486. doi:

Novel Decellularization and Cryopreservation of Corneal Stroma for Lamellar Keratoplasty OPEN ACCESS

Ying Liu; Ying-Bo Shui; Andrew J W Huang; Xu Han

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 487. doi:

Regenerative healing immune response in cornea after chemical burn OPEN ACCESS

Christine Tilstra-Smith; Swathi Jacobs; Nileyma Castro; Tere Williams; Audrey M Bernstein

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 488. doi:

A Novel Transgenic Mouse For Corneal Wound Healing Analysis of TRPV1 Expression OPEN ACCESS

Bianca Bigit; Rebecca Jung; Peter Toth; Victor H Guaiquil; Jin-Hong Chang; Mark Rosenblatt

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 489. doi:

Treatment with isoliquiritigenin reduces the pro-fibrotic response in human corneal fibroblasts *in vitro* OPEN ACCESS

Weinong Song; Vanessa Rozo; Nayone Lantyer Araujo; Jennifer Kang; Melinda Quan; Theint Aung; Sara Thomasy; Brian Leonard

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 490. doi:

The impact of extracellular matrix dimensionality on corneal keratocyte gene expression OPEN ACCESS

Kara Poole; Matthew Petroll

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 491. doi:

Corneal damage in rabbit *in vivo* 8-month post sulfur mustard gas ocular exposure OPEN ACCESS

Frederick W Fraunfelder; Ratnakar Tripathi; Nishant Sinha; Maxwell Jeffrey; Laila Ayman Suleiman; Prashant R. Sinha; Praveen Kumar Balne; Suneel Gupta; Nathan Hesemann; Shyam S Chaurasia; Rajiv R Mohan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 492. doi:

Reversal of fibrosis via S1P inhibition in 3D in vitro corneal model. OPEN ACCESS

Sarah E Nicholas; Sandip Kumar Basu; Nawajes Mandal; Dimitrios Karamichos

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 493. doi:

AQUAPORINS MODULATION IN CHRONIC MUSTARD GAS KERATOPATHY CONDITION IN RABBIT CORNEAS *IN VIVO* OPEN ACCESS

Maxwell Jeffrey; Ratnakar Tripathi; Nishant R. Sinha; Brenden R Lankau; Duraisamy Kempuraj; Praveen Kumar Balne; Suneel Gupta; Prashant R. Sinha; James Landreuneu; Rajiv R Mohan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 494. doi:

Differential Gene Expression in Diabetic vs Non-Diabetic Human Corneas OPEN ACCESS

Brenden R Lankau; Ratnakar Tripathi; Rajnish Kumar; Will Dunscombe; Rajiv R Mohan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 495. doi:

MUSTARD GAS EXPOSURE AFFECTS LIMBAL STEM CELLS IN RABBIT CORNEA IN VIVO AND HUMAN CORNEA EX VIVO OPEN ACCESS

Laila Ayman Suleiman; Nishant Sinha; Ratnakar Tripathi; Alexandria Hoffmann; Prashant R. Sinha; Suneel Gupta; Rajnish Kumar; Andrew Houmes; Nathan Hesemann; James Landreuneu; Rajiv R Mohan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 496. doi:

Evaluation of nano-structured, dexamethasone-eluting suture handleability for ocular trauma repair OPEN ACCESS

Thanuja M Y; Sri Vishnu Kiran Rompicharla; Rose K Sia; Aditya Josyula; Mahdi Forouharshad; Yanran Shao; Neeil Gandhi; Jairo Ortiz; Justin Hanes; Ian Pitha; Kraig S Bower; Marcus H Colyer; Laura Ensign; Kunal Parikh

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 497. doi:

Dexamethasone acetate loaded poly(ε-caprolactone) nanofibers for the treatment of rat corneal chemical burn OPEN ACCESS

Dong-Kyu Kim; Da Kim; Sun-Kyung Park; Eun Jeong Kim; Young Chae Yoon; David Myung; Hyun Jong Lee; Kyung-Sun Na

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 498. doi:

Human corneal stromal stem cell treatment to reverse established opacities and recover corneal clarity OPEN ACCESS

Gary Yam; Mithun Santra; Moira L. Geary; Deepinder K. Dhaliwal; Vishal Jhanji; Michael YS Hsu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 499. doi:

Characterisation of a novel ABCB5-expressing limbal mesenchymal stem cell population and its role in corneal (lymph)angiogenesis and immune privilege OPEN ACCESS

Mana Notara; Berbang Meshko; Thomas Volatier; Mark Andreas Kluth; Christoph Ganss; Markus Hermann Frank; Natasha Frank; Bruce Ksander; Claus Cursiefen

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 500. doi:

Impact of the loss of tenascin X on corneal stroma architecture and tissue repair in mice OPEN ACCESS

Takayoshi Sumioka; Hiroki Iwanishi; Ai Matsushita; Shingo Yasuda; Masayasu Miyajima; Yuka Okada; Ken-Ichi Matsumoto; Shizuya Saika

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 501. doi:

The role of Smad4 in corneal development and homeostasis OPEN ACCESS

Shingo Yasuda; Yong Yuan; Jianhua Zhang; Yen-Chiao Wang; Sachin Anil Ghag; Winston Kao; Shizuya Saika; Chia-Yang Liu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 502. doi:

RNA-seq analysis of naïve and sulfur mustard exposed rabbit corneas revealing novel genes associated with mustard gas keratopathy OPEN ACCESS

Rajnish Kumar; Devansh M Sinha; Brenden R Lankau; Nishant Sinha; Ratnakar Tripathi; Suneel Gupta; Rajiv R Mohan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 503. doi:

TGF beta-3 localization in rabbit corneas with spontaneous persistent epithelial defects after Photorefractive keratectomy (PRK) OPEN ACCESS

Valeria Villabona Martinez; Barbara Dutra; Lycia Pedral Sampaio; Thomas M Shiju; Santhiago Marcony; Steven E Wilson

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 504. doi:

Mustard gas exposure causes meibomian gland deficiency in rabbit eye *in vivo* OPEN ACCESS

Ratnakar Tripathi; Nishant R. Sinha; Brenden R Lankau; Maxwell Jeffrey; Prashant R. Sinha; Laila Ayman Suleiman; Payton Iujin; Suneel Gupta; Nathan P Hesemann; Rajiv R Mohan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 505. doi:

Single cell RNA-seq characterization of corneal wound healing following PRK OPEN ACCESS

Katherine Borner; Ze Yu; Chao Xing; Matthew Petroll

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 506. doi:

LRRC15 Protein as a Novel Marker for Corneal Myofibroblasts OPEN ACCESS

Miguel Miron Mendoza; Kara Poole; Katherine Borner; Matthew Petroll

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 507. doi:

Effect of neutrophil enzyme inhibitors on corneal opacity following acute inflammation OPEN ACCESS

Yong-Soo Byun; Ji Yeon Lee; Min Jung Koo

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 508. doi:

MITOCHONDRIAL DNA BINDING PROTEIN, TFAM, MODULATES HUMAN CORNEAL FIBROBLAST TRANSDIFFERENTIAION *IN VITRO* OPEN ACCESS

Alexandria Hofmann; Nishant R. Sinha; Laila Ayman Suleiman; Maxwell Jeffrey; Rajnish Kumar; Rajiv R Mohan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 509. doi:

Nano-structured, anti-inflammatory sutures improve wound closure and healing in a rabbit model of ocular trauma OPEN ACCESS

Sri Vishnu Kiran Rompicharla; Jairo Ortiz; Thanuja M Y; Mahdi Forouharshad; Aditya Josyula; Yanran Shao; Neeil Gandhi; Justin Hanes; Kraig S Bower; Ian Pitha; Laura Ensign; Kunal Parikh

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 510. doi:

Topical lubrication restores the corneal stroma integrity by inhibiting interleukin-1 mediated MAPK activation in dry eye disease OPEN ACCESS

Feeling Yu Ting Chen; Yael Efraim; Dylan Pham; Vahid Niknezhad; Sarah M Knox; Nancy A Mcnamara

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 511. doi:

Topical NorLeu^3 Angiotensin (1-7) Promotes Non-Fibrotic Healing in Ocular Globe Injury Model OPEN ACCESS

Catherine Chester; Weiyuan Hu; Jose Miguel Mora Correa; Aditya Naik; Kaitlyn Trinh; Elly Portillo; Priyal Dave; Brandon Ebright; Kathleen Rodgers; Mark S Humayun; Juan Carlos Martinez; Stan G. Louie

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 512. doi:

Epoxide Fatty Acids Improve Mouse Cornea Alkali Wound Healing OPEN ACCESS

Mitchell Watsky; Xiaowen Lu; Qiyi He; Christophe Morisseau; Sung Hee Hwang; laura carbone; Bruce Hammock

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 513. doi:

Characterizing extracellular vesicles from diabetic keratopathy and keratoconus. OPEN ACCESS

Brenna Sulianne Hefley; Pawan Shrestha; Brenda Vasini; David Hoang; Jian-Xing (Jay) Ma; Kamran Riaz; Dimitrios Karamichos

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 514. doi:

Transplantation of Skin Melanoma Cells into the Corneal Stroma Highlights the Importance of ECM Composition and Architecture OPEN ACCESS

Hadi Joud; Victoria Emerick; Mei Sun; Edgar M Espana

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 515. doi:

Corneal Myofibroblasts Preserve Regulatory T Cell Functional Phenotype OPEN ACCESS

Antonio Esquivel Herrera; Mark Krauthammer; Seokjoo Lee; Sunil Chauhan; Reza Dana; Thomas H. Dohlman
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 516. doi:

Novel Evidence and Mechanism of Macrophage Transition into Myofibroblasts in Corneal Injury OPEN ACCESS
Nishant R. Sinha; Vinay Kumar Pulimamidi; Wonkyung Cho; Lei Xi; Rahul Kumar Verma; Olufemi Samuel Folorunso; Sunil Chauhan
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 517. doi:

A Cell-free Treatment with Quality-Controlled Corneal Stromal Stem Cell-Derived Extracellular Vesicles on Corneal Opacities OPEN ACCESS
Mithun Santra; Moira Louise Geary; Vishal Jhanji; Martha Funderburgh; Gary Yam
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 518. doi:

3D-printed PDMS Microwell Platform Promotes the Stemness of Human Keratocyte Spheroids from SMILE-Derived Lenticules OPEN ACCESS
Yuexi Chen; Jianing Gu; Xihao Sun; Zekai Cui; Yuqin Liang; Jiansu Chen; Zheng Wang
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 519. doi:

SMAD4 together with YAP and TAZ can serve as novel targets to intervene CE-like pathological corneal stroma thinning found in TGFb signaling deficiency mouse lines *Tgfbr1*$^{kera\text{-}cko}$ and *Tgfb*... OPEN ACCESS
Yen-Chiao Wang; Yuan Yong; Olivia Zolnik; Chia-Yang Liu
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 520. doi:

The anti-fibrotic and pro-healing effects of topical *Lycium barbarum* polysaccharide (LBP) treatment in relation to alkali-induced epithelial-stromal injury OPEN ACCESS
Chu Wang Yee; Kendrick Co Shih; Yau Kei Chan
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 522. doi:

Sulfur Mustard Exposure Disrupts Transmembrane Water Channel Proteins In Rabbit Corneas in vivo OPEN ACCESS
Madeline Bhend; Duraisamy Kempuraj; Ratnakar Tripathi; Nishant R. Sinha; Will Dunscombe; Brenden R Lankau; Praveen Kumar Balne; Suneel Gupta; Maxwell Jeffrey; Prashant R. Sinha; Rajiv R Mohan
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 523. doi:

Chlorine gas toxicity to the mouse cornea *in vivo* and human cornea *in vitro* OPEN ACCESS
Prashant R. Sinha; Ratnakar Tripathi; Nishant R. Sinha; Maxwell Jeffrey; Laila Ayman Suleiman; Suneel Gupta; Nathan Hesemann; Rajiv R Mohan
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 524. doi:

Carbofuran ocular exposure affects corneal clarity and autophagy flux OPEN ACCESS
Suneel Gupta; Ratnakar Tripathi; Nathan Forck; Prashant R. Sinha; Eric Zhang; Sampann Sinha; Lynn M Martin; Rajnish Kumar; Nathan Hesemann; Rajiv R Mohan
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 525. doi:

Novel Insights on the impact of Monocarboxylate Transporters in Human Corneal Fibrosis OPEN ACCESS
Pawan Shrestha; Sarah E Nicholas; Dimitrios Karamichos
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 526. doi:

Assessing glucocorticoid dosage impact: Secondary glaucoma incidence after childhood cataract surgery. OPEN ACCESS
Diana Chabané Chabané Schmidt; Torben Martinussen; Daniella Bach-Holm; Line Kessel
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 527. doi:

Refractive Outcomes from Monofocal versus Toric Intraocular Lens Implants and Impact on Post-Operative Eyeglass Prescribing at a Veterans Affairs Medical Center. OPEN ACCESS
Jeremy Brittingham Hatcher; Amy Chomsky
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 528. doi:

Cataract surgery related complications in patients with a history of intravtireal injections OPEN ACCESS
Eubee Koo; Cindy Siyang Zhao; Kacper Chwialkowski; Ehsan Rahimy; Prithvi Mruthyunjaya
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 529. doi:

Ophthalmology Residents Cataract Surgery: Pre-op risk factors, Intraoperative complications, and Outcomes OPEN ACCESS
Yaacov Cnaany; Ayelet Goldstein; Itay Iavy; Itay Chowers; Hadas Ben Eli
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 530. doi:

The effect of peripheral astigmatism and peripheral blur on visual field sensitivity thresholds OPEN ACCESS
Marnie van der Mooren; Antonio Del Aguila-Carrasco; Priya Janakiraman; Andrew Turpin; Daniel Chang; Allison M McKendrick
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 531. doi:

The Effects of Music and Television on Intraoperative Hypertension in Cataract Surgery: A Prospective, Randomized Controlled Trial OPEN ACCESS
Ricky Paramo; Tiffany Cheng; Michael Curley; Sruthi Kodali; Vasiliki Giannakakos; Anne Barmettler
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 532. doi:

Trends for Missed Postoperative Appointments and Lost to Follow Up After Cataract Surgery at a US Safety Net Hospital OPEN ACCESS
Reilley Knott; Jonathan Volkin; Dallin Milner; Andrew Hull; Joana Karhanxa; Jennifer Patnaik; Deidre St Peter
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 533. doi:

Analysis of Glare and its Impact on Retinal Image Quality in Intraocular lenses OPEN ACCESS
Lester Hosten; George Lau; Nisha Kumar; Krishnakumar venkateswaran
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 534. doi:

Incidence and risk factors for idiopathic persistent post-operative anterior uveitis after resident-performed cataract surgery OPEN ACCESS
Russell Day; Tavish Nanda; Violet Lin; Jennifer Lindsey
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 535. doi:

Risk Factors for Intraoperative Complications During Resident-Performed Phacoemulsification OPEN ACCESS
Emma Catherine Stenz; Calvin D. Dao; Christina G. Dias; Milan Jaiswal; Grace Kuang; Alice Z Chuang; Robert M Feldman

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 536. doi:

Association between Eye Care Provider Density and Volume of Cataract Surgeries among Medicare Beneficiaries OPEN ACCESS
Aneesha Ahluwalia; Victoria Marks; Suzann Pershing
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 537. doi:

Comparison of accuracy of recent IOL power formulas in short eyes OPEN ACCESS
Roo Min Jun; Yujin Gim; Kyung Eun Han
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 538. doi:

Intraocular lens implantation in high myopic patients: 10 years of experience. OPEN ACCESS
Álvaro Fernández-Vega González; Nicolas Sanchez Maluf; Rosa Alvarado; Maria Isabel Lopez Galvez; Alvaro Fernández-Vega Sanz; Jesus Merayo-Lloves; Jose Alfonso Sanchez
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 539. doi:

Accuracy of IOL Power Calculators Following Myopic Refractive Surgery OPEN ACCESS
Walker Kay; Nate Olson; Shaurey Vetsa; Muhammed Jaafar; Kenneth Han; Michael Christensen; Majid Moshirfar
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 540. doi:

Agreement in intraocular lens power calculation and refractive outcomes between Galilei G6 and IOLMaster 700 in patients with prior LASIK surgery OPEN ACCESS
Nestor Ibarra Salazar; Alejandro Rodriguez-Garcia; Eugenia Margarita Ramos Dávila; Sara Gonzalez Godinez
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 541. doi:

Evaluation of A-Constants and Differences in IOL Powers for Monofocal Patients for Different Ethnic Populations with Various Corneal Asphericities OPEN ACCESS
Kamal K Das; Rajaraman Suryakumar; Wei Lu; Andrew Maxwell
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 542. doi:

Comparison of the accuracy of the web-based ESCRS intraocular lens power calculator formulas OPEN ACCESS
Nahyun Park; Changmin Kim; Ho Seok Chung; Eun-Ah Ye; Jae Yong Kim; Hun Lee
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 543. doi:

The Performance of Trifocal Intraocular Lens Implantation in Highly Myopic Patients with or Without Astigmatism OPEN ACCESS
Curtis R Martin; Stephen Lobue; Thomas Catapano; Brittany DeNaro; Timothy Link; Christopher Shelby; Wyche Coleman
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 544. doi:

Clinical outcomes after diffractive multifocal intraocular lens implantation in eyes that underwent myopia-correcting refractive surgery and vitrectomy OPEN ACCESS
Seung Woo Lee; Sumin Kim; Han Sang Park
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 545. doi:

Corneal thickness of congenital cataract OPEN ACCESS
Suzu Yoshitomi; Yoshiaki Kiuchi; Kaori Komatsu; Kazuyuki Hirooka
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 546. doi:

Cataract Surgery Outcomes for Incarcerated Patients at a Resident Clinic in Alabama OPEN ACCESS
Calvin McNelly; Thomas A. Swain; Russell Read; Sophia Liu; Christopher A Girkin
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 548. doi:

Effect of environmental factors on cataract surgery outcomes OPEN ACCESS
Oscar Chen; Jake Austin Lesher; Dylan Raikar; Matthew Lim; Christopher Skaggs; Romney Hansen; Durdana Shah; Anjali Tannan
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 549. doi:

Generic Preservative-Free Intracameral Moxifloxacin for the Prevention of Endophthalmitis in Cataract Surgery: A Case Series OPEN ACCESS
Dallin Milner; Jonathan Volkin; Reilley Knott; Jennifer Patnaik; Cara Capitena Young; Deidre St Peter
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 550. doi:

Resident- versus Faculty-Placed Toric Intraocular Lens Outcomes OPEN ACCESS
Wisam Najdawi; Zachary Mortensen; Tirth Shah; Thomas Oetting
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 551. doi:

Dilated Fundoscopic Exams at One-week Post-operative Evaluation Following Cataract Removal and Intraocular Lens Implantation OPEN ACCESS
Terrence Murphy; Nabila Sardar; Anjali Tannan
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 552. doi:

The clinical efficacy of preoperative flash visual evoked potential(VEP) for mature cataracts without a response to pattern VEP OPEN ACCESS
Jong-Soo Lee; yubin son
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 553. doi:

Research publication bias in clinical trials in cataract OPEN ACCESS
Tejasvi Paturu; Anchal Shukla; Shreya Gitanjali Shivan; Steven Benyahia; Trenton Lippert; Vic Velanovich
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 554. doi:

The Impact of Virtual Follow-Ups on Patient Outcomes after Cataract Surgery: A Systematic Review OPEN ACCESS
Angelica Hanna; Diana Martinez; Marko Popovic; Ike Iqbal K Ahmed; Joshua Teichman
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 555. doi:

A Quantitative and Qualitative Analysis of Cataract Surgery Operative Efficiency in Dedicated and Non-Dedicated Ophthalmology Surgery Centers OPEN ACCESS
James Ellis; Jeremy Nathan Shapiro; David Samuel Portney; Shahzad I Mian
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 556. doi:

Depletion of caspase 12 alleviates retinal degeneration in aged BALB/c mice following systemic neonatal infection by murine cytomegalovirus (MCMV) OPEN ACCESS
Ming Zhang; Jinxian Xu; Xinyan Zhang; Brendan Marshall
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 557. doi:

Differential Analysis of Complement Expression and Localization Between Mouse, Rat, and Human Eyes OPEN ACCESS

Aarin D Jones; Hua Yang; Aixu Sun; Guillermo Lehmann; Wen Fury; Ying Hu; Botir T Sagdullaev

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 558. doi:

Complement Factor D Expression in Normal and Age-Related Macular Degeneration Human Eyes OPEN ACCESS

Aixu Sun; Hua Yang; Ying Hu; Jingtai Cao; Botir T Sagdullaev

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 559. doi:

SIGIRR dysfunction exasperates age-related inflammation and retinal degeneration OPEN ACCESS

DIYA BHATTACHARYA; Thomas Friedel; Marion SZCZEPAN; Matthew Pilgrim; Yvonne Dombrowski; Heping Xu; Mei Chen

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 560. doi:

Genetic deletion of interferon regulatory factor 1 (IRF1) protects against retinal degeneration induced by sodium iodate in mice OPEN ACCESS

Varun Embar Jeevan; Fazle Elahi; Ali Rajooldezfuly; Logan Mays; Hu Huang

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 561. doi:

Beta-2 Adrenergic Receptor Expression in Monocyte-Derived Macrophages Mediates the Inhibition of Choroidal Neovascularization OPEN ACCESS

Joyce Gong; Kyle S Chan; Steven Droho; Amrita Rajesh; Jeremy A Lavine

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 562. doi:

Single-cell RNA sequencing analysis revealed rod photoreceptors are most sensitive to age-induced degeneration OPEN ACCESS

Mei Chen; Miao Tang; Bin Zou; Lia wei; Heping Xu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 563. doi:

PolySia Nanoparticle Modulates M1 Macrophages Response Through Siglec Agonism as Mechanism of Action for Macular Degeneration Treatment OPEN ACCESS

Victor G. Sendra; Diyan Patel; Samantha Gallaher; Anitha Krishnan; David Callanan; Tarek Hassan; Chris Scott; Michael Tolentino; mohammed Genead

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 564. doi:

Cytokine Analysis for Age-Related Macular Degeneration Understanding: Insights from Tear and Serum Samples with IL-6, IL-8, IL-10, TNF-α, and VEGF OPEN ACCESS

Estefanía Castillo Balcazar; Marisa Cruz Aguilar; Lorenzo Islas Vazquez; Agustin Lammoglia Kirsch; Yan Carlos Alvarado Alvarado; Jose Luis Rodriguez Loaiza; Maria Carmen Jimenez Martinez

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 565. doi:

Differential response to laser injury between young and aging retina OPEN ACCESS

Caijiao Yi; Wen Deng; Jian Liu; JinYan Qi; Xuexue Cui; Xiangling Yuan; Mei Chen; Heping Xu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 566. doi:

A protective role of dynamic gamma delta T-cell subsets in experimental choroidal neovascularisation (CNV). OPEN ACCESS

Adhithi Ramesh; Lynette Beattie; Xilun Wang; Tina Carroll; Erica L Fletcher; Matt Rutar; Alice Brandli

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 567. doi:

The BRD4 inhibitor JQ1 promotes autophagy-dependent clearance of cytosolic DNA and inhibits retinal inflammation OPEN ACCESS

xingfei zhu; ming zou; qin ke; Wei Liu; David W Li; Lili Gong

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 568. doi:

Oxidative stress-induced BRD4 Promotes STING Expression and Inflammation OPEN ACCESS

xiangyu ge; ming zou; qin ke; xingfei zhu; Wei Liu; David W Li; Lili Gong

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 569. doi:

Dysregulated natural killer cells mediate RPE dysfunction in early Age-Related Macular Degeneration OPEN ACCESS

Archana Padmanabhan Nair; Sayan Ghosh; Praveen Machiraju; Swaminathan Sethu; Debasish Sinha; Arkasubhra Ghosh

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 570. doi:

Development of PAS-nomacopan for treatment of geographic atrophy and its efficacy in a blue light model comparing the relative contributions of C5 and LTB_4 inhibition to decreased retinal... OPEN ACCESS

Miles Nunn; Choon Ping Tan; Michaela Gebauer; Uli Binder; Mukesh Sehdev; George Magrath; Elias Reichel

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 571. doi:

Contribution of CD4 and CD8 cells to retinal ganglion cell loss in glaucoma OPEN ACCESS

Jordan Mayberry; Huilan Zeng; Markus H Kuehn

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 572. doi:

Structural and Functional Characteristics of Autoimmune Pathology in POAG OPEN ACCESS

Chhavi Saini; Mengyu Wang; Maximilian Braun; Kin-Sang Cho; Jessica Sun; Grace Johnson; Shuhong Jiang; Dongfeng Chen; Lucy Q Shen

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 573. doi:

Characterizing Cytotoxic and Regulatory CD4+ T cells in Patients with Primary Open-Angle Glaucoma (POAG) OPEN ACCESS

Laila Carmen Prendergast; Shuhong Jiang; Kin-Sang Cho; Grace Johnsen; Chhavi Saini; Maximilian Braun; Farris ElZandi; Lucy Q Shen; Martine J Jager; Dongfeng Chen

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 574. doi:

Autoinflammation and Autoimmunity in the Aqueous Humor of Glaucoma Patients OPEN ACCESS

Eitan Katz; Yang Yang; Christian Kim; Bayasgalan Surenkhuu; Azza Dammak; Vidhya R Rao; Christine Mun; Anubhav Pradeep; Ahmad A Aref; Pooja Bhat; Jose de la Cruz; Simon Kaja; Sandeep Jain

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 575. doi:

Increased adaptive immune cells in aqueous humour of patients with glaucoma OPEN ACCESS

Bettina Hohberger; Paul Schwarz; Robert Lämmer; Christian Mardin; Luis Munoz; Martin Herrmann

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 576. doi:

Analysis of Sclera Macrophages in a Mouse Glaucoma Model OPEN ACCESS

Maru Ando; Shiraj Crowdhury; Annie Mozzer; Joe Gerald Jesu Raj; Ian Pitha
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 577. doi:

Profiling of Macrophage Populations in the Conventional Outflow Tract OPEN ACCESS
Aleksander Grimsrud; Joan Kalnitsky; Rose Mathew; W Daniel Stamer; Daniel R Saban; Katy Liu
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 578. doi:

Trends in the Prevalence of Retinal and Optic Nerve Diseases in China: An Artificial Intelligence Based National Screening OPEN ACCESS
Li Dong; Ruiheng Zhang; Wen-bin Wei
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 579. doi:

Cost-Effectiveness of Self-Imaging Optical Coherence Tomography Screening for Diabetic Macula Edema OPEN ACCESS
Zitian Liu; Xiaotong Han; Peng Li; Yingfeng Zheng
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 581. doi:

Assessing the Impact of Photographer Experience on Gradability of Fundus Photography for Artificial Intelligence-based Diabetic Retinopathy Screening OPEN ACCESS
CHANNING HOU; Shivani Patel; Madelyn Class; Devrat Shah; Ruchir Gupta; Matthew Blau; Oleg Shum; Julia Grachevskaya; Lorrie Cheng; Jeffrey D Henderer; Yi Zhang
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 582. doi:

Diagnosis of Diabetic Retinopathy by Ultra-Wide Filed Image and Artificial Intelligence: A Systematic Review and Meta-Analysis OPEN ACCESS
Kunihiko Hirosawa; Takenori Inomata; Jaemyoung Sung; Ken Nagino; Akie Midonikawa-Inomata; Atsuko Eguchi; Kenta Fujio; Keiji Inagaki; Shintaro Nakao
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 583. doi:

AI-assisted diabetic retinopathy screening in the primary care setting compared to the ophthalmology clinic setting OPEN ACCESS
Madelyn M Class; Shivani Patel; Ruchir Gupta; CHANNING HOU; Devrat Shah; Matthew Blau; Lorrie Cheng; Julia Grachevskaya; Oleg Shum; Jeffrey D Henderer; Yi Zhang
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 584. doi:

What are the perceptions and concerns of people living with diabetes and NHS staff about potential implementation of AI-assisted screening for Diabetic Eye Disease? OPEN ACCESS
Christopher G Owen; Kathryn Wills; Royce Shakespeare; Charlotte Wahlich; Lakshmi Chandrasekaran; Umar Chaudhry; Abraham Olvera-Barrios; Ryan Chambers; Louis Bolter; John Anderson; Sarah Barman; Jiri Fajtl; Catherine A Egan; Adnan Tufail; Alicja Rudnicka
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 585. doi:

Diagnostic accuracy and feasibility of artificial intelligence-based diabetic retinopathy screening in primary care settings: a real-world assessment OPEN ACCESS
Sanil Joseph; Xianwen Shang; Katerina Kiburg; Jacqueline Henwood; Zhuoting Zhu; Malcolm Clark; Richard MacIsaac; Thulasiraj D Ravilla; Peter van Wijngaarden; Mingguang He
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 586. doi:

Evaluation of a novel artificial intelligence (AI) algorithm to screen for retinopathy among diabetics in India OPEN ACCESS
Maitreya Doshi; Siva R. Swaminathan; Louay Almidani; Aleksandra Mihailovic; Subhajit Banerjee Purnapatra; Deepthi Prasad; Midhula Vijayan; Pradeep Y Ramulu
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 587. doi:

Cost-effectiveness analysis of artificial intelligence-based diabetic retinopathy screening in Australian primary care settings. OPEN ACCESS
Wenyi Hu; Zhuoting Zhu; Mingguang He; Lei Zhang
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 588. doi:

Retrospective review of exam concordance in a newly implemented remote diabetic retinopathy screening program at a tertiary care, academic medical center OPEN ACCESS
Samyuktha Guttha; Lucy Cobbs; Douglas R Lazzaro; Lauren Golden; Elisabeth Cohen
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 589. doi:

Diabetic Retinopathy Screening in Federally Qualified Health Centers: Active Outreach vs. Point of Care Testing OPEN ACCESS
Adam Hidad; Paul J Bryar
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 590. doi:

Patient Follow-Up after Remote Screening for Diabetic Retinopathy at Primary Care Sites Across Virginia OPEN ACCESS
Erika Robinson; Caroline Cotton; Ashton Leone; Michael Cusick; Arjun Jayantakumar Dirghangi
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 591. doi:

Factors Associated with Follow-up Eye Care after Telemedical Diabetic Retinopathy Screening OPEN ACCESS
Elisah Huynh; Jia Jia Zhang; Erin Garrity; Alice Carlyle Lorch; Grayson W Armstrong
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 592. doi:

Neighborhood socioeconomic distress predicts follow-up adherence in a large diabetic teleretinal imaging screening program OPEN ACCESS
Emely Tatiana Carmona; Lauren M Wasser; Julie Cassidy; Andre Stone; Hamiah Zaheer; Sarah Atta; Andrew M Williams
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 593. doi:

Characteristics Associated with Adherence Rate to Ophthalmologic Care Following Detection of Diabetic Retinopathy OPEN ACCESS
Ryung Lee; Jorge Cuadros; David Aaron Eichenbaum
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 594. doi:

Eye Care Follow-Up after Remote Diabetic Retinopathy Screening using Teleophthalmology OPEN ACCESS
Tanvi Chokshi; Joshua Kim; Maria Jessica Cruz; Lindsey Nguyen; Treysi Vargas Ramos; Abraham Hang; Blake Snyder; Glenn Yiu
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 595. doi:

Impact of Hiring a Patient Care Navigator on Follow-Up Metrics of a Telemedicine Screening Program OPEN ACCESS
Matthew Blau; Ruchir Gupta; Madelyn Class; CHANNING HOU; Shivani Patel; Devrat Shah; Lorrie Cheng; Julia Grachevskaya; Sherona Tillmon; Oleg Shum; Jeffrey D Henderer; Yi Zhang

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 596. doi:

Impact of Socioeconomic Status on Remote Diabetic Retinopathy Screening using Teleophthalmology OPEN ACCESS

Maria Jessica Cruz; Tanvi Chokshi; Treysi Vargas Ramos; Lindsey Nguyen; Abraham Hang; Blake Snyder; Glenn Yiu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 597. doi:

Patient factors associated with diabetic eye screening receipt at baseline in the Implementation of Teleophthalmology in Rural Health Systems (I-TRUST) Study OPEN ACCESS

Loren Lock; Kyle Peterson; Chloe L Stevens; Guanhua Chen; Andrew Quanbeck; Yao Liu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 598. doi:

Identification of diabetic retinopathy using a telehealth eye screening program in South Louisiana and the Mississippi Gulf Coast Region OPEN ACCESS

Victor Wang; Jonathan D Nussdorf

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 599. doi:

The Role of Geography in a Telemedicine Screening Program for Diabetic Retinopathy OPEN ACCESS

Abraham Hang; Tanvi Chokshi; Maria Jessica Cruz; Lindsey Nguyen; Treysi Vargas Ramos; Joshua Kim; Blake Snyder; Glenn Yiu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 600. doi:

Implementation of a Student Volunteer Program for Diabetic Retinopathy Screening at a Federally Qualified Health Center OPEN ACCESS

Mark Parsons; Kenneth Han

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 601. doi:

An inaugural study of screening for diabetic retinopathy in Bermuda OPEN ACCESS

Catherine Jamison; Rebecca L Thomas; Petri Huhtinen; Lori Rockhead; Erika Setzu; Deborah Jones; Tunde Peto; David R Owens

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 602. doi:

Barriers and enablers to diabetic retinopathy screening among children and young adults in Bangladesh compared to Northern Ireland OPEN ACCESS

Katie Curran; Munir Ahmed; Mirza Manbira Sultana; Laura Cushley; Tunde Peto; Mohammad Awlad Hossain; Lutful Husain; Bedowra Zabeen; Nathan Congdon

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 603. doi:

Associating glaucoma and diabetic retinopathy: opportunistic AI-powered glaucoma screening OPEN ACCESS

Carlos Marques-Neves; Afonso Vieira Lima-Cabrita; Rodrigo Marques; veronica santos; Eunice carrapico; Walter Rodrigues; Ingeborg Stalmans; Luis Abegao Pinto; Joana Tavares Ferreira

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 604. doi:

AI-(EM)POWERED SCREENING: GLAUCOMA POST STUDY OPEN ACCESS

Afonso Vieira Lima-Cabrita; Susana Rebocho Duarte; Emanuel Fernandes; Carlos Marques-Neves; Walter Rodrigues; Rodrigo Marques; veronica santos; Eunice carrapico; Marta Pazos; Ingeborg Stalmans; Joana Tavares Ferreira; Luis Abegao Pinto

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 605. doi:

Utilizing Deep Learning to Diagnose Glaucoma from Fundus Photography in African Ancestry Individuals OPEN ACCESS

Rebecca Salowe; Shuo Li; Roy Lee; Gui-Shuang Ying; Insup Lee; Osbert Bastani; Joan M O'Brien

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 606. doi:

Enhancing Glaucoma Detection: Integrating Deep Learning with Color Fundus Photos and Polygenic Risk Score OPEN ACCESS

Xiaoyi Raymond Gao; Fengze Wu; Rafiul Karim Rasel; Marion Chiariglione

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 607. doi:

Enhancing Myopia Screening in the Community - Exploring the Potential of Smartphone Photorefraction OPEN ACCESS

Ling Yau Kiu; Oi-lam Kwok; Ho-cheung Leung; Daniel NH Chan; Wing-chun Tang; Hing Yi Li; Kenny HC Chung; Michael MK Cheung; Eugene Fu; Paul H Lee; Hong-va Leong; Grace Ngai; Lily YL Chan; Chi-wai Do

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 608. doi:

Refraction Measurements Comparison between the EyeQue VisionCheck and Autorefractor and Phoropter Refraction OPEN ACCESS

Noam Sapiens; Hiral Korani; John Serri

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 609. doi:

Smartphone Screening for Cataract and Anterior Segment Diseases in Rural India: Comparison to In-Person Ophthalmologist Exam OPEN ACCESS

Nakul Shekhawat; Kamini Reddy; Jordan Shuff; Shreya Hariharakumar; Xiangrong Kong; Vijay Anthony Santhanaraj; Rashmirita Kakoty D; Bharadwaj K; Prabhu Krishna Sriram; Nishant Vivekanand; Dayakar Yadalla; Venkatesh Rengaraj; Kunal Parikh

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 610. doi:

Solar Generator Integration in Comprehensive Remote Community Based Eye Screenings OPEN ACCESS

Helen Nguyen; Myriam Aniy Lin; Alexandra Sanchez; Shane Thomas Meledathu; Rita Vought; Victoria Vought; Bernard Szirth; Albert S Khouri

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 611. doi:

Cost-effectiveness and cost-utility of a digital technology-driven hierarchical healthcare screening pattern in China: A decision-analytic Markov model OPEN ACCESS

Yuxuan Wu; Xiaohang Wu; Zhenjun Tu; yingzhe zhang; Rong Pan; Haotian Lin

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 612. doi:

Cost-Effectiveness and Cost-Utility of Artificial Intelligence-Assisted Population Screening for Glaucoma in Australia: A Decision-Analytic Markov Model Approach OPEN ACCESS

Catherine Jan; Wenyi Hu; Algis J Vingrys; Peter van Wijngaarden; Randall S Stafford; Mingguang He; Lei Zhang

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 613. doi:

Assessing the effectiveness and feasibility of a community-based ocular screening model for the elderly in China: the Wenzhou Eye Study OPEN ACCESS

GU ZHENG; Shiqi Hu; Yiming Zhao; Xinmin Wang; Yanyan Lin; Tianhao Huang; Shilei Wang; Cong Ye; Fan Lu; Xinting Liu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 614. doi:

Identifying Harms of a Community Based Vision Health Screening Program OPEN ACCESS

Ryan Schmidt; Dove Spector; Verian Wedeking; Annette Totten; Mitch Brinks
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 615. doi:

Outcomes of New Vision Screening Collaboration by Medical Students and Local Non-Profit in Underserved Community OPEN ACCESS
Rima Stepanian; Vincent Le; Min Young Kim; Suhani Gupta; Jonathan Grey; Nahrain Putris Schumaier; Sahal Saleh; Michael Maywood; Lori Stec; Adam Weiner
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 616. doi:

The Utility of an At-home Vision Screening Kit in a Predominantly Non-English Speaking Underserved Population OPEN ACCESS
Timothy Do; Michael Nguyen; Kara Her; Bryan Kuo; Kevin Chau; Madeleine Lu; Michele Lim
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 617. doi:

Digital exclusion, social deprivation and clinical outcomes of patients undergoing hyperacuity home monitoring OPEN ACCESS
Josef Christian Huemer; Jessica Mendall; Meriam Islam; Karen Wong; Stafford sansome; Dawn Sim; Lucas Bachmann; swan Kang
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 618. doi:

Telemedicine in oculoplastic surgery during the Covid-19 pandemic: a single center experience OPEN ACCESS
Clara Castillejo Becerra; Lilly Wagner
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 619. doi:

Utilization of Telehealth among Medicare Beneficiaries in Rural California with Chronic Eye Disease OPEN ACCESS
Karla Murillo; Ken Kitayama; Fei Yu; Victoria L Tseng; Anne L Coleman
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 620. doi:

Disparities and Inequities in Telemedicine for Ophthalmology OPEN ACCESS
Momoko Kimura Ponsetto; Kaitlin Kogachi; Trisha Chau; Elizabeth White; Merina Thomas
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 621. doi:

In utero versus adult cadmium exposure: impacts on retinal structure, function, and ocular gene expression OPEN ACCESS
Michele M. Salzman; Logan A. Dameris; Rebecca C. Lichtler; Tetsuya Takimoto; Emma J. Penfield; Steven K. Martell; Michael A. Cowley; Freya Mowat
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 622. doi:

Antagonistic interactions between growth regulatory pathways and axial patterning genes determine retinal fate OPEN ACCESS
Amit Singh; Neha Gogia; Anuradha Chimata; Madhuri Kango-Singh
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 623. doi:

ASC-2 is required for murine Iris and heart development via downstream target of tfap2b OPEN ACCESS
Kyoungyul Seo; HongKyung Kim; Se Yong Jung
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 624. doi:

Dysregulated molecular networks in *Cib2* knockout mice mimic human age-related macular degeneration OPEN ACCESS
Mary Hackbarth; Saumil Sethna; Yang Song; Saima Riazuddin; Ronna Hertzano; Zubair Ahmed
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 625. doi:

Characterization of glaucoma-relevant phenotypes in an *Angiopoietin-like 7* zebrafish knockout line OPEN ACCESS
McKenzie Gillison; Anna Larson; Shi Song Rong; Janey L Wiggs; Inas F Aboobakar
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 626. doi:

Choroideremia iPSC-RPE model reveals a dysregulated inflammatory response OPEN ACCESS
Katy Linkens; Lyes Toualbi; Nicholas Owen; Mariya Moosajee
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 627. doi:

Clinical and Molecular Characterization of *AIPL1*-Associated Leber Congenital Amaurosis/Early-Onset Severe Retinal Dystrophy OPEN ACCESS
Tong Li; Quan Zhang; Xiaodong Sun
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 628. doi:

Comparison of surface protein composition between adult RPE and pluripotent stem cell-derived RPE OPEN ACCESS
Swapna Nandakumar; Farhad Farjood; Yue Wang; Jade Bola; Brigitte Arduini; Jeffrey Stern; Nathan C Boles; Sally Temple
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 629. doi:

Epigenetic Insights Into Retinitis Pigmentosa And Related Retinal Dystrophies OPEN ACCESS
Galina Dvorianchikova; Chloe M Moulin; Michelle Fleishaker; Daniel Pelaez; Dmitry V Ivanov
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 630. doi:

MicroRNA transcriptomic analysis of human plasma extracellular vesicles as surrogate markers of Age-related Macular Degeneration OPEN ACCESS
Steven Droho; Timothy Domashevich; Daniel Perez Cremades; Talisa Forest; Naresh Mandava; Anne Lynch; Stephen Redenti; Miguel Flores-Bellver
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 631. doi:

A COMPARATIVE ANALYSIS OF CONJUNCTIVAL TRANSCRIPTOMIC CHANGES IN GLAUCOMA PATIENTS UNDER TOPICAL MEDICATION AND INDIVIDUALS WITH DRY EYE OPEN ACCESS
Cristina Irigoyen-Bañegil; Elena Carnero González; Itziar Gutiérrez; Leire Extramiana; Alfonso L. Sabater; Javier Moreno-Montañes
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 632. doi:

Elucidating the asymmetric manifestation of pseudoexfoliation syndrome by RNA-sequencing and pathway analysis OPEN ACCESS
Matthias Zenkel; Sai Pulasani; Steffen Uebe; Arif Ekici; Friedrich E Kruse; Francesca Pasutto; Ursula Schlötzer-Schrehardt
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 633. doi:

Identification and characterization of alternative splicing events in human macula and

peripheral retina OPEN ACCESS

Sudeep Mehrotra; Puja A. Mehta; Jayshree Advani; Deborah A Ferrington; Anand Swaroop; Ayellet Segre

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 634. doi:

Optic Nerve Head (ONH) Spatial Transcriptomics in Non-Human Primate (NHP) Experimental Glaucoma (EG) OPEN ACCESS

Galen Williams; Jinho Lee; Chen Stowell; Juan Reynaud; Hongli Yang; Stuart Keith Gardiner; Nicholas Marsh-Armstrong; Claude F Burgoyne; Priya Chaudhary

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 635. doi:

Pathogenic ECM and Expression Patterns of Trabecular Meshwork Cells OPEN ACCESS

Keerti Soundappan; Jingwen Cai; Hongfang Yu; Kamesh Dhamodaran; Hasna Baidouri; Ted S Acott; Hongyan Xu; Vijaykrishna Raghunathan; Yutao Liu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 636. doi:

Single cell glycan-RNA sequencing reveals the glycocalyx diversity at the human ocular surface OPEN ACCESS

Rafael Martinez-Carrasco; Pablo Argueso

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 637. doi:

Comprehensive tissue specificity analysis identifies (novel) retina-specific, long non-coding RNAs OPEN ACCESS

Emma Delanote; Alfredo Dueñas Rey; Karla Ruiz; Victor López Soriano; Manon Bouckaert; Kelly Lemeire; Jasper Verwilt; Hanne Lenaerts; Sarah De Keulenaer; Filip Van Nieuwerburgh; Eva D'Haene; Elfride De Baere; Pieter Mestdagh; Steve Lefever; Sandro Banfi; Frauke Coppieters

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 639. doi:

Discovering novel glaucoma neural repair genes using computational approaches based on single-cell RNA-seq data OPEN ACCESS

Yeganeh Madadi; Lu Lu; Hao Chen; Xiaoqin Huang; Hina Raja; Mohammad Delsoz; Robert W. Williams; Monica M Jablonski; Siamak Yousefi

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 640. doi:

Genetic regulation of splicing in human retina highlights the visual cycle as an emerging pathway in age-related macular degeneration (AMD) OPEN ACCESS

Puja Mehta; John M Rouhana; Andrew R Hamel; Sudeep Mehrotra; Jayshree Advani; Milton English; Deborah A Ferrington; Anand Swaroop; Ayellet Segre

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 641. doi:

Single Cell Resolution Machine Learning Predicts Non-Coding Cis-Regulatory Variant Impact OPEN ACCESS

Leah VandenBosch; Timothy Joel Cherry

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 642. doi:

Single cell RNA sequencing of human lamina cribrosa (LC) cells identifies the integrated stress response (ISR) as a key driver of glaucomatous optic nerve (ON) cupping. OPEN ACCESS

Caoimhe Normile; Oisin Cappa; Vadim Zhernokov; Bruce Moran; Boris Kholodenko; David Simpson; Carl M Sheridan; Mustapha Imaten; Colm J O'Brien

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 643. doi:

Spatial transcriptomics reveal isoform-specific patterns of *TCF4* dysregulation in CTG18.1 expansion positive FECD case-derived corneal endothelial cells OPEN ACCESS

Nihar Bhattacharyya; Christina Zarouchlioti; Jana Jedlickova; Lubica Dudakova; Pavlina Skalicka; Kirthika Muthusamy; Petra Liskova; Alison J Hardcastle; Stephen Tuft; Alice Davidson

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 644. doi:

Spatially Resolved Single Cell Atlas of Human Developing Retina OPEN ACCESS

Xuesen Cheng; Zhen Zuo; Jin Li; Yumei Li; Ala Moshiri; Rui Chen

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 645. doi:

Transcriptomic analysis of anterior segment tissues derived from patients with pseudoexfoliation syndrome and glaucoma OPEN ACCESS

Sai Pulasani; Matthias Zenkel; Arif Ekici; Ursula Schlötzer-Schrehardt; Francesca Pasutto

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 646. doi:

Transcriptomic shift in retinal ganglion cell during DNA methyltransferase-mediated axon regeneration OPEN ACCESS

Wai Lydia Tai; Kin-Sang Cho; Emil Kriukov; Ajay Ashok; Xuejian Wang; Aboozar Monavarfeshani; Wenjun Yan; Yingqian Li; Timothy Guan; Joshua Sanes; Petr Y Baranov; Dongfeng Chen

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 647. doi:

The Vitreous Proteome and its Association with Intrinsic Protein Disorder OPEN ACCESS

Michael Antonietti; David J Taylor Gonzalez; Mak B Djulbegovic; Jason Greenfield; Vladimir Uversky; Jayanth Sridhar; Carol Karp

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 648. doi:

Understanding Macula-Off Rhegmatogenous Retinal Detachment through Vitreous Proteomics OPEN ACCESS

Sarah Weber; Mireille Caton-Darby; Jeffrey Yu; Nicholas J. Carruthers; Christopher Gates; Tanya Marrocco-Redmond; Thomas W. Gardner; David N. Zacks; Yuanjun Zhao; Jeffrey Sundstrom

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 649. doi:

Preeclampsia-mediated ROP Protection is Associated with Differential Placental Proteome Expression OPEN ACCESS

Leah Owen; Jessica Comstock; Nathan Glaza; Margaret M Deangelis; Christian Con Yost; Camille fung; Jordan Driscoll; Tamara Abulez; Kelly Conrads; Brian Hood; Nicholas Bateman; Michael Varner; George L. Maxwell; Thomas Conrads

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 650. doi:

High-resolution proteomic profiling of aqueous humor liquid biopsies from patients with uveitis OPEN ACCESS

Julian Wolf; Ditte K Rasmussen; Young Joo Sun; Prithvi Mruthyunjaya; Antoine Dufour; Alexander Bassuk; Vinit B Mahajan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 651. doi:

Plasma and Urine Metabolome Correlation Using Two Age-Related Macular Degeneration (AMD) Cohorts Reveal Non-Invasive Metabolite Biomarkers OPEN ACCESS

Kevin Mendez; Ines Lains; Craig Wheelock; Rachel Kelly; John B Miller; Demetrios G. Vavvas; Ivana K Kim; Joan W Miller; Deeba Husain; Jessica Lasky-Su

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 652. doi:

Plasma lipidomics in nonhuman primates with drusen suggest shared role of

glycerophospholipids in AMD OPEN ACCESS
Yin Allison Liu; Carol Villafuerte-Trisolini; Huaxu Yu; Glenn Yiu
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 653. doi:

Multi-omic analysis of RPE and photoreceptor pathology in early-onset retinal degeneration in *Mfrp*$^{-/-}$ mice OPEN ACCESS
DaNae Woodard; Kelsey Dang; Pooja Biswas; Anne Marie Berry; Danielle Lazaro; Allen Wang; Radha Ayyagari
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 654. doi:

Multi-omic spatial effects on high-resolution AI-derived retinal thickness OPEN ACCESS
Roberto Bonelli; Victoria E Jackson; Yue Wu; Julia Owen; Samaneh Farashi; Yuka Kihara; Marin Gantner; Catherine A Egan; Katie Williams; Brendan Robert E Ansell; Adnan Tufail; Aaron Y Lee; Melanie Bahlo
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 655. doi:

Multi-omics of retinas from free-ranging primates with naturally occurring thin retinal nerve fiber layer OPEN ACCESS
Amanda Melin; David Young; Arthur Fernandes; Rachel Munds; Arturo Barron-Arrambide; Palaiologos Alexopoulos; CBRU Cayo Biobank Research Unit; Michael Montague; Armando Burgos-Rodriguez; Melween I Martinez; Daniel Promislow; Gadi Wollstein; John Danias; James Higham; Qingrun Zhang
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 656. doi:

Multi-omics profiling of retinal pigment epithelium reveals enhancer-driven activation of RANK-NFATc1 signaling in traumatic proliferative vitreoretinopathy OPEN ACCESS
Mengyu Liao; Xiaohong Wang; Yupeng Chen; Hua Yan
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 657. doi:

Multiomics Analysis Illuminates the Molecular Basis of Autosomal Dominant Optic Disc Drusen. OPEN ACCESS
Karanvir Kaushal; Liping Liu; Hirenkumar Patel; Ajay Kumar; Sangeethabalasri Pugazhendhi; Juan A Oses-Prieto; Mohammed Ali Shariati; Yuqin Dai; Alma Burlingame; Yaping Joyce Liao
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 658. doi:

OcularID: Leveraging deep clinical phenotyping and multi-omics to identify novel targets for ocular diseases OPEN ACCESS
Samuel Lessard; Merhdad Khajavi; Munender Vodnala; Pavitra Ramachandran; Michael Tsabar; Preeti Bais; Heming Xing; Mikhail Levit; Catherine O'Riordan; Katherine Klinger; Emanuele de Rinaldis; Franck Rapaport; Charles Fulco; Clement Chatelain; Suzanne B.R. Jacobs; Shameer Khader
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 659. doi:

Retinomics.org: Visualizing multi-omic spatial effects on high-resolution AI-derived retinal thickness OPEN ACCESS
Julia Owen; Victoria E Jackson; Roberto Bonelli; Samaneh Farashi; Yuka Kihara; Marin Gantner; Catherine A Egan; Katie Williams; Brendan Robert E Ansell; Adnan Tufail; Melanie Bahlo; Aaron Y. Lee; Yue Wu
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 660. doi:

Lipoprotein metabolism pathway genetic risk score is associated with distinct glaucoma phenotypes in a clinical biobank OPEN ACCESS
Kanza Aziz; Yan Zhao; Sayuri Sekimitsu; Mohammad Eslami; Ayellet Segre; Tobias Elze; Janey L Wiggs; Nazlee Zebardast
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 661. doi:

Identifying pathology onset mechanisms and network modules across inherited retinal degenerations using a multi-omics approach OPEN ACCESS
Anupam Kumar Mondal; Ke Jiang; Anand Swaroop
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 662. doi:

Interrogating the genetics of AMD using single-cell multiomics of human RPE and choroid OPEN ACCESS
Sean K Wang; Howard Y Chang
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 663. doi:

Multi-omic retinal analyses of genetically diverse mice unveil a novel model of retinopathy OPEN ACCESS
Michael MacLean; Olivia J. Marola; Travis Cossette; Cory Diemler; Amanda A. Hewes; Alaina Reagan; Gareth R Howell
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 664. doi:

Functional Characterization of Rare Genetic Variants in the *LOXL1* Gene Associated with Pseudoexfoliation Syndrome/Glaucoma OPEN ACCESS
Iris Kerker; Ursula Hoja; Valentin Nelea; Matthias Zenkel; Andreas Gießl; Friedrich E Kruse; Dieter Reinhardt; Francesca Pasutto; Ursula Schlötzer-Schrehardt
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 665. doi:

Correlation of aqueous and plasma levels of phosphorylated tau181 with age and Montreal Cognitive Assessment Scores in individuals undergoing cataract surgery OPEN ACCESS
Hemal Patel; Cason B. Robbins; C. Ellis Wisely; Justin Ma; Pali Singh; Pratap Challa; Terry Kim; Dilraj S. Grewal; Sharon Fekrat
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 666. doi:

Topical insulin protects against retinal ganglion cell loss in nonhuman primate model of experimental glaucoma OPEN ACCESS
Priya Chaudhary; Trinity Holthausen; Grant Cull; Michaela Dunn; Dawn Jennings; Juan Reynaud; Adriana Di Polo; Brad Fortune
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 667. doi:

A Phase 1 Trial of Topical Insulin for Patients with Glaucoma OPEN ACCESS
Zac Wennberg Smith; Gala Beykin; Mariella Saludares; Mariana Nunez; QianQian Wang; Adriana Di Polo; Jeffrey Louis Goldberg
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 668. doi:

Tolerability and Efficacy of Open-label Nicotinamide and Pyruvate Supplementation for Primary Open Angle Glaucoma over 16 months OPEN ACCESS
Tasneem Zainab Khatib; Zac Wennberg Smith; Jeffrey Louis Goldberg
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 669. doi:

Mitochondrial uncoupler MP201 promotes retinal ganglion cell neuroprotection in experimental glaucoma OPEN ACCESS
Heberto Quintero; Renata Ghenno-Manrique; Nicolas Belforte; Jorge L. Cueva-Vargas; Robert Alonso; John G. Geisler; Adriana Di Polo
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 670. doi:

Activating soluble adenylyl cyclase regulates mitochondria, rescues retinal ganglion cells, and ameliorates visual dysfunction caused by oxidative stress OPEN ACCESS

Wonkyu Ju; Tonking Bastola; Guy Perkins; Keun-Young Kim

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 671. doi:

Mitochondrial Protection in Retinal Degeneration: The Therapeutic Potential of Irbesartan OPEN ACCESS

Andrew Jr White; Ushasree Pattamatta; Nicole Ann Carnt; Adrian Marcus

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 672. doi:

Homocysteine elevation in glaucoma reveals dysfunctional one-carbon metabolism as a target for neuroprotection OPEN ACCESS

James R Tribble; Vickie Hoi Ying Wong; Kelsey V Stuart; Glyn Chidlow; Alan Nicol; Carola Rutigliani; Tim J Enz; Anh Hoang; Pei Ying Lee; Emma Lardner; Gustav Stålhammar; Christine Nguyen; Robert James Casson; Anthony P Khawaja; Bang V Bui; Pete Williams

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 673. doi:

High-throughput Screening of ATF4/CHOP inhibitors as Neuroprotectants for Glaucoma OPEN ACCESS

Dong Liu; Wei Chen; Hang Yang; Liang Liu; Steve Schow; Robert Lum; Yang Hu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 674. doi:

Evaluation of metabolites towards retinal ganglion cell neurite outgrowth or neurite-axon transition OPEN ACCESS

Emily Neag; Alejandra Hernandez; Sean Meehan; Sanjoy K Bhattacharya

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 675. doi:

Microglia/Macrophage Glucagon-like Peptide 1 Receptors are Necessary for GLP-1R Retinal Ganglion Cell Rescue in Glaucoma OPEN ACCESS

Tianyuan "Ben" Yao; Anny Zhong; Turner Schwartz; Sahit Reddi; Jie Wu; Joe Vithayathil; Qi N Cui

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 677. doi:

Effective treatment of optic neuropathies by intraocular delivery of MSC-sEVs through augmenting the G-CSF-macrophage pathway OPEN ACCESS

Wei Yi; Ying Xue; Wenjie Qing; Yingxue Cao; Lingli Zhou; Mingming Xu; Zehui Sun; Yuying Li; Xiaomei Mai; Le Shi; Chang He; Feng Zhang; Elia J Duh; Yihai Cao; Xialin Liu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 678. doi:

Therapeutic Effect of Exosomes Derived from Retinal Organoids on Retinal Ganglion Cell Survival in a Rat Model of Chronic Ocular Hypertension OPEN ACCESS

Si Hyung Lee; Jung Woo Han; Hyo Song Park; Jin Ok Oh; Tae Kwann Park

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 679. doi:

Optimized microspheres for sustained delivery: preservation of vision in a model of glaucoma OPEN ACCESS

Tonia S Rex; Carlisle DeJulius; Sarah Naguib; Elisabeth Artis; Amy Stahl; Thomas Dean; Mukesh Gupta; David J Calkins; Craig Duvall

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 680. doi:

MicroRNA profiling of small extracellular vesicles generated from a CRISPR-engineered human BRN3B-H9 reporter cell line reveals key targets and signaling pathways crucial for retinal gang... OPEN ACCESS

Sandeep Kumar Vishwakarma; Mallikarjuna Rao Gedda; Dhiraj Kumar; Noor D White Carreiro; Stanislav I. Tomarev

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 681. doi:

Investigating the Therapeutic Potential of miR-181a/b Inactivation in Glaucoma OPEN ACCESS

Marta Molinari; Filomena Massa; Elena Marrocco; Edoardo Nusco; Alessia Indrieri

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 682. doi:

Neuroprotective Effect of Memantine and MK801 on NMDA-induced Retinal Ganglion Cell Injury in SD Rats OPEN ACCESS

Xinmin Sun; Yidi Tang; Danyang Li; wankun xie

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 683. doi:

Overexpression of hGDF15 in retina of transgenic mice is associated with retinal ganglion cell neuroprotection in a murine glaucoma model of increased intraocular pressure OPEN ACCESS

Mohammad Harun-Or-Rashid; Ji Zhang; Henriette Frikke-schmidt; Wai Wong

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 684. doi:

Effect of long-term glaucoma on AAV retinal transduction OPEN ACCESS

Shan Fan; Chuanxi Xiang; Terri L McGee; Chad E Bigelow; Ganesh Prasanna; Noel D Johnson; Vikas Gulati; Lisa Reid; Carol B Toris

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 685. doi:

Characterization of AAV-meditated viral transduction in adult and aged mice OPEN ACCESS

Delaney Henderson; Balwantray C Chauhan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 686. doi:

Electric Field Stimulation Collaborates with Ciliary Neurotrophic Factor to Direct Retinal Ganglion Cell Axon Regeneration After Optic Nerve Crush Injury OPEN ACCESS

Connie Huang; Sasha Medvidovic; Timothy Kim; Gigi Niu; Anahit Simonyan; Pooyan Pahlavan; Ege Iseri; Vahini Garimella; Mahnaz Shahidi; Darrin Jason Lee; Biju Thomas; Derek S. Welsbie; Gianluca Lazzi; Kimberly K. Gokoffski

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 687. doi:

Voluntary Exercise Protects Against Visual Function Decline After Retinal Ganglion Cell Injury in Ovariectomized Rats OPEN ACCESS

Andrew J. Feola; Kelleigh Hogan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 688. doi:

BAX depletion enhances axonal resilience in a mouse model of transient ocular hypertension OPEN ACCESS

Robert Nickells; Diana C Lozano; Nicole Muench; William O Cepurna; John C Morrison

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 689. doi:

Modulating serotonin signalling provides direct RGC protection in glaucoma OPEN ACCESS

SAYANTA DUTTA; Michelle Surma; Kavitha Anbarasu; Arupratan Das

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 691. doi:

Targeting 5-HT1A serotonin receptor provides glaucoma neuroprotection independent of IOP regulation OPEN ACCESS
Arupratan Das; Michelle Surma; Kavitha Anbarasu; SAYANTA DUTTA
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 692. doi:

Modulating transsynaptic dopamine signaling promotes optic nerve regeneration and preserves visual function OPEN ACCESS
Qi Zhang; Yiqing Li; Yehong Zhuo
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 693. doi:

Exploring the link between developmental genes and the regeneration of the optic nerve induced by Wnt OPEN ACCESS
Gabrielle Albano; Paola E Parrales; Alexander Venanzi; Abigail S Hackam
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 695. doi:

Impact of experimental glaucoma severity on structural and functional outcomes after internal limiting membrane peel for retinal ganglion cell replacement in nonhuman primates OPEN ACCESS
Michaela Dunn; Anstomenis Thanos; Grant Cull; Melody Hernandez; Cátia Gomes; Priya Chaudhary; Gareth R Howell; Joseph Leffler; Benjamin Sivyer; Yvonne Ou; Jason S Meyer; Brad Fortune
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 696. doi:

Inhibition of MNK-eIF4E mRNA Translational Control Protects Against ERK-Mediated Retinal Ganglion Cell Degeneration OPEN ACCESS
Jeremy M Sivak; Alessandra Tuccitto; Margaret Luke; Karen Wigg
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 697. doi:

Activation of AMPK/mTOR pathway protects against apoptosis in experimental glaucoma via inhibiting PERK/ATF4/CHOP pathway OPEN ACCESS
Jufang Huang
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 698. doi:

The NLRP3 inflammasome mediates neurodegeneration in an ischemia-reperfusion injury model of acute angle-closure glaucoma OPEN ACCESS
Andrew R. Griswold; Sarah B. Dickman; Victoria McGilligan; Meredith S Gregory-Ksander
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 699. doi:

The mechanism and targeted therapy of zinc mediating retinal ganglion cell injury through histone H4 deacetylation OPEN ACCESS
Zhe Liu; Huiya Gilbert; Jiahui Tang; Yehong Zhuo; Larry Benowitz; Yiqing Li
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 700. doi:

Islets of Langerhans transplantation into the eye anterior chamber improves retinal ganglion cell function and visual behaviors in glaucoma OPEN ACCESS
Sana El Hajji; Clara Gobault; Yukihiro Shiga; Nicolas Belforte; Melanie Ethier; Isaac Alejandro Vidal Paredes; Florence Dotigny; Vincent Poitout; Adriana Di Polo
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 701. doi:

Differential Impact of VEGF Inhibitors on Retinal Ganglion Cell Survival: A Comparative Analysis of Bevacizumab and Sorafenib in Ocular Neovascular Disorder Treatment OPEN ACCESS
Jaehoon Jung; Wungrak Choi; Min Kim; Jin-ok Choi; Chan Yun Kim
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 702. doi:

Effects of topical ripasudil on response of mouse optic nerve to experimental glaucoma and nerve crush OPEN ACCESS
Sarah Quillen; Elizabeth Cone Cone Kimball; Kelsey Ritter-Gordy; Mary Ellen Pease; Ian Pitha; Thomas Vincent Johnson; Harry A Quigley
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 703. doi:

Colchicine as a Novel Neuroprotective Drug for Stress-Related Neurodegeneration. OPEN ACCESS
Maria Holubowicz; Cezary Rydz; William Cho; Dorota Skowronska-Krawczyk
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 704. doi:

Transplantation and Survival of Retinal Ganglion Cells under Elevated Intraocular Pressure in Human Donor Eyes OPEN ACCESS
Tasneem Putliwala Sharma; Salil Gupta; Kathleen Ho; Shahna Shahul Hameed
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 705. doi:

Developing novel therapies for macular fibrosis secondary to neovascular age-related macular degeneration OPEN ACCESS
David Hughes; Jürgen Prestle; Nina Zippel; Leo Thomas; Heike Neubauer; Heping Xu; Mei Chen
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 706. doi:

Next-generation ocular topical SBT-272 demonstrates optimized retina tissue exposure: building upon elamipretide for treating dry AMD OPEN ACCESS
Michael DiMatteo; James Wakefield; John Ciallella; Anthony Abbruscato; David Ryan Lally
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 707. doi:

Dietary serine supplementation reveals a protective effect against ROS in dry AMD OPEN ACCESS
GANESH SATYANARAYANA; Sayantan Datta
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 708. doi:

Ultralocal subretinal immunosuppressive nanoparticles to abrogate graft rejection in retinal cell therapy OPEN ACCESS
Kang Li; Ying Liu; Wathsala Liyanage; Anjali Sharma; Bani Antonio-Aguirre; Yuchen Lu; Zhuolin Li; Krystal Yearis; Kenneth Jimenez; Boaz Goldberg; Sally Li; Annabelle Pan; Minda Mcnally; Kannan Rangaramanujam; Mandeep S Singh
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 709. doi:

Impact of donor and host age on systemic stem cell therapy to treat a mouse model of AMD OPEN ACCESS
Brenton T. Bicknell; Carolina Francelin Rovarotto; Xiaoping Qi; Maria B Grant; Michael Boulton
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 710. doi:

Violet light reduces light-induced retinal damage in a murine model OPEN ACCESS
Steve S.W. Chen; Hideto Osada; Jue Wang; Kazuno Negishi; Toshihide Kurihara; Kazuo Tsubota; Norimitsu Ban

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 711. doi:

Comparative Evaluation of Anti-Angiogenic Effects of Biosimilar Drugs in a DL-α-Aminoadipic Acid Rabbit Model of Chronic Vascular Leakage in Retina. OPEN ACCESS

Donatas Neverauskas; Robertas Cesna; Symantas Ragauskas; Tomas Paulauskas; Giedrius Kalesnykas; Jeffrey Adam Jamison; Odeta Adamoniene

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 712. doi:

Impact of dietary omega-6 and omega-3 polyunsaturated fatty acids on retinal autophagy during aging in mice OPEN ACCESS

Marie-Agnès Bringer; Jean-Baptiste Bizeau; Bénédicte Buteau; Lucy Martine; Elisabeth Dubus; Laurent Leclère; Pierre Lapaquette; Caroline Peltier; Alain M. Bron; Niyazi Acar

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 713. doi:

Translational development of ikarovec's bicistronic geographic atrophy lead AAV vector IKC159V through capsid and delivery route optimisation OPEN ACCESS

Laura Vaux; Emily Warner; Kara Boyd; Peter Widdowson; Katie Binley; Andrew Osborne

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 714. doi:

Assessment of pre-existing anti-drug antibodies (ADAs) in pooled serum against novel trispecific biologic RO-104 analogs OPEN ACCESS

Isabel Ray; Alina K Sinha; Li Xu; Peter M Kaiser; Arshad M. Khanani; Jeffrey S Heier; Jessi Prentice; Parth Patel; Nikhil Gupta; Ashwin Gupta; Megana Paidela; Yixuan Ma; Ramesh Bhatt; Ramanath Bhandari

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 715. doi:

IND-enabling preclinical safety and efficacy studies using GMP-grade human iPSC-derived retinal pigment epithelial (RPE) cells for treating dry age-related macular degeneration (AMD). OPEN ACCESS

Harshini Surendran; Lalitha Soundararajan; Niharika Patiolla; Jonathan Stoddard; Sebastian Arrizabalaga; Zengping Liu; Lingam Gopal; Xinyi Su; Renee Christine Ryals; Rajani Battu; Rajarshi Pal

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 716. doi:

Poly Sialic-Acid Coated Nanoparticle Suppresses Complement Activity OPEN ACCESS

Sheri L Peterson; Diyan Patel; Anitha Krishnan; Ali Khanehzar; Amit Lad; David Callanan; Tarek Hassan; Chris Scott; Michael Tolentino; Mohamed Genead

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 717. doi:

Plasma pharmacokinetics of single- and repeat-dose intravitreal EYP-1901 (vorolanib in Durasert®) in rabbits over 12 months OPEN ACCESS

Terry Hsieh; Baruch D Kuppermann; Michelle Howard-Sparks; Christopher Crean; Said Saim

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 718. doi:

Comparative Assessment of MN007 and Eylea in the Subretinal Fibrosis Model OPEN ACCESS

Kevin Harkin; Lynsey-Dawn Allen; James Bojdo

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 719. doi:

Poly Sialic-Acid Coated Nanoparticle attenuates Neovascularization, Inflammation and Complement Activity in AMD OPEN ACCESS

Diyan Patel; Sheri L Peterson; Victor G. Sendra; Anitha Krishnan; Amit Lad; David Callanan; Tarek Hassan; Chris Scott; Michael Tolentino; mohammed Genead

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 720. doi:

Reduction of Complement Factor B using CRISPR/Cas9 OPEN ACCESS

Mutayyaba Adnan; Adrianna Latuszek; Aixu Sun; Henry Chen; Heather Brown; Suzanne Hartford; Ying Hu; Jingtai Cao; Botir T Sagdullaev

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 721. doi:

Effects of Amyloid-β Oligomer Stressors on the ARPE-19 cell line OPEN ACCESS

Sonali Nashine; Maria Cristina Kenney; James Nowick; Adam Kreutzer

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 722. doi:

The Effect of Sex on Subfoveal Choroidal Thickness in Age-Related Macular Degeneration and Healthy Eyes OPEN ACCESS

Panisa Singhanetr; Priya Pragnesh Shah; Romy Bejjani Elizabeth J Rossin

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 723. doi:

CRP activates choroidal mast cell degranulation and alterations in retinal pigment epithelial cells OPEN ACCESS

Imran Ahmed Bhutto; Marzieh Moghadas; Shreya Jolly Jolly; D Scott McLeod; Malia Michelle Edwards

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 724. doi:

Intravitreal high concentration of fibrinogen induces retinal damage through ICAM-1 pathway OPEN ACCESS

Yasuyuki Sotani; Hisanori Imai; Hiroko Yamada; Megumi Kitamura; SOTARO MORI; Wataru Matsumiya; Akiko Miki; Sentaro Kusuhara; MAKOTO NAKAMURA

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 725. doi:

Retinal Detachment Induces Sustained Retinal and RPE/Choroid Neuroinflammation and Transient Decline of CSF1R+ Cells OPEN ACCESS

Daniel E. Maidana; Sara Pastor Puente

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 726. doi:

Complement Factor H (CFH) Y402H polymorphism alters the endoplasmic reticulum (ER) stress response in iPSC-RPE cells OPEN ACCESS

Angela Armento; Inga Sonntag; Merve Sen; Simon John Clark; Rosario Fernandez-godino; Berta de la Cerda; Marius Ueffing

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 727. doi:

Dynamics of MicroRNA Secreted via Extracellular Vesicles During the Aging of Embryonic Stem Cell-Derived Retinal Pigment Epithelium OPEN ACCESS

Dimitrios Pollalis; Gopa Kumar Gopinadhan Nair; Justin Leung; Clarisa Marie Bloemhof; Jeffrey K. Bailey; Britney O. Pennington; Amir I. Khan; Kaitlin R. Kelly; Ashley K. Yeh; Kartik S. Sundaram; Dennis O Clegg; Chen-Ching Peng; Liya Xu; Constantin Georgescu; Jonathan Wren; Sun Young Lee

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 728. doi:

Identification and characterization of a novel mouse model for age-associated retinal degeneration OPEN ACCESS

Olivia J. Marola; Michael MacLean; Travis Cossette; Cory Diemler; Alaina Reagan; Amanda A. Hewes; Gareth R Howell

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 729. doi:

Hypoxia-Induced Lipid Metabolism Dynamics in Retinal Pigment Epithelial Cells
OPEN ACCESS
Ozlem Calbay; Chen-Lin Hsieh; Fei Wang; Charles Lu; Tian Yu; Jarel Gandhi; Harry Sweigard; Chris Ling; Anneke I. Den Hollander
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 730. doi:

VLDLR deficiency promotes TGF-β signaling-induced RPE energy metabolism disturbance and subretinal fibrosis OPEN ACCESS
Yusuke Takahashi; Xiang Ma; Wenjing Lily wu; Miwa Hara; Carolina Panzarin; Jiyang Cai; Jian-Xing (Jay) Ma
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 731. doi:

Interferon regulatory factor 5 (IRF5) gene ablation causes senescencent changes in mouse choroid OPEN ACCESS
Congxiao Zhang; Russell Quinn; Joys Annita David; Katherine Patterson; Eric Nguyen; Ruchi Sharma; Kapil Bharti
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 732. doi:

HIF-1a -dependent regulation of survival and death pathways in an experimental model of retinal detachment OPEN ACCESS
Bhavneet Kaur; Bruna Miglioranza Scavuzzi; Jingyu Yao; Mengling Yang; Lin Jia; Steven F Abcouwer; David N Zacks
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 733. doi:

A Potential Role for Clusterin in the Pathogenesis of Age-Related Macular Degeneration (AMD) OPEN ACCESS
Batya Rinsky; Adi Kramer; sarah Elbaz-Hayoun; Itay Chowers
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 734. doi:

Complement injury and CRP stress alter inflammatory cytokine secretion in AMD iPSC derived choroidal endothelial cells. OPEN ACCESS
Kelly Mulfaul; Samantha G Schwarte; Megan J Riker; Brynnon E Harman; Edwin M Stone; Budd A. Tucker; Robert F Mullins
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 736. doi:

Role of IL-17A in driving inflammatory responses in progression of dry age-related macular degeneration OPEN ACCESS
Sayan Ghosh; Victoria Koontz; Sridhar Bammidi; Pooja Gautam; Stacey L Hose; Debasish Sinha
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 737. doi:

Functional assays to model AMD using patient derived iPSC-RPE with varying clinical phenotype OPEN ACCESS
Jacob D Painter; Mansour Dughbaj; Hojae Lee; Dolly Mistry; Mallika Nimmagadda; Harry Sweigard; Gerry Rodrigues; Jarel Gandhi
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 738. doi:

Localization of Toll-like Receptors and Intracellular Lipid Droplets in an anaphylatoxin-induced AMD model in iPSC-derived retinal pigment epithelium OPEN ACCESS
Katherine Patterson; Congxiao Zhang; Andrew Fausey; David McGaughey; Joys Annita David; Ruchi Sharma; Kapil Bharti
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 739. doi:

Single-cell mRNA sequencing of complement factor H Y402H (*CFH-H/H*) transgenic mouse RPE cells OPEN ACCESS
Josh Amason; Chen Yu; Lindsey A Chew; Mikael Klingeborn; Sejiro Littleton; Daniel R Saban; Catherine Bowes Rickman
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 740. doi:

Shared RPE transcriptomic changes in response to two oxidants implicated in AMD pathogenesis: cigarette smoke and iron OPEN ACCESS
Rohini M Nair; Elie Mer; Kevin R Zhang; John W Tobias; Venkata R M Chavali; Joshua L Dunaief
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 741. doi:

Dose-dependent Effect of Varying Cigarette Smoke Levels on Autophagic Pathways in the Retinal Pigment Epithelium (RPE) OPEN ACCESS
Alyssa Chen; GANESH SATYANARAYANA; Inara Jawed; Micah A Chrenek; Sayantan Datta
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 742. doi:

Sodium iodate alters key epithelial-to-mesenchymal transition factors in human iPSC-derived RPE cells OPEN ACCESS
Gregory Philip Campbell; Yuanjun Zhao; Jasmine Geathers; Alistair J Barber; Jeffrey Sundstrom; Stephanie Louise Grillo
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 743. doi:

Role of Cigarette Smoking induced RPE Cellular Senescence in AMD OPEN ACCESS
Qi Zhou; Zunyi Zhang; Yinga Wu; Jing Ma; Shusheng Wang
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 744. doi:

Activation of choroidal CD8+ T cells in response to injuries of the retinal pigment epithelium (RPE) OPEN ACCESS
James Regun Karmoker; Sarah Bounds; Yan Chen; Jiyang Cai
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 745. doi:

Basally secreted RPE exosomes promote choriocapillaris atrophy but not drusen in an iPS cell model of Sorsby's fundus dystrophy. OPEN ACCESS
Amit Chatterjee; Sonal Dalvi; Yashoda Subedi; Timothy Guida; Nathaniel Foley; Aryan Bhakhri; Ruchira Singh
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 746. doi:

Tear exosomes and age-related macular degeneration OPEN ACCESS
Arko Ghosh; Remington Marie Bliss; Meet Panjwani; Jonathan M Holmes; Brian S McKay
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 747. doi:

Effects of Oxidative and ER stress on the Degenerative process in Experimental Retinal Degeneration OPEN ACCESS
sheida Ardeshirilajimi; Kerstin Sandholm; Kristina Nilsson Ekdahl; Camilla Mohlin
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 748. doi:

The miR-211/Ezrin molecular network regulates endolysosomal pathway in the RPE OPEN ACCESS
Ivan Conte; Daniela Intartaglia; Giuliana Giamundo
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 749. doi:

Expression Patterns of ATP-activated P2X Receptor Subtypes in Age-related Macular Degeneration OPEN ACCESS
Sena Youn; Siqi Li; Printha Wijesinghe; Christopher Campbell; Joanne A Matsubara

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 750. doi:

Hypoxic Influence on Human Melanocyte Extracellular Vesicle Release OPEN ACCESS
Remington Marie Bliss; Nicole R. Congrove; Induvahi Veernala; Brian S. Mckay
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 751. doi:

Monoclonal Antibody Development for Lipocalin-2 Neutralization in Atrophic AMD OPEN ACCESS
Mihir Nemani; Emma Mahally; Sayan Ghosh; Victoria Koontz; Stacey L Hose; Debasish Sinha
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 752. doi:

The Role of the CCR1 Receptor During Retinal Degeneration OPEN ACCESS
Sarah Elbaz-Hayoun; Adi Kramer; Batya Rinsky; Itay Chowers
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 753. doi:

HDAC inhibition induces double-stranded RNA accumulation in retinal pigment epithelial cells OPEN ACCESS
Kyle Henry Bond; Xiaoqiu Wu; Magali Saint-Geniez; Yi Bao
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 754. doi:

Validation of the two-stage laser mouse model of subretinal fibrosis and the therapeutic effect of aflibercept OPEN ACCESS
Kyungho Park; Hyun Woo Park; Hee Young Lee; Yeongyeong Kim; Ajin Lee; Ah Hyun Lee; Hyuna Kim; Larry C Park
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 755. doi:

OCT-Guided Spatially Targeted Laser Microirradiation Platform for Inducing Geographic Atrophy in Non-Human Primates OPEN ACCESS
Michael Carlson; Sanghoon Kim; Michael Aldape; Subrata Batabyal; Samarendra Mohanty
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 756. doi:

A laser-induced retinal atrophy model in cynomolgus monkeys OPEN ACCESS
FEGN GAO; Zhaohui Yan; Qin Liao; Yanlin Zhang; Sucai Zhang; Wankun Xie
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 757. doi:

Dose-dependent retinal damage in a LED white bright light model OPEN ACCESS
Marc Cerrada-Gimenez; Leena Tähtivaara; Anni Tenhunen; Xavier Ekolle; Birgitta Lappetelainen; Ville Jokinen; Anne Mari Haapaniemi; Anna Mari Koponen; Päivi Partanen; Anni Kolehmainen; Nerija Kvietkauskiene; Simas Bijeikis; Maria Vähätupa; Jeff Jamison
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 758. doi:

Stimulator of interferon genes (STING) as a therapeutic target for atrophic age-related macular degeneration OPEN ACCESS
Pooja Gautam; Sayan Ghosh; Victoria Koontz; Sridhar Bammidi; Stacey L Hose; Debasish Sinha
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 759. doi:

SODIUM IODATE INDUCES HYPERREFLECTIVE FOCI ACCOMPANIED BY RAPID VISION LOSS, RETINAL CELL DEATH, AND GLIAL REACTIVITY IN LONG-EVANS RATS. OPEN ACCESS
Susan Renee Gembic; Stephanie Louise Grillo; Michael D. Dennis; Jeffery M. Sundstrom; Alistair J Barber
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 760. doi:

Characterizing $NaIO_3$ induced Retinal Degeneration in Brown Norway Rats OPEN ACCESS
Daniel Costa; Justin Prater; Zsolt Ablonczy; Kathryn Secamiglio; Stephanie M Fogerson; David Culp
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 761. doi:

Proteome dynamics of aging retinal pigment epithelium OPEN ACCESS
Steffi Daniel; John Hulleman
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 762. doi:

Clinicopathological features of retinal glial and choroidal changes in an eye with multi-focal geographic atrophy. OPEN ACCESS
Malia Michelle Edwards; D. Scott McLeod; Imran Ahmed Bhutto; Jeffrey Messinger; Andreas Berlin; Jacques Bijon; K Bailey Freund; Christine A Curcio
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 763. doi:

Exploring the Role of Exosomal miRNA-146a-5p in Sodium Iodate-Induced Retinal Pigment Epithelial Dysfunction OPEN ACCESS
SOOBIN CHO; Jiye Kim; Jeong A Choi; Eunyoung Tak; Yoon Jeon Kim
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 764. doi:

Knocking Down Retinal Pigment Epithelium Hemoglobin Expression Results in Accelerated Death of Photoreceptors with Aging OPEN ACCESS
Onur Inam; Qun Zeng; Chyuan-Sheng Lin; Tongalp H Tezel
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 765. doi:

Creation of a Collagen Producing Cell Atlas in a Model of Sub-Retinal Fibrosis OPEN ACCESS
Sarah Doyle; Ema Ozaki; Said Aktas; Peter D Westenskow; Derrick Feenstra
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 766. doi:

Mechanism and Consequences of Intracellular C3 activation in the Retinal Pigment Epithelium in Models of Macular Degeneration OPEN ACCESS
Valencia Fernandes; Li Xuan Tan; Aparna Lakkaraju
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 767. doi:

Investigation of Müller Cell Profiles in Humans and an In-Vivo Model of Geographic Atrophy OPEN ACCESS
POONAM NAIK; Imran Ahmed Bhutto; D. Scott McLeod; Malia Michelle Edwards
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 768. doi:

Systemic exposure to UVB is sufficient to induce AMD: Characterization of a Novel Animal Model OPEN ACCESS
Abdelhakim Mohamed Safwat Morsy; Valerie Harris; Yusra Zaidi; Xingjun Fan; Brian Stansfield
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 769. doi:

ARMS2 A69S is associated with an increased level of retinal degeneration in a co-culture model for AMD OPEN ACCESS
Merve Sen; Emanuel ten Brink; Kevin Elsner; Ellen Kilger; Angela Armento; Marius Ueffing
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 770. doi:

IL1 family signalling is not involved in retinal pigment epithelial (RPE) cell senescence in age-related macular degeneration (AMD) OPEN ACCESS

Sarah Jean McFetridge; Heike Neubauer; Nina Zippel; Stefan Kreideweiss; Heping Xu; Mei Chen

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 771. doi:

Visual and Anatomical Outcomes of Endogenous *Klebsiella pneumoniae* Endophthalmitis with and without Vitrectomy: A Systemic Review and Meta-analysis of Individual Participant Data OPEN ACCESS

Chieh-Yu Lin; Wen-Yi Shau; Chia-Ying Tsai; Tso-Ting Lai

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 772. doi:

Endophthalmitis Following Pars Plana Vitrectomy: Clinical Features, Visual Outcomes, and Risk Factors OPEN ACCESS

Brandon Bates; Caroline Rosanky; Jared Moon; Saima A Khan; Maitri Pancholy; Sunir Garg; Philip Storey

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 773. doi:

Normative values in retinal vessel oximetry–Systematic Review and Meta-Analysis OPEN ACCESS

Katrin Hirsch; Rebekka Heitmar

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 774. doi:

New treatment paradigm for infectious endophthalmitis: Results from the Mexican Endophthalmitis Study Group Protocol 1 and 3 OPEN ACCESS

Raul Velez-Montoya; Guillermo Salcedo-Villanueva; Jose Dalma-Weishausz; Gerardo Garcia-Aguirre; Sergio E Hernández-Da Mota; Abel Ramirez-Estudillo; Sergio Rojas-Juarez; Renata Garcia-Franco; Vanesa Flores-Peredo; Daniel Moreno-Paramo; Vidal Soberon-Ventura; Jans Fromow-Guerra

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 775. doi:

Endophthalmitis Rate after Intravitreal Injection Given Various Povidone-Iodine Concentrations OPEN ACCESS

Suhail Alam; Shaurey Vetsa

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 776. doi:

Non-Damaging Laser Retinal Therapy (NRT) for Type 2 Macular Telangiectasia: Three years follow-up OPEN ACCESS

Daniel Lavinsky; Anne Elise Chaves; Wagner Schneider; Monica Oliveira; Pedro Machado Luz; Fabio Lavinsky; Daniel V Palanker

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 777. doi:

Clinical characteristics of Acute Retinal Necrosis based on viral etiology. OPEN ACCESS

JISUN PARK; Hyeong Min Kim

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 778. doi:

Factors associated with Improvement of Discomfort caused by Symptomatic Vitreous Floater OPEN ACCESS

Sung Pyo Park; Hyeon Gyu Choi

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 779. doi:

Impact of exposure to residual intraretinal fluid and fluctuations of central subfield thickness on visual outcomes in eyes with macular edema following central retinal vein occlusion: A ... OPEN ACCESS

Michael S Ip

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 780. doi:

Clinical outcomes of enhanced monofocal intraocular lens implantation in phacovitrectomy according to epiretinal membrane severity OPEN ACCESS

Seongyong Jeong; Soyeon Park; Hyeongjun Park; Sooncheol Cha; Jun Hyuk Son; Min Sagong

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 781. doi:

Increased Thickness of the Retinal Inner Nuclear Layer in Patients with Post-COVID-Syndrome OPEN ACCESS

Julia Schottenhamml; Christian Y Mardin; Marianna Lucio; Adam Skornia; Eva Rühl; Bettina Hohberger

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 782. doi:

Endogenous Fungal Endophthalmitis: A Single-Center Retrospective Study and Review of the Literature OPEN ACCESS

Eleanor Burton; Vishal Reddy; Arthi Venkat

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 783. doi:

Microbiological Profile in Exogenous Endophthalmitis and its Visual Outcome in a Reference Center in Mexico City OPEN ACCESS

Carlos Illescas-Lomeli; Alan Chew; Braulio Velasco-Sepulveda; David Jimenez-Collado; Enrique Ariza-Camacho; Gloria Ornelas-Hall; Federico Graue-Wiechers

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 784. doi:

Temporal Optical Coherence Tomography Findings and their Relation to Visual Outcomes in Endophthalmitis OPEN ACCESS

James Harris; Sloane McTavish; Sandra Alhoyek; Marisa Tieger; Elizabeth J Rossin; David M Wu; Nimesh Arvind Patel

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 785. doi:

Clinical Features, Antibiotic Susceptibilities, and Treatment Outcomes of Endophthalmitis Caused by Gram-Negative Bacteria OPEN ACCESS

Brandon Pham; Darlene Miller; Harry W. Flynn

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 786. doi:

Incidence Rates of Endophthalmitis Following Pars Plana Vitrectomy Based on Surgical Tamponade OPEN ACCESS

Anja Rabiljenovic; Sean Platt; David G Miller

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 787. doi:

Tractional versus Rhegmatogenous Retinal Detachment After Small-Gauge Vitrectomy for Endophthalmitis OPEN ACCESS

Harshvardhan Chawla; Camille P Hicks; D. Anthony Mazzulla; Joseph D. Benevento; Sidharth Pun

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 788. doi:

Retrospective Review of Management of Open-Globe Injuries Before and After Implementation of Standardized Harvard Protocol and Order-Set OPEN ACCESS

Brian Hwang; Jonathan Thomas; Michael E Rauser

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 789. doi:

Tube-shunt related, non-tuberculosis Mycobacterial endophthalmitis: A case series and review of the literature OPEN ACCESS

Jennifer Huang; Bhagyashri Pandey; Michelle Chernyak; Mitul Mehta; Angeline Wang

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 790. doi:

Treatment outcomes in endophthalmitis patients: a comparison between tap and inject versus pars plana vitrectomy OPEN ACCESS

Amir-Ali Golrokhian-Sani; Shayaan Kaleem; Abbie Lai; Chris Zajner; Marko Popovic; Rajeev Hemant Muni

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 791. doi:

Intravenous Drug Use (IVDU)-associated Endogenous Candida Endophthalmitis and Clinical Manifestations OPEN ACCESS

Su Jeoung Kim; Paulo J.M. Bispo

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 792. doi:

Improving laser targeting accuracy with Augmented Reality guidance in retinal laser therapy OPEN ACCESS

Sangjun (Sarah) Eom; Miroslav Pajic; Maria Gorlatova; Majda Hadziahmetovic

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 793. doi:

Effect of sublethal thermal laser irradiation on barrier function of retinal pigment epithelial cells under normal and reduced serum concentrations OPEN ACCESS

JOYCE TOHME; Paula Enzian; Ralf Brinkmann; Yoko Miura

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 794. doi:

Light and transmission electron microscopy findings following selective microsecond retinal pigment epithelium photodisruption in rabbits OPEN ACCESS

Christian Burri; André Schulz; Simon Salzmann; Beat Haenni; Nahoko Shintani; Boris Povazay; Chantal Dysli; Martin Sebastian Zinkernagel; Boris Victor Stanzel

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 795. doi:

Ocular Manifestations in MPGN (C3 Dense Deposit Disease) on the island of Ireland OPEN ACCESS

Laura Nicole Cushley; Ciara McAvoy; Neal Morgan; Anthony Dorman; Tunde Peto; Vittorio Silvestri; Peter Maxwell; Mairead Convery; Peter J Conlon; Julie Silvestri

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 798. doi:

Assessing the Anisotropic Biomechanical Properties of Retinal Quadrants in the Porcine Eye OPEN ACCESS

Dario L'Abbate; Kia Charlotte Prescott; David H. W. Steel; Brendan Geraghty; Victoria Kearns

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 801. doi:

Longitudinal Assessment of Retinal Health in Peptide Lv (PLv)-Deficient Mice OPEN ACCESS

Kofi Owusu-Ansah; Dylan Luc Pham; Gabriella Lomenzo; Michael Ko; Gladys Y P Ko

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 802. doi:

Media Matters: Biomechanical properties of the retina are influenced by sample preparation OPEN ACCESS

Kia Charlotte Prescott; Dario L'Abbate; David H. W. Steel; Brendan Geraghty; Victoria Kearns

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 803. doi:

Comparison of incidence of cataracts following two different subretinal injection methods in mice OPEN ACCESS

Adam Moser; Paul Miller; T Michael Nork

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 804. doi:

Dose Accuracy Comparison of Subretinal Delivery Methods OPEN ACCESS

Nadya Choti; Tom Meyer; Sergio Camacho Gonzalez; Kyle Pfeffer; Molly Walsh; Nneoma Nzeduru; Madison White; Kirsten Stoner

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 805. doi:

Establishing an *in-vivo* retinal edema model in the chick OPEN ACCESS

Sameer Chaurasia; Tyler Heisler-Taylor; Sumaya Hamadmad; Ali Zatari; Rahaf Shalash; Dena Martini; Misha Sohail; Diana Summitt; Cherish Brumley; Colleen M Cebulla

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 806. doi:

Characteristics of Vitreoretinal Lymphoma in B-scan Ultrasonography OPEN ACCESS

Junxiang Gu; Qian Chen; Peijun Zhang; Ting Zhang; Tingting Jiang; Min Zhou; Xin Huang; Gezhi Xu; Qing Chang

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 807. doi:

Health Disparities & Geographic Atrophy: A Meta-epidemiological Study of Equity Reporting in Systematic Reviews OPEN ACCESS

Ryan Emmert; Tyler McKenzie; Dawsyn Smith; Hanna Russell; Micah Hartwell

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 808. doi:

Five Year Trend in Intraocular Steroid Usage in a Large Retinal Practice OPEN ACCESS

Alexander Miller; Matthew Wilneff; Zach David Miller; Harrison Dean Sciulli

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 809. doi:

The Prognostic Significance of Acute Henle Fiber Layer Damage in Placoid Diseases OPEN ACCESS

Matteo Meneam; Alessandro Marchese; Prithvi Ramtohul; Francesco Bandello; Elisabetta Miserocchi; Maria Vittoria Cicinelli

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 810. doi:

Endoscopy Assisted Pars Plana Vitrectomy Outcomes in Dropped Lens Fragments Retrieval OPEN ACCESS

Amanda Kay Hertel; Martin A Mainster; Mary Champion; Radwan Ajlan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 811. doi:

Impact of the Cilioretinal Artery on Retinal Vessel Density in Eyes with Age-related Macular Degeneration OPEN ACCESS

Alan Goto; Carol Villafuerte-Trisolini; Alexander Rusakevich; Sophie Lee; Parisa Emami-Naeini; Ala Moshiri; Susanna S Park; Glenn Yiu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 812. doi:

Outcomes from hydroxychloroquine retinopathy screening utilising OCT and autofluorescence as the primary imaging modality OPEN ACCESS

Gilad Allon; Bahar Demir; Olayinka Williams; Luke Nicholson; Ling Zhi-Heng

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 813. doi:

Gap analysis of retinal diagnostic codes in SNOMED International OPEN ACCESS

Fritz Gerald Paguiligan Kalaw; Cindy Xinji Cai; Kareem Moussa; Brian C Toy; Jessica Shantha; Durga S Borkar; Sally Liu Baxter

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 814. doi:

Therapeutic Intervention in a Glial Stress Correlated Functional Deficit Small Animal Model of Traumatic Optic Neuropathy OPEN ACCESS

Annie Kathleen Ryan; Tyler Heisler-Taylor; Matthew A Reilly

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 815. doi:

Chlamydia pneumoniae Infection and Associated NLRP3 Inflammasome Activation in Alzheimer's Disease Retina OPEN ACCESS

Bhakta Prasad Gaire; Yosef Koronyo; Altan Rentsendorj; Dieu-Trang Fuchs; Lalita Subedi; Natalie Swerdlow; Keith L Black; Moshe Arditi; Timothy R Crother; Maya Koronyo-Hamaoui

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 816. doi:

Generating Models of *PRPH2*-associated retinal dystrophy OPEN ACCESS

Renee Christine Ryals; Nadia Moore; Lauren Renner; Jana M Giaquinto; Molly Marra; Hannah Woolard; Paul Yang; Mark E Pennesi; Samuel Peterson; Besty Ferguson; Martha Neuringer; Kathleen R Chirco

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 817. doi:

Effect of Anti-VEGF Therapy on Subretinal Hemorrhage OPEN ACCESS

Damla Oncel; Jennifer I Lim

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 818. doi:

Clinical Features of Pediatric Drusen OPEN ACCESS

SeokHyeon Song; Minji Kim; GyeongYun Jeon; Kyu Hyung Park; Kwangsic Joo

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 819. doi:

Single-cell RNA Analysis of Peripheral Blood Mononuclear Cells In a Mouse Model of Retinitis Pigmentosa OPEN ACCESS

Shimokawa Sakurako; Takahiro Hisai; Huanyu Zhao; Yan Tao; Masatoshi Fukushima; Chie Kikutake; Mikita Suyama; Koh-Hei Sonoda; Yusuke Murakami

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 820. doi:

Molecular and Cellular Mechanisms of Levodopa-Mediated Visual Function Rescue in Albinism OPEN ACCESS

Sarah Macdonald; Eloise Keeling; Jennifer A Scott; Helen Griffiths; Andrew Lotery; J. Arjuna Ratnayaka; James Edward Self; Helena Lee

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 821. doi:

Accuracy and readability of after visit summaries for retinal conditions generated by a large language model OPEN ACCESS

Nikhil Bommakanti; Fatima Rizvi; Anza Rizvi; Hana A. Mansour; Bita Momenaei; Jordan Safran; Michael Yu; Anthony Obeid; Yoshihiro Yonekawa

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 822. doi:

Outcomes of treat and extend and cessation with anti-VEGF in a large cohort of patients with pachychoroid related neovasculopathy OPEN ACCESS

Carolin Aizouki; Amit Vikram Mishra; Graeme K Loh; Nishananth Ramachandran; Parampal Grewal; Mark E Seamone

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 823. doi:

Characterizing the late-stage retinal phenotype of long-chain 3-hydroxyacyl-CoA dehydrogenase deficiency (LCHADD) in the G1528C *Hadha* knock-in murine model OPEN ACCESS

Allison G Curtis; Shannon Babcock; Melanie B Gillingham; Renee Christine Ryals

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 824. doi:

Tamoxifen protects photoreceptors in the sodium iodate model OPEN ACCESS

Timothy Taemin Lee; Brent Bell; Ying Song; Joshua L Dunaief

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 825. doi:

Retinal Detachment in Incarcerated Patients OPEN ACCESS

Manuela Herrera; Ala Moshiri; Parisa Emami-Naeini; Susanna S Park; Glenn Yiu; Kareem Moussa

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 826. doi:

The splicing of VEGF-A in monocytes from people with neovascular age related macular degeneration (nAMD) and diabetic retinopathy is altered by inhibition of SRPK1 and CLK OPEN ACCESS

Yizhuo Gao; Jyoti Agrawal; Jason Amartey; Tom Hawtrey; Jonathan Morris; Winfried M K Amoaku; David O Bates

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 829. doi:

Activation of mechanosensitive TRPV4 channel inhibits retinal vascular inflammation in diabetes OPEN ACCESS

Sathishkumar Chandrakumar; Xiao Yang; Mahesh Agarwal; Irene Santiago Tierno; Timothy S Kern; Kaustabh Ghosh

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 830. doi:

Disruption of the IL-6 cis-trans balance in Müller glial cells contributes to VEGF dysregulation in diabetic retinopathy OPEN ACCESS

Rebekah Robinson; Joshua Glass; Ashok Sharma; Shruti Sharma

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 831. doi:

Loss of pleckstrin homology domain and leucine rich repeat protein phosphatase 2 has protective effects on high glucose-injured retinal ganglion cells via Akt-GSK-3β-Nrf2 pathway OPEN ACCESS

xuan liu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 832. doi:

Proteomics analysis of extracellular vesicles derived from retinal Müller cells under normal and high glucose conditions: implications to diabetic retinopathy OPEN ACCESS

Logan Mays; Ali Rajooldezfuly; Fazle Elahi; Thi Nguyen; Brian Mooney; Hu Huang

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 833. doi:

The role of protein S in impaired glucose tolerance associated with pregnancy OPEN ACCESS

Masahiko Sugimoto; Mineo Kondo; Corina N D'Alessandro Gabazza; Masaaki Toda; Taro Yasuma; Esteban C. Gabazza

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 834. doi:

PDLIM1 Suppresses Retinal Neovascularization by Regulating β-catenin Pathway OPEN ACCESS

Xinxiao Gao; Wen Feng; Pinxue Xie

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 835. doi:

Oral alpha-cyclodextrin targets the gut-retinal axis and corrects diabetic retinopathy (DR) in a mouse model of type 2 diabetes (T2D). OPEN ACCESS

Yvonne Adu-Agyeiwaah; Ram Prasad; Sergio Li Calzi; Bright Asare Bedaiko; Jason Floyd; Mariana D Duporit; Tim Florian Dorweiler; Cristiano Vieira; Irina A Pikuleva; Julia Busik; Maria B Grant

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 836. doi:

G6PD transgenic mice develop attenuated pathology of diabetic retinopathy OPEN ACCESS

Fazle Elahi; Logan Mayo; Hu Huang

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 837. doi:

Evidence for Photoreceptor Oxidative Stress Detected by OCT Biomarkers in Patients at the Earliest Stage of Diabetic Retinopathy OPEN ACCESS

Peter Zakaria; Ryan Freedman; Kelsey Chen; Bing Ross; Claire Simons; Gary W Abrams; Bruce A Berkowitz

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 838. doi:

HuD and CRYAA Functions in Intercellular Communication in Retinal Cells OPEN ACCESS

Chongtae Kim; Su Been Oh; Young-Hoon Park

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 839. doi:

Small extracellular vesicles inhibit NLRP3 inflammasome activation in diabetic retinopathy OPEN ACCESS

Henry Louie; Lola Mugisho; Lawrence W Chamley; Ilva D Rupenthal

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 840. doi:

miR-205-5p suppresses high glucose-induced angiogenesis in retinal cells OPEN ACCESS

Maria Eduarda dos Santos Pires; Miriam Martinez Santos; Maria Oltra; Maria Ybarra Sánchez; Javier Sancho-Pelluz; Jorge M Barcia

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 841. doi:

Regulation of HIF-1α/VEGFA mRNA transcription by miR-205-5p in diabetic mice OPEN ACCESS

Maria Ybarra Sánchez; Miriam Martinez Santos; Maria Oltra; Maria Eduarda dos Santos Pires; Javier Sancho-Pelluz; Jorge M Barcia

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 842. doi:

PPARα$^{-/-}$ Microglia-Derived Extracellular Vesicles Induce Astrocytic Senescence and Endfeet Loss in Diabetic Retinopathy OPEN ACCESS

Tian Yuan; Rui Cheng; Wentao Liang; Jian-Xing (Jay) Ma

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 843. doi:

Ile-Trp dipeptide prevents diabetic retinopathy via gut Indole/AhR/PXR signaling in type 2 diabetes OPEN ACCESS

Ram Prasad; Yvonne Adu-Agyeiwaah; Edgar L Ready V; Sarbodeep Paul; Rati Sharma; Iuliia Dorofeeva; Jason Floyd; Aayushi Rohella; Sergio Li Calzi; Bruce Stevens; Qiuhong Li; Maria B Grant

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 844. doi:

The Roles of Lower Glycolytic Enzymes and Transporters in Regulating the Barrier Integrity and Spreading Behavior of Retinal Endothelial Cells OPEN ACCESS

Nicole Barbara Oska; Shaimaa Eltanani; Mohamed Shawky; Thangal Yumnamcha; Ahmed Ibrahim

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 845. doi:

S100A9*Tg* exhibits neurodegenerative and vascular abnormalities in the retina OPEN ACCESS

Shyam S Chaurasia; Rayne Lim; Scholastica Go; James Flynn; Utkarsh reddy Addi; Veluchamy A Barathi

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 846. doi:

Autotaxin level is related with retinal pigment epithelial barrier function in mouse eyes with diabetic retinopathy OPEN ACCESS

Yang LIU; Megumi HONJO; Reiko YAMAGISHI; Makoto AIHARA

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 847. doi:

Early changes of glia cells in the INS^{C94Y} pig model for diabetic retinopathy OPEN ACCESS

Antje Grosche; Lew Kaplan; Oliver Bludau; Kirsten Wunderlich; Patricia Hoffelner; Cornelia Deeg; Simone Renner; Eckhard Wolf; Stefanie M. Hauck

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 848. doi:

Ubiquitination of glycolytic enzymes in the diabetic mouse retina OPEN ACCESS

Ivy S Samuels; Geeng-Fu Jang; Jack S Crabb; John W. Crabb

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 849. doi:

Unraveling the Role of Cytochrome-P450 (CYP)-Derived Lipid Metabolites in Diabetic Retinopathy Progression OPEN ACCESS

Sonali Sharma; Mohamed Moustafa; Amany M Tawfik; Nader Sheibani; Mong Wang; Mohamed Al-Sayed Al-Shabrawey

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 850. doi:

Transcriptomic analysis reveals Müller cells as central modulators of diabetic retinopathy progression in the streptozotocin mouse model. OPEN ACCESS

Katia Corano Scheri; Yi-Wen Hsieh; Amani A Fawzi

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 851. doi:

Evidence of endothelial-to-mesenchymal transition in diabetic mouse retinal endothelial cells OPEN ACCESS

Weiquan (Wendy) Zhu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 852. doi:

Role of RXR in the Development of Diabetic Retinopathy OPEN ACCESS

Marina S Gorbatyuk; Iuliia Dorofeeva; Assylbek Zhylkibayev; Inna V. Saltykova; Venkatram Atigadda; Bibek Adhikari; Oleg Gorbatyuk; Maria B Grant

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 853. doi:

To study the differential expression of Paraoxonase and its methylation status in retinal endothelial-pericytes co- culture in diabetic milieu OPEN ACCESS

Bharathidevi Subramaniam Rajesh; Sathik Shajahan; Coral Miriam Magdalene
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 854. doi:

Correlation of Aqueous and Vitreous Protein Levels in Proliferative Diabetic Retinopathy and Their Association with Clinical Parameters OPEN ACCESS
Ingeborg Klaassen; Reinier O. Schlingemann; David H. W. Steel
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 855. doi:

High glucose induces an early increase of proinflammatory cytokines in Muller glia cells and in primary cultures of rat retina OPEN ACCESS
Irene Pandino; Diego Sbardella; Alessandra Boccaccini; Grazia Graziani; Pedro Miguel Lacal; Maria Grazia Atzori; Flavia Pricci; Marika Villa; Monica Varano; Mariacristina Parravano; Grazia Raffaella Tundo
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 856. doi:

Human biorepository for imaging and molecular analysis of Diabetic Retinal Disease: An update of the Mary Tyler Moore Vision Initiative OPEN ACCESS
Patrice E Fort; Kelli Ramos; Corey M Porter; Carmen Yu; Thomas W Gardner; Jennifer K Sun; S Robert Levine
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 858. doi:

Exploring the Impact of Extracellular Vesicles in Proliferative Diabetic Retinopathy: Insights from Vitreous Profiling OPEN ACCESS
Melanie Elisanna Schwammle; Stefaniya Konstantinova Boneva; Yana Tarakanchikova; Hansjurgen Agostini; Gunther R Schlunck; Irina Nazarenko; Felicitas Bucher
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 859. doi:

Loss of the interleukin-6 receptor leads to differential regulation of VEGF family members in Müller glial cells under hypoxic conditions *in vitro* OPEN ACCESS
Stepan Budkin; Rebekah Robinson; Grace Greenway; Joshua Glass; Shruti Sharma
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 860. doi:

IL-6 trans-signaling modulates mitochondrial function and apoptosis in murine Müller glial cells in a glucose-dependent manner OPEN ACCESS
Joshua Glass; Rebekah Robinson; Samah Ahmadieh; Ashok Sharma; Shruti Sharma
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 861. doi:

S100A9 causes Müller Cell Gliosis OPEN ACCESS
Utkarsh reddy Addi; Scholastica Go; Sibabalo Sokupa; Katina Patterson; Shyam S Chaurasia
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 862. doi:

Aqueous Humor Proteome Associated with Incomplete Anti-VEGF Response in Diabetic Macular Edema OPEN ACCESS
Lasse Joergensen Cehofski; Jessica Cao; Kentaro Kojima; Noelle Bakker; Ingeborg Klaassen; Bent Honoré; Henrik Vorum; Charles Clifton Wykoff
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 863. doi:

A Non-Contact Co-Culture Model of Primary Retinal Cells OPEN ACCESS
Laura Leanne Valdez; Richard LeBaron; Andrew T C Tsin
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 864. doi:

Caspase Dependent HRP Apoptosis OPEN ACCESS
Arianna L Lizbeth Rodriguez; Laura Leanne Valdez; Richard LeBaron; Andrew T C Tsin
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 865. doi:

Hyperglycemia, Hypoxia, and their Synergistic Effects on miRNA Expression in Human Retinal Endothelial Cells OPEN ACCESS
Suhani Gupta; Chloe Connelly; Khaled Elmasry; Mohamed Al-Sayed Al-Shabrawey
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 866. doi:

Altered retinal capillary reactivity correlates with impaired microglial calcium-dependent vasoregulation in the STZ model of diabetes OPEN ACCESS
Andrew Ian Jobling; Pialuisa Quiriconi; Una Greferath; Bang V Bui; Michael Alexander Dixon; Erica L Fletcher
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 867. doi:

A Prospective study of type 1 and type 2 Diabetics examining the correlation between antioxidant levels and neuronal layer loss. (DECAN study) OPEN ACCESS
LORRAINE NORTH; Manju Chandran; Geeta Menon; Narendran Nair
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 868. doi:

Role of exosomal miR-205-5p in angiogenesis and migration OPEN ACCESS
Miriam Martinez Santos; María Ybarra Sánchez; Maria Pires Dos Santos; Maria Oltra; Javier Sancho-Pelluz; Jorge M Barcia
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 869. doi:

T2DM impedes the visual cycle and causes retinopathy through impairment of hepatic vitamin A metabolism OPEN ACCESS
Han-Hsin Chang; Min-Chun Chang; David Pei-Cheng Lin
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 870. doi:

Hypoxia and hyperglycemia Mitigate IRBP Expression in Cultured Retinoblastoma Cells OPEN ACCESS
Andrew T C Tsin; Arianna L Lizbeth Rodriguez; Laura Leanne Valdez; David Flores; Federico Gonzalez-Fernandez
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 871. doi:

ALDH1A1 Gene Therapy Attenuates Acrolein-Induced Müller Cell Dysfunction in Diabetic Retinopathy. OPEN ACCESS
Burak Mugdat Karan; Josy Augustine; Peter Barabas; Mei Chen; Alan W Stitt; Tim M Curtis
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 872. doi:

Role of circulating acylated ghrelin in diabetic retinopathy OPEN ACCESS
Ernesto Marano; Maria Consiglia Trotta; Carlo Gesualdo; Francesco Petrillo; Anca Hermenean; Settimio Rossi; Michele D'Amico; Francesca Simonelli
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 873. doi:

Bioegineered 3D Blood-Retinal-Barrier Model Enhances Barrier Markers and Mfsd2a Expression Compared to Transwells OPEN ACCESS
Karen Yud Torrejon; Andrea M Unser; Hira Afzaal; Feryan Ahmed; Pujhitha Ramesh
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 874. doi:

Insulin-induced early worsening in diabetic retinopathy is mediated via disruption of

claudin-19 tight junctions in the RPE OPEN ACCESS
Karen Hernandez; Bela Anand-Apte
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 875. doi:

Identification of transcriptional changes that mediate permeability in response to both VEGF and cytokines OPEN ACCESS
Maximilian McCann; Andrius Kazlauskas
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 876. doi:

Activin attenuates VEGF-induced permeability by multiple mechanism that are determined by the duration of exposure to activin OPEN ACCESS
Basma Baccouche; Andrius Kazlauskas
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 877. doi:

Dysregulation of Nrxn1 in Early Diabetic Retinal Disease OPEN ACCESS
Eda Kusan Unlu; Ruth Marx-Rattner; Kaitlyn Clark; Valina L Dawson; Ted M Dawson; Mira Menon Sachdeva
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 878. doi:

Role of Lysyl Oxidase in the Mechanoregulation of Retinal Vascular Inflammation and Degeneration in diabetes OPEN ACCESS
Kaustabh Ghosh; Sathishkumar Chandrakumar; Irene Santiago Tierno; Mahesh Agarwal; Emma S Lessieur; Timothy S Kern
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 879. doi:

Single cell transcriptomics reveal the dynamic regulation of retinal Müller glial-expressed protective genes in response to diabetes OPEN ACCESS
Sui Wang
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 880. doi:

Actin remodeling governs neutrophil activation: Implications for retinal capillary degeneration in diabetic retinopathy. OPEN ACCESS
Mahesh Agarwal; Sathishkumar Chandrakumar; Irene Santiago Tierno; Emma M Lessieur; Timothy S Kern; Kaustabh Ghosh
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 881. doi:

Clinical Implications of Densiron 68 Endotemponade after Pars Plana Vitrectomy: A Systematic Review and Meta Analysis OPEN ACCESS
Karim Diranc; Jeff Park; Andrew Gregory; Ahsan Mir; Priya Sharma; Chaesik Kim; Daniel Juzych; Pradeepa Yoganathan
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 883. doi:

Comparison of Proliferative Vitreoretinopathy (PVR) between Mice and Rabbits OPEN ACCESS
Lichun Zhong
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 884. doi:

Peripapillary changes of Retinal Nerve Fiber Layer (RNFL) after a successful surgery for rhegmatogenous retinal detachment - 1 year results OPEN ACCESS
Anastasios Stavrakakis; Anastasia Vlachou; Pavlina Tsoka; Evaggelia Bagaki; Miltiadis Tsilimbaris
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 885. doi:

Evaporative Heavy Liquids for Retinal Tamponade OPEN ACCESS
Avnish Deobhakta; Richard B Rosen; Paul Lee; Harriet Lloyd
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 887. doi:

Effectiveness, safety, and practicality of robotic systems in eye surgery: A systematic review OPEN ACCESS
Arun James Thirunavukarasu; Monica L. Hu; William P. Foster; Kanmin Xue; Jasmina Cehajic Kapetanovic; Robert E MacLaren
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 888. doi:

Outcomes of Vitreoretinal Surgery for Retinal Detachment Associated with Retinal Hemangioblastoma in Von Hippel-Lindau Disease OPEN ACCESS
Fatima Rizvi; Asad Farooq Durrani; Hana A. Mansour; Anza Rizvi; Bita Momenaei; Carol Shields; Jose S. Pulido
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 889. doi:

Assessing functional retinal recovery in the treatment of large persistent Macular Holes by subretinal Autologous Internal Limiting Membrane Transplantation OPEN ACCESS
Nina Lucia Francesca Giudici; Hanna Camenzind-Zuche; Christian Pruente
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 890. doi:

Study of Aspiration Volumes of Back-flush Needle and Infusion Volumes of Vitrectomy Devices. OPEN ACCESS
Masaharu Mizuno; Takashi Koto; Kosuke Nakajima; Tomoka Ishida; Makoto Inoue
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 891. doi:

Treating Full-Thickness Macular Holes with peeled ILM reposition results in better preserved RNFL OPEN ACCESS
Warda Darwisch; André Maurice Trouvain; Dominik Weber; Philipp K Roberts; Kathi Savioli; Peter Szurman; Boris Victor Stanzel
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 892. doi:

Transcorneal Vitrectomy in Eyes with Regressed Retinoblastoma OPEN ACCESS
Yicheng Bao; Gisella Sanchez; Thomas C Lee; Jesse L Berry; Aaron Nagiel
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 893. doi:

In-Office Lens Repositioning for Anterior Crystalline Lens Dislocation OPEN ACCESS
Lindsay Klofas Kozek; Prasida Unni; Jonathan D Tijerina; Sandra Alhoyek; Caroline Cotton; Humberto Salazar; Kenneth Fan; Nimesh Arvind Patel
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 894. doi:

DEVELOPMENT OF A MICRONEEDLE FOR INTRAOPERATIVE CANNULATION OF RETINAL VESSELS OPEN ACCESS
Tongalp H Tezel; Aykut Aksit; David Koenigstein; Ahmet Hondur; Anil K Lalwani; Jeffrey W Kysar
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 895. doi:

Feasibility of a double dose of iPSC-RPE patch transplantation in a laser-induced RPE ablation swine model OPEN ACCESS
Juan Amaral; Irina Bunea; Mandeep Singh; ruchi Fnu; Jair Montford; Francesca Barone; Kristi Creel; Arvydas Maminishkis; Teresa Magone De Cuadros Costa; Amir H Kashani; Kapil Bharti
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 896. doi:

Real-time Optical Coherence Tomography overlay in Epiretinal Membrane Peeling for

Real-time Optical Coherence Tomography Overlay in Epiretinal Membrane Peeling for enhanced intraoperative visualization: A Pilot Study OPEN ACCESS
Keisuke Ueda; Amr Saad; Luca von Felten; Takashi Matsumoto; Ferhat Turgut; Gabor Mark Somfai; Matthias Becker
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 897. doi:

An exploratory study of vitrectomy with intravitreous ranibizumab instead of panretinal photocoagulation for vitreous hemorrhage from proliferative diabetic retinopathy OPEN ACCESS
Yong Wei
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 898. doi:

Subretinal Autologous Internal Limiting Membrane Transplantation for the repair of large persistent macular holes OPEN ACCESS
Christian Pruente; Hanna Camenzind-Zuche
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 899. doi:

Assessing vitreoretinal surgical training experience by leveraging instrument maneuvers and visual attention with deep learning neural networks OPEN ACCESS
Rogerio Nespolo; George R Nahass; Mahtab Faraji; Darvin Yi; Yannek Isaac Leiderman
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 900. doi:

Comparison of Traction Forces in Ex-situ Vitrectomy Using 25-Ga 20000 CPM Dual Blade Vitrectomy Probes and 25-Ga 10000 CPM Single Blade Vitrectomy Probes OPEN ACCESS
Brian McDonell; Ying Zhu; Kevin Phan; Vara Wuyyuru; Steve Charles
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 902. doi:

Vitrectomy Technique Modification Alters Intraocular Pressure Dynamics During Subretinal Bleb Formation OPEN ACCESS
Vahid Ownagh; Bo Hansen; Michelle McCall; Sandra S. Stinnett; Cynthia A Toth; Lejla Vajzovic
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 903. doi:

Posture and ergonomics of the cervical spine in vitroretinal surgery, a comparative study between 3D heads-up versus surgical microscope OPEN ACCESS
Pablo Alberto Juarez Vargas; Elsa Cynthia Hernandez Piñamora; Jans Fromow-Guerra; Alejandra Solana Sanchez; Andrea Gonzalez Ceballos; Virgilio Morales Catón; José Gerardo García Aguirre; Vidal Soberon Ventura; Guillermo Salcedo Villanueva
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 904. doi:

Autologous retinal transplantation in a porcine model of retinal hole OPEN ACCESS
Madeline Evers Olufsen; Jens Hannibal; David H. W. Steel; Grazia Pertile; Nina Buus Sørensen; Anders Tolstrup Christiansen; Jens F Kiilgaard
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 905. doi:

Short-term results of combinated surgery of vitrectomy and phacoemulsification with implantation of extended-depth-of-focus intraocular lens: A case series. OPEN ACCESS
Alfredo Ingratta; Fernando Sergio Pagani; Aníbal Andrés Francone; Rodrigo Albano; Martina Donoso; Maria Paz Cirillo; Tomas Castro Feijoo; Martin Charles; Maria Julia Minetto
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 906. doi:

New insight of residual Perfluorocarbon Liquid removal in vitreoretinal surgery OPEN ACCESS
Ying Chen; Wang Yee Chu; Zhongdui Long; Yau Kei Chan
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 907. doi:

Enhancing silicone oil removal efficiency: A comparative study of ultrasonic vitrectomy handpieces and conventional methods OPEN ACCESS
Grant Higgins; Asael Papour
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 908. doi:

User Interface for Bimanual Robotic System in Posterior Segment Surgery – Survey Study OPEN ACCESS
Aleksandra Goch; Kirsty Clarke; Ning Wang; Marco Anastasi; Marinko V Sarunic; Danail Stoyanov; Riaz Asaria; Agostino Stilli
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 909. doi:

Chorioretinal atrophy after treatment with Voretigene Neparvovec in clinical practice OPEN ACCESS
Michele Della Corte; Paolo Melillo; Clemente Maria Iodice; Valentina Di Iorio; Danila Pisani; Amelia Citro; Settimio Rossi; Mananthi Karali; Francesco Testa; Sandro Banfi; Francesca Simonelli
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 910. doi:

Retention rates of subretinal gene therapeutic agents based on AAV serotype 2 and 8 using different drug-delivery materials OPEN ACCESS
Felix Reichel; Peter Kiraly; Immanuel Philipp Seitz; M Dominik Fischer
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 911. doi:

41-gauge subretinal injection needle for surgical removal of submacular perfluorocarbon fluid. OPEN ACCESS
Stephania Chavez Cobian; Efrain Romo-Garcia; Amairani Tanairi Rodriguez de la Vega
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 912. doi:

Advancing Intraocular Surgery Analysis: A Tailored Video Annotation Tool for Enhanced Grading and AI Training OPEN ACCESS
James Xu; Josiah K To; Dakari Harris; Andrew Browne
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 913. doi:

Intraocular Pressure (IOP) Optimized Performance Settings with Posterior Adaptive Fluidics (PAF), and 25 Gauge 25,000 cpm Dual-Action Vitrectomy Cutters OPEN ACCESS
Asael Papour; Lester Hosten
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 914. doi:

Long-Term Efficacy of Genipin Cross-Linked Sclera Reinforcement in Maculoschesis: Visual Acuity and Reattachment Outcomes OPEN ACCESS
Anas Abu Said; Yanfeng Su; ShuangQian Zhu; ShiHao Chen
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 915. doi:

Effect of COVID-19 pandemic on surgical utilization, presentation and outcomes of pars-plana vitrectomy for complications of diabetic retinopathy within a county system. OPEN ACCESS
Weilin Song; Reza Kianian; Judy Figueroa; Jack B. Margines; Jiwei Sheng; Hamid Hosseini; Pradeep Prasad; Kirk Hou
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 916. doi:

Sutureless vitrectomy with removal of dense posterior capsule opacification in patients with vitreous floaters or macular pucker OPEN ACCESS
William Illiano; John Mason
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 917. doi:

Incidence of Management Changes on Postoperative Day One After Epiretinal Membrane Peel OPEN ACCESS
Hannah E Anderson; Fatima Rizvi; Anza Rizvi; Hana A. Mansour; Bita Momenaei; Sunir Garg
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 918. doi:

Long-term outcomes of pars plana vitrectomy without gas tamponade for myopic foveoschisis with foveal detachment OPEN ACCESS
Wenyi Tang
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 919. doi:

Three-Dimensional Quantitative Analysis of Macular Changes Related to Internal Limiting Membrane Peeling in Retinal Detachment Repair with Silicone Oil Tamponade OPEN ACCESS
Yung-Ray Hsu; Tzu-Han Hsieh
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 920. doi:

Efficacy of Pneumatic Retinopexy versus Vitrectomy with Scleral Buckle in Repairing Uncomplicated Rhegmatogenous Retinal Detachment OPEN ACCESS
Deborah Li; David Szanto; Emily R White; Nicholas Fazio; Khurram Chaudhary
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 921. doi:

Outcomes of Eyes with Retinoschisis-Related Retinal Detachment OPEN ACCESS
Bita Momenaei; Asad Farooq Durrani; Kristine Wang; Jason Hsu
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 922. doi:

Role of Oral Methotrexate in Preventing Proliferative Vitreoretinopathy and Retinal Re-detachment OPEN ACCESS
Effie Z Rahman; Charles Clifton Wykoff; David M Brown; Rajiv Shah
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 923. doi:

TP53 Arg72Pro polymorphism as a potential biomarker for functional prognosis in patients with retinal detachment: Insights from real-world clinical data and an experimental mouse model of... OPEN ACCESS
Salvador Pastor; NADIA REGINA CABELLO GALINDO; Eva M Sobas Abad; Rebeca Lapresa; Angeles Almeida; Jose-Carlos Pastor; RICARDO USATEGUI-MARTIN
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 924. doi:

From Injury to Ice: Examining the Return to Sport After Retinal Injuries in the National Hockey League OPEN ACCESS
Justin Pennington; Viren Rana; Brian Savoie; Gary Legault; David J Ramsey
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 925. doi:

Demographic variations among presentation and management of rhegmatogenous retinal detachments OPEN ACCESS
Ryan Duong; Michael Cusick
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 926. doi:

Postoperative Rhegmatogenous Retinal Detachment Following Vitrectomy and Subretinal Tissue Plasminogen Activator for Submacular Hemorrhage OPEN ACCESS
Jordan Safran; Bita Momenaei; Jonathan Lee Martin; Benjamin Crain; Hana A. Mansour; Collin Richards; Jason Hsu
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 927. doi:

Evaluation of outcomes of Recurrent Retinal detachment repair with use of perfluoro-n-octane as medium-term tamponade OPEN ACCESS
Manib Akanda; K V Chalam
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 928. doi:

12-Month Outcomes of Pneumatic Retinopexy for Primary Rhegmatogenous Retinal Detachment in a Japanese Cohort: a Multicenter Study OPEN ACCESS
HIROKO YAMADA; Hisanori Imai; Kunihiko Akiyama; Yasuyuki Sotani; Ken Watanabe; Takaaki Matsuki; Toru Noda; MAKOTO NAKAMURA
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 929. doi:

Intraocular Pressure Elevation After Pars Plana Vitrectomy for Rhegmatogenous Retinal Detachments. OPEN ACCESS
Jonathan Volkin; Nathan Grove; Lauren Arguinchona; Jennifer Patnaik; Leonard Seibold; Niranjan Manoharan
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 930. doi:

The Utility of Preoperative Gas Injection as an Adjunctive Therapy to Pars Plana Vitrectomy in the Repair of Rhegmatogenous Retinal Detachments OPEN ACCESS
Hyelin You; Meenakshisundaram Subramanian; K V Chalam
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 931. doi:

Vitreous hemorrhage following 27-gauge pars plana vitrectomy (PPV) for diabetic tractional retinal detachment (DM-TRD) OPEN ACCESS
Xiaoyu Cai; Ryan Duong; Naveen Ambati; Yevgeniy (Eugene) Shildkrot
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 932. doi:

Rhegmatogenous Retinal Detachment Complicated by Retinopathy of Prematurity at Scar Stage Requiring Multiple Surgeries OPEN ACCESS
Kazuhiko Umazume; Takuto Yamamoto; Kumiko Sone; Hiroshi Goto
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 933. doi:

Ndr2 kinase regulates the microglia inflammatory response in high glucose conditions OPEN ACCESS
Hélène M. Léger; Beatriz Fazendeiro; Antônio Francisco Ambrosio; Paulo Fernando Martins dos Santos
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 934. doi:

Liquid biopsy for proliferative diabetic retinopathy: single-cell transcriptomics (scRNA-seq) of human vitreous reveals inflammatory T cell signature OPEN ACCESS
Rachana Haliyur; David Parkinson; Jing Xu; Qiang Li; Yuanhao Huang; Jie Liu; Feiyang Ma; Johann Gudjonsson; Rajesh Rao
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 935. doi:

Targeting HSP: Tr1 Cell-Mediated Immune Tolerance to HSP60 Attenuates Neurodegeneration in Glaucoma OPEN ACCESS

Shuhong Jiang; Kin-Sang Cho; Eric F. Thee; Irvin Yi; Laila Carmen Prendergast; Ajay Ashok; Julie Chen; Li Pan; Maximilian Braun; Wai Lydia Tai; Sarita Pooranawattanakul; Kasim Gunes; Martine J Jager; Lucy Q Shen; Jianzhu Chen; Dongfeng Chen

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 936. doi:

Understanding Glaucoma Immunopathology by Building Retina-on-a-Chip OPEN ACCESS

Qin (Maggie) Qi; Kevin Liu; Eunice Park; Fiona Duong; Dongfeng Chen; Kin-Sang Cho; Maximilian Braun

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 937. doi:

Application of lineage tracing to signal cell sequencing (scSeq) to definitively discriminate retinal microglia from monocyte-derived macrophages (MDM) OPEN ACCESS

Phillip E Kish; Dejuan Kong; Sumathi Shanmugam; Heather Hager; Xuan An Le; Bing Ross; David N. Zacks; Steven F Abcouwer

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 938. doi:

Development of a novel *In vitro* platform to model the involvement of the immune system in AMD. OPEN ACCESS

Evangeline Monroe Foster; Peter Coffey; Emily Eden; Lyndon DaCruz; Sally Cowley; Amanda-Jayne Francis Carr

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 939. doi:

A clinical study evaluating biomarkers of immunosenescence in the progression of Age-Related Macular Degeneration (The Immuno AMD Study) OPEN ACCESS

Adnan Khan; Andrew Shapanis; Paul Skipp; Andrew Lotery

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 940. doi:

Insulin protects against progression of experimental glaucoma (EG) in nonhuman primates (NHP) OPEN ACCESS

Brad Fortune; Michaela Dunn; Grant Cull; Juan Reynaud; Dawn Jennings; Trinity Holthausen; Priya Chaudhary; Adriana Di Polo

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 941. doi:

A Randomized, Sham Controlled, Masked Phase II Study for Safety of Intravitreal Implantation of NT-501 Encapsulated Cell Therapy for the Treatment of Glaucoma: Adverse Events and Structur... OPEN ACCESS

Alexandria Dominguez; Gala Beykin; Mariana Nunez; Zac Wennberg Smith; George A. Cioffi; Jeffrey M Liebmann; Marzhan Atakulova; Davinder S. Grover; Jennifer Rinn; Alexus Schley; Jeffrey Louis Goldberg

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 942. doi:

PTEN knockout improves survival of transplanted human retinal ganglion cells OPEN ACCESS

Whitney Stuard Sambhanya; Aru Nagalingam; Jian Du; Will Yutzy; Thomas Vincent Johnson

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 943. doi:

A novel function of optineurin in axonal mitochondria transport for axon integrity and regeneration OPEN ACCESS

Yang Hu; Dong Liu; Hannah Webber; Fuyun Bian; Manjari Prakash; Liang Li; In Jee You; Xue Feng; Hang Yang; Liping Liu; Pingting Liu; Ming Yang; Haoliang Huang; Zdenek Lansky

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 944. doi:

Unveiling the Culprit: The Crucial Role of Amacrine Cells in Optic Nerve Injury OPEN ACCESS

Yiqing Li; Zhe Liu; Qi Zhang; Yehong Zhuo

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 945. doi:

Treatment with soluble Fas ligand prevents disease progression in the DBA/2J chronic mouse model of glaucoma OPEN ACCESS

Sarah Dickman; Anitha Krishnan; Bhupender Verma; Ann Marshak-Rothstein; Meredith S Gregory-Ksander

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 946. doi:

The deficiency of growth hormone releasing hormone receptor (GHRHR) promotes retinal ganglion cell survival in experimental optic neuropathies via the inhibition of ferroptosis OPEN ACCESS

Yan Tong; Jingna He; Poemen PM Chan; Clement C. Tham; Calvin C P Pang; WAI KIT CHU

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 947. doi:

Optogenetic activation of vascularized human retinal organoids OPEN ACCESS

Volker Busskamp; KRITIKA SHARMA; Rouhollah Habibey

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 948. doi:

A novel bioengineered RPE-choroid interface to study dry Age-related Macular Degeneration OPEN ACCESS

Giovanna Brancati; Mikhail Nikolaev; Asia Badolato; Christoph Oberst; Matthias Lutolf; J. Gray Camp; Lauriane Cabon; Heloisse Ragelle; Elod Kortvely

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 949. doi:

Device-free isolation of photoreceptors from patient stem cell derived retinal organoids OPEN ACCESS

Nicholas Edwin Stone; Laura R Bohrer; Nathaniel Kevin Mullin; Robert F Mullins; Edwin M Stone; Budd A. Tucker

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 950. doi:

Inhibition of BAX/BAK-mediated apoptosis promotes retinal ganglion cell maintenance in human retinal organoids OPEN ACCESS

Jingliang Simon Zhang; Robert Johnston

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 951. doi:

Survival and integration of organoid derived iPSC-RGCs into NHP tissue in an organotypic retinal explant culture system OPEN ACCESS

Joseph Leffler; Cátia Gomes; Melody Hernandez; Subramanian Dharmarajan; Priya Chaudhary; Brad Fortune; Yvonne Ou; Jason S Meyer; Benjamin Sivyer

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 952. doi:

Electric Fields Direct Growth of Human Embryonic Stem Cell-Derived Retinal Ganglion Cell Axons In Vitro. OPEN ACCESS

Gengle Niu; Timothy Silliman; Anahit Simonyan; Pooyan Pahavan; Gianluca Lazzi; Kimberly K. Gokoffski

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 953. doi:

GHOST-seq: Graft and Host Omics Studies to Improve Transplantation outcome within and outside the eye OPEN ACCESS

Petr Y Baranov; Emil Kriukov

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 954. doi:

Foveal avascular zone enlargement correlates with visual acuity decline in patients with diabetic retinopathy OPEN ACCESS
Brandon Duffy; Daniela Castellanos Canales; Nicole Decker; Taffeta Yamaguchi; Liz Pearce; Amani A Fawzi
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 955. doi:

Risk Factors for Diabetic Retinopathy and Neural Retinal Degeneration in Youth with Type 1 Diabetes OPEN ACCESS
Konstantina Sampani; Joyce Keady; Paolo S Silva; Lori Laffel; Lloyd P Aiello; Jennifer K Sun
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 956. doi:

Diabetic Retinopathy Lesion Types and Distribution on Ultrawide Field Imaging and the Risk of Disease Worsening Over Time OPEN ACCESS
Paolo S Silva
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 957. doi:

Oral APX3330, a Ref-1 Inhibitor, Slows Progression of Diabetic Retinopathy on a Binocular DRSS Person-Level Scale OPEN ACCESS
Daniel Su; Jay Stuart Pepose; Barbara Withers; Mitchell G Brigell; Audrey Lazar; Ronil Patel; George Magrath; Peter K Kaiser; David S Boyer
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 958. doi:

Outcomes of the HORNBILL study: a Phase I/IIa trial investigating BI 764524 in patients with diabetic macular ischemia OPEN ACCESS
Quan Dong Nguyen; Chirag Jhaveri; Maged S Habib; Elizabeth Pearce; Khaled Nassar; Bartlomiej Krawczyk; Martin Gliem; Sobha Sivaprasad
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 959. doi:

Ultra-Widefield Fluorescein Angiography (UWF-FA) Retinal Leakage and 4-year Diabetic Retinopathy Outcomes in DRCR Retina Network Protocol AA OPEN ACCESS
Justis P Ehlers; Sari Yordi; Alison Martin; Sunil K Srivastava
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 960. doi:

Effects of Intermittent Fasting on Gut Microbiota and Metabolome in a Murine Model of Diabetes OPEN ACCESS
Rangsheng Mei; Jacey Hongjie Ma; yiwen ou
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 961. doi:

Intra-arterial and Intravitreal Belinostat for the Treatment of Retinoblastoma OPEN ACCESS
Anthony B. Daniels
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 962. doi:

Aqueous humor anti-VEGF as a therapeutic biomarker in retinoblastoma OPEN ACCESS
Timothy William Corson
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 963. doi:

Applications of rare circulating biomarkers to rare cancers: circulating hybrid cells and uveal melanoma OPEN ACCESS
Alison Skalet
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 964. doi:

Collaborative partnership in translating discovery of a novel circulating neoplastic hybrid cell to patients with uveal melanoma OPEN ACCESS
Melissa Hirose Wong
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 965. doi:

Aqueous humor: a proximal organ liquid biopsy for ocular tumors - extending to new diseases and indications OPEN ACCESS
Jesse L Berry
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 966. doi:

Aqueous humor: a proximal organ liquid biopsy for ocular tumors - extending to new analytes and new ventures OPEN ACCESS
Liya Xu
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 967. doi:

Unveiling Glutaredoxin's Role in Aging: Accelerated Senescence and Impaired Lens Function in *Grx1/Grx2* Double Knockout Mice OPEN ACCESS
Hongli Wu; Jinmin Zhang; Yu Yu; Ying Qin
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 968. doi:

Tracking molecular aging and diabetic hyperglycemia in murine and human lenses by in vivo quasi-elastic light scattering spectroscopy eye scanning OPEN ACCESS
Lee E Goldstein; Douglas Parsons; Olga Minaeva; Juliet A Moncaster
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 969. doi:

Deficiency in lipid peroxidation suppressor Gpx4 results in neonatal cataract formation in mice OPEN ACCESS
Zongbo WEI; Caili Hao; Kazi Radeen; Xingjun Fan
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 970. doi:

Slc20a2 Phosphate Transporter Knockout Leads to Microphthalmia and Cataract Development in Mice OPEN ACCESS
Taishi Painter; Guangdu Jack Shang; Melissa Zhou; Chun-hong Xia; Xiaohua Gong
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 971. doi:

SH2B1 promotes diabetic cataract formation via P38MAPK signaling pathway-mediated apoptosis OPEN ACCESS
Xiaohui Jiang; Qiyuan Li
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 972. doi:

βA3ΔG91 Mice Develop Congenital Cataract and Show Autophagy Disruption OPEN ACCESS
Akosua Konadu Boateng; Roy Joseph; Om P Srivastava
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 973. doi:

Eil2 regulates expression of key lens genes in development, perturbation of which causes early-onset lens defects OPEN ACCESS

Sanjaya Kumar Shrestha; Sandeep Aryal; Archana Siddam; Francisco Hernandez; Salil Anil Lachke

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 974. doi:

SD-OCT Features and Macular Sensitivity in *ABCA4*-related Stargardt disease (STGD1) OPEN ACCESS

Yanzhao WANG; Folahan Adesola Ibukun; Elias Traboulsi; David G Birch; Janet S Sunness; Rupert Strauss; Isabelle S Audo; Michel Michaelides; SriniVas R Sadda; Hendrik P Scholl; Eberhart Zrenner; Michael S Ip; Artur V Cideciyan; Paul S Bernstein; Xiangrong Kong

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 975. doi:

Detection and analysis of the progression of Fundus Features in Neovascular Age-related Macular Degeneration in the Phase 2 Longitude Study on Color Fundus Photographs OPEN ACCESS

Hannah Khan; Syon Parashar; Andrea Arreguin; Dawn Sim; Carl G O Glittenberg; Siva Balasubramanian

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 976. doi:

Longitudinal Assessment of AMD using Ultrawide Field Imaging – The Optos PEripheral RetinA (OPERA) Study OPEN ACCESS

Colin Froines; Jeong W Pak; Jennifer Heathcote; Elvira Agron; Emily Y Chew; Tunde Peto; Barbara A Blodi; Amitha Domalpally

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 977. doi:

Geographic Atrophy Enlargement Using Manual, Semi-Automated, and Deep Learning Approaches OPEN ACCESS

Jacob Bogost; Apoorva Safai; Rachel E Linderman; Robert Slater; Rick Voland; Jeong W Pak; Donald S Fong; Barbara A Blodi; Amitha Domalpally

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 978. doi:

Imaging and clinical features of pulsatile polypoidal choroidal vasculopathy using optical coherence tomography and indocyanine green angiography OPEN ACCESS

Kwang-Eon Choi; Eungyu Yoon; Young Joo Lee; So Hyeon Bae; Cheolmin Yun

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 979. doi:

OCT-based AI-assisted phenotyping of intermediate AMD in the prospective PINNACLE trial OPEN ACCESS

Sophie Riedl; Julia Mai; Simon Schürer-Waldheim; Georg Faustmann; Hrvoje Bogunovic; Lars Fritsche; Toby Prevost; Daniel Rueckert; Hendrik P Scholl; Sobha Sivaprasad; Andrew Lotery; Ursula Schmidt-Erfurth

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 980. doi:

Variability of perilesional FAF patterns associated with automated OCT-based PR/RPE loss ratios in GA progression in the phase 3 OAKS/DERBY trials OPEN ACCESS

Julia Mai; Gregor Sebastian Reiter; Sophie Riedl; Wolf-Dieter Vogl; Amir Sadeghipour; Alex McKeown; Hrvoje Bogunovic; Ursula Schmidt-Erfurth

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 981. doi:

Clinical and Molecular Characterization of Corneal Neovascularization in Young versus Adult mice OPEN ACCESS

Mark Krauthammer; Antonio Esquivel Herrera; Akitomo Narimatsu; Seokjoo Lee; Sunil Chauhan; Reza Dana; Thomas H. Dohlman

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 982. doi:

Diabetic regulatory T Cells Enhances Suture-induced Corneal Neovascularization (CNV) OPEN ACCESS

Katayoon Forouzanfar; Akitomo Narimatsu; Francesca Kahale; Shima Dehghani; Seokjoo Lee; Rohan Bir Singh; Reza Dana; Tomas Blanco

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 983. doi:

Blockade of the hyaluronan receptor LYVE-1 hampers corneal dendritic cell emigration OPEN ACCESS

Felix Bock; Wei Zhang; David Jackson; Claus Cursiefen

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 984. doi:

CD4$^+$ T cells drive corneal nerve damage but are dispensable for corneal epitheliopathy development in the context of dry eye OPEN ACCESS

Alexia Vereertbrugghen; Manuela Pizzano; Agostina Cernutto; Florencia Sabbione; Irene Angelica Keitelman; Carolina Maiumi Shiromizu; Douglas Vera Aguilar; Federico Fuentes; Mirta Nilda Giordano; Analia Trevani; Cintia S De Paiva; Jeremias Gaston Galletti

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 985. doi:

Lactate crosstalk between neutrophils and effector T cells defines the level of Th1 versus Th17 subsets in herpes stromal keratitis (HSK) corneas OPEN ACCESS

Mashidur Rana; Mizumi Setia; Pratima Suvas; Anish Chakraborty; Susmit Suvas

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 986. doi:

The miR-183/96/182 Cluster Regulates Sensory Innervation, Resident Myeloid Cells and Functions of the Cornea Through Cell type-specific Target Genes OPEN ACCESS

Naman Gupta; Mallika Somayajulu; Katherine Gurdziel; Giovanni LoGrasso; Haidy Aziz; Sharon McClellan; Ahalya Pitchaikannu; Manoranjan Santra; Farooq Muhammed; Linda D Hazlett; Shunbin Xu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 987. doi:

In vivo examinations of the dendritic cell dynamics in the human cornea OPEN ACCESS

Sebastian Bohn; Elisabeth Wagner; Karsten Sperlich; Stephan Allgeier; Klaus-Martin Reichert; Oliver Stachs

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 988. doi:

Chromatic Swept-Source Corneal Confocal Microscopy OPEN ACCESS

Karsten Sperlich; Sebastian Bohn; Stephan Allgeier; Klaus-Martin Reichert; Heinrich Stolz; Rudolf F Guthoff; Oliver Stachs

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 989. doi:

Dual optical coherence tomography and microscopy for characterization of cystinosis in the cornea OPEN ACCESS

Cristina Canavesi; Andrea Cogliati; Hayley E. Chang; Landa Prifti; Alexander G. Solorzano; Kuan Hong Wang; Ed G. Freedman; John J. Foxe

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 990. doi:

Clinical applications of the novel Optical transmission tomography in anterior eye OPEN ACCESS

Wajdene GHOUALI; Samer Alhaddad; Viacheslav Mazlin; Antoine Labbé; Christophe Baudouin; Claude Boccara

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 991. doi:

In vivo assessment of corneal epithelial cells in orthokeratology lens wearers OPEN ACCESS

Patrice Tankam; Hadiya Farhath Pattan; Xiao Liu

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 992. doi:

Material Characterization of Corneal Cross-Linking Combining Inverse Finite Element Modeling and Varied Mechanical Tests OPEN ACCESS

Matteo Frigelli; Robert Lohmüller; Gunther R Schlunck; Stefan Lang; Philippe Büchler; Sabine Kling

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 993. doi:

In-vivo human corneal natural frequency dispersion OPEN ACCESS

Chaitanya Duvvuri; Manmohan Singh; Salavat Aglyamov; Kirill Larin; Michael D Twa

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 994. doi:

A Novel Artificial Neural Network to determine the Mechanical properties of the Human Corneal Tissue OPEN ACCESS

Elena Redaelli; Piermario Vitullo; Stefania Fresca; Jose Felix Rodriguez Matas; Paolo Zunino; Giulia Luraghi; Begoña Calvo; Jorge Grasa

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 995. doi:

Primary open angle glaucoma polygenic risk score can identify individuals at low risk of disease onset in the Ocular Hypertension Treatment Study OPEN ACCESS

Nazlee Zebardast; Sayuri Sekimitsu; Kanza Aziz; Yan Zhao; Rishabh Singh; John H Fingert; Mae O Gordon; Michael A Kass; Todd E Scheetz; Ayellet Segre; James D Brandt; Janey L Wiggs

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 996. doi:

A metabolome-wide analysis of intraocular pressure suggests neuroinflammatory mechanisms as possible mechanisms involved in glaucoma OPEN ACCESS

Pirro G Hysi; Ajda Pristavec; Anthony P Khawaja; Jospeh Bastasic; David A Mackey; Janey L Wiggs; Jamie E Craig; Louis R Pasquale; Christopher J Hammond; Marie-Hélène Roy-Gagnon

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 997. doi:

Machine learning based on prediagnostic metabolomic profiles identifies distinct subtypes of exfoliation glaucoma OPEN ACCESS

Akiko Hanyuda; Qiana A. Zelezniik; Yoshihiko Raita; Kazuno Negishi; Louis R Pasquale; Janey L Wiggs; Jae H Kang

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 998. doi:

Association of socioeconomic status, polygenic risk, and glaucoma OPEN ACCESS

Kelsey Vernon Stuart; Robert Luben; Alasdair N Warwick; Patrice Marie Hicks; Kian Madjedi; Peng Tee Khaw; Paul Foster; Anthony P Khawaja; Paula Anne Newman-Casey

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 999. doi:

Association of Ambient Particulate Matter (PM2.5) Exposure and Glaucoma Incidence: A Prospective UK Biobank Study OPEN ACCESS

Paul J Foster; Zihan Sun; Kelsey V Stuart; Robert Luben; Nicholas G strouthidis; Hari Jayaram; Peng Tee Khaw; Anthony Khawaja

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1000. doi:

Improving Glaucoma Clinical Trial Enrollment Using Eyes With Low Variability Visual Field Worsening OPEN ACCESS

Alex Pham; Louay Almidani; Patrick Herbert; Chris Bradley; Jithin Yohannan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1001. doi:

Prevalence and factors associated with persistent lack of glaucoma awareness across consecutive visits in a multi-ethnic Asian cohort: the Singapore Epidemiology of Eye Diseases Study OPEN ACCESS

Sahil Thakur; Miao Li Chee; Raghavan Lavanya; Can Can Xue; Qingsheng Peng; Zhi Da Soh; Yih Chung Tham; Ching-Yu Cheng

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1002. doi:

Visual crowding in infantile idiopathic nystagmus is not reduced by contrast-polarity differences or flicker. OPEN ACCESS

Vijay K Tailor; Tessa M Dekker; Annegret Dahlmann-Noor; Maria Theodorou; John Greenwood

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1003. doi:

Peripheral reading improvement after non-invasive electrical stimulation of early visual areas OPEN ACCESS

Andrew E Silva; Melanie Mungalsingh; Louise Raudzus; Benjamin Thompson

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1004. doi:

Rapid desensitization to retinally stabilized flickering stimuli OPEN ACCESS

Leah Johnston; Kaitlyn Paige Lee; Pavan Tiruveedhula; Austin Roorda

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1005. doi:

Vision within the Blind Spot: Rapid Quantification of Melanopsin Pathway Sensitivity OPEN ACCESS

JEFFREY C RABIN; Jewearly Lundby; Madison Brase; Ally Vu; Austin Millis; Grant Wood; Dorin Huq; Erica Poole; Emma Fenrich

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1006. doi:

Archetypal Analysis Demonstrates Visual Field Patterns of Loss and Evolution in Non-Arteritic Anterior Ischemic Optic Neuropathy OPEN ACCESS

David Szanto; Brian Woods; Jui-Kai Wang; Tobias Elze; Mona K Garvin; Louis R Pasquale; Randy H Kardon; Joseph Branco; Asala Erekat; Mark J Kupersmith

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1007. doi:

A Novel Test to Characterize Chromatic Sensitivity Across the Visual Field OPEN ACCESS

Christopher Wu; Bismark Owusu-Afriyie; Wendy Watkins Harrison; Daniel R Coates

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1008. doi:

White color perception on a two-photon infrared RGB display OPEN ACCESS

Pedro Gil Fernández; Juan Tabernero; Silvestre Manzanera; Christina Schwarz; Pablo Artal

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1009. doi:

Screening by Glaucoma Polygenic Risk Score to Identify Primary Open-Angle Glaucoma in Two Biobanks: an Interim Report OPEN ACCESS

Hetince Zhao; Louis R. Pasquale; Nazlee Zebardast; Rachel H. Lee; Kanza Aziz; David S Friedman; Thi Ha Vy; Ron Do; Ayellet Segre; Janey L Wiggs

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1010. doi:

Cross-ancestry genome-wide association study for intraocular pressure in 263,134 individuals provides novel insights into glaucoma pathogenesis OPEN ACCESS

Anthony P Khawaja; Mahantesh I Biradar; Kelsey V Stuart; Robert Luben; Zihan Sun; Timing Liu; Zihe Xu; Alasdair N Warwick; Richie Hu; Peng Tee Khaw; Paul Foster; Pirro G Hysi

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1011. doi:

Polygenic risk is associated with differential treatment response to SLT and medical therapy in treatment-naive glaucoma OPEN ACCESS

Jamie E Craig; Antonia Kolovos; Thi Thi Nguyen; Joshua Schmidt; Stuart L Graham; Alex W Hewitt; Owen Siggs; Stuart MacGregor; Mark Hassall

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1012. doi:

Multi-ancestry genome-wide association study of dry eye disease in the Million Veteran Program OPEN ACCESS

Jaxon Jade Huang; Bryan Gorman; Peter B. Barr; Christopher W. Halladay; Cari L. Nealon; Chris Chatzinakos; Michael Francis; Paul B Greenberg; Wen-Chih Wu; Saiju Pyarajan; Tim B. Bigdeli; Sudha K Iyengar; Neal S Peachey; Anat Galor

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1013. doi:

Connecting ocular and systemic health: Phenome- and genome- wide analyses of retinal layer thicknesses from optical coherence tomography imaging across >50k participants OPEN ACCESS

Seyedeh Maryam Zekavat; Saman Doroodgar Jorshery; Franziska G Rauscher; Katrin Horn; Sayuri Sekimitsu; Yusrah Shweikh; Satoshi Koyama; Vineet Raghu; Tobias Elze; Ayellet Segre; Janey L Wiggs; Lucian V Del Priore; Jay C. Wang; Markus Scholz; Pradeep Natarajan; Nazlee Zebardast

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1014. doi:

Genetic risk for open angle glaucoma subtypes is associated with specific visual field defect classes OPEN ACCESS

Sayuri Sekimitsu; Sophie Smith; Yan Zhao; Mohammad Eslami; Mengyu Wang; Tobias Elze; Ayellet Segre; Jae H Kang; Joni Turuten; Aarno Palotie; Joel Raemoe; Janey L Wiggs; Nazlee Zebardast

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1015. doi:

Identification of a new genetic loci associated with Primary Angle Closure Glaucoma OPEN ACCESS

Yunhua Loo; Wee Ling Chng; Zhehao Liu; Tin Aung; Chiea Chuen Khor; Zhenxun Wang

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1016. doi:

Comparison of retinal nerve fiber layer (RNFL) optical texture analysis (ROTA) versus RNFL thickness analysis for measurement of retinal nerve fiber layer defects in early glaucoma OPEN ACCESS

Jane Ho; Yawen Guo; Carmen Sze Ching Lo; Gilda Lai; Alexander Lam; Christopher Kai-Shun Leung

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1017. doi:

Influence of posterior pole curvature on the morphology of idiopathic macular hole OPEN ACCESS

Niroj Sahoo; Jay Chhablani; Mudit Tyagi; Ninan Jacob; Podili Srinivas Rao; Pathan Rahman Khan

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1018. doi:

Longitudinal Analysis of Ellipsoid Zone loss in patients with Retinitis Pigmentosa OPEN ACCESS

Kubra Sarici; Cesar Estrada Puente; Xiao Zhou; Ramiro S Maldonado

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1019. doi:

Ellipsoid Zone Recovery and Outer Nuclear Layer Changes Following IV Penicillin Treatment for Syphilitic Retinitis. OPEN ACCESS

Nitesh Mohan; Sumit Sharma; Michael Ramos; Matthew Schulgit; Kimberly Baynes; Careen Lowder; Justis P Ehlers; Sunil K Srivastava

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1020. doi:

A novel grid strategy for correlating focal macular anatomic changes with focal changes in choriocapillaris perfusion OPEN ACCESS

Farhan Hiya; Yuxuan Cheng; Mengxi Shen; Jianqing Li; Alessandro Berni; Gissel Herrera; Robert O'Brien; Giovanni Gregori; Ruikang K Wang; Philip J Rosenfeld

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1021. doi:

En Face OCT Imaging as a Stand-Alone Modality for Monitoring Disease Progression in Intermediate AMD OPEN ACCESS

Jeremy Liu; Mengxi Shen; Alessandro Berni; Gissel Herrera; Farhan Hiya; Omar El Mulki; Giovanni Gregori; Philip J Rosenfeld

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1022. doi:

The impact of the total macular hyperpigmentation on the onset of persistent choroidal hypertransmission defects in intermediate AMD OPEN ACCESS

Alessandro Berni; Mengxi Shen; Yuxuan Cheng; Gissel Herrera; Farhan Hiya; Jeremy Liu; Liang Wang; Jianqing Li; Omer Trivizki; Robert O'Brien; Giovanni Gregori; Ruikang K Wang; Philip J Rosenfeld

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1023. doi:

A Phase 1 First in Human Study of VP-001; a peptide conjugate of oligonucleotide designed to treat Retinitis Pigmentosa Type 11 patients OPEN ACCESS

Fred Chen; David G Birch; Carla Jackson; Anna Mills; Laura Florez; Jessica Nichols; Paula Cunningham; Janya Grainok; Adam Martin; Subrata Das; Sue Fletcher; Clare Guerrero; Sri Mudumba

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1024. doi:

Interim results for RGX-381: a first in human phase 1/2 clinical trial of AAV.CB7.hCLN2 gene therapy for CLN2 Batten disease-associated retinopathy OPEN ACCESS

Robert Henderson; Paul Gissen; Katrina Prise; Ayeesha Vithlani; Sarah Cornelius; Dermot Roche; Dorothy A Thompson; Nicholas Buss; Alexander Bailey; Falabella Paulo; Wei Chieh Huang; Jenna Burke; Christina Ohnsman

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1025. doi:

Safety, Tolerability, and Efficacy of Tinlarebant from the 24-Month Phase 2 study in Adolescent Patients Affected by Stargardt Disease OPEN ACCESS

John R Grigg; Fred Chen; Ta-Ching Chen; Robyn V Jamieson; Hendrik P Scholl; Michel Michaelides; Jana Zernant; Rando Allikmets; Quan Dong Nguyen; Nathan L Mata

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1026. doi:

Epiretinal placement of fibrin hydrogel-encapsulated adeno-associated virus transduces retinal pigment epithelium in the domestic pig OPEN ACCESS

Brittni Scruggs; Aubrey Berger; Francesca Zenti; Travis Knudsen; Matthew Hill; Evan Atherton; Emma Trnoic; Raymond Iezzi; Alan D Marmorstein

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1027. doi:

Efficient and therapeutic RPE prime editing *via* novel engineered virus-like particles OPEN ACCESS

Samuel Wang Du; Meirui An; Aditya Raguram; David Liu; Krzysztof Palczewski

Haplotype-based gene editing for the treatment of RP1-associated IRDs OPEN ACCESS
Raulas Krusnauskas; Qin Liu
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1029. doi:

Delivering large genes using adeno-associated virus (AAV) and the CRE-lox DNA recombination system OPEN ACCESS
Seongjin Seo; Poppy Datta; Kun Do Rhee; Rylee J Staudt; Jacob Thompson; Ying Hsu; Salma Hassan; Tyler Rankin; Arlene V Drack
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1030. doi:

Imaging the fine details of RGCs in mouse using visible-light OCT OPEN ACCESS
Hao Zhang
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1031. doi:

Retinal microglia, neuroinflammation, and glaucoma: towards new neuroprotective therapies OPEN ACCESS
Milica Margeta
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1032. doi:

Synaptic remodeling and glaucoma OPEN ACCESS
Yvonne Ou
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1033. doi:

Mechanotransduction: driver of the early response of retinal cells to ocular hypertension OPEN ACCESS
David Krizaj
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1034. doi:

Osteopontin drives retinal ganglion cell resiliency in glaucomatous optic neuropathy OPEN ACCESS
Xin Duan
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1035. doi:

Targeting neuronal mitochondria and metabolism for neuroprotection in glaucoma OPEN ACCESS
Pete Williams
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1036. doi:

Descemet stripping and automated endothelial keratoplasty (DSAEK) versus non-Descemet stripping and automated endothelial keratoplasty (nDSAEK) for bullous keratopathy:a 10-year follow-up OPEN ACCESS
Lisa Hokama; Kotomi Tajima; Masatoshi Hirayama; Shigeto Shimmura; Kazuno Negishi
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1037. doi:

Long-term outcomes after Femtosecond Laser-assisted Primary Pterygium Surgery OPEN ACCESS
Kenric Fan; Jodhbir S Mehta
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1038. doi:

Precision in IOL Calculation for Cataract Patients with Prior History of Combined RK and LASIK OPEN ACCESS
Amal Altaf; Muhammed Jaafar; Kenneth Han; Azraa Ayesha; Soroush Omidvarnia; Isabella Stoakes; Majid Moshirfar
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1039. doi:

Structural and Functional Changes of Binocular Corneal Innervation and Ocular Surface Function After Unilateral Refractive Suregry OPEN ACCESS
Qianwen Gong; Liang Hu
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1040. doi:

Automated method for effective optical zone analysis OPEN ACCESS
Maren-Christina Blum; Hamed Haidari; Victor Derhartunian; Samuel Arba Mosquera
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1041. doi:

Removal of Corneal Specular Reflection with Pulsed LED Illumination OPEN ACCESS
Li Chen; Jianming Xu; Richard Hofer
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1042. doi:

Optimization of spot spacings for reducing roughness in laser induced optical breakdown processes for corneal laser vision correction OPEN ACCESS
Samuel Arba Mosquera; Helen Amann
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1043. doi:

Corneal Mechanical Sensitivity By Non-Contact Brill Engines Esthesiometer changes after PRK, LASIK and SMILE OPEN ACCESS
Arturo J Ramirez-Miranda; Arturo Manuel-Garcia; Guillermo Raul Vera-Duarte; Alejandro Navas; Enrique O Graue-Hernandez
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1045. doi:

Corneal stroma analysis and related ocular manifestations in recovered COVID-19 patients. OPEN ACCESS
Jing Zhuang; Yuke Huang; Xi Chen; Taiwei Chen; Xiao Wang; Jingyi Jiang; Yan Li; Keming Yu
Investigative Ophthalmology & Visual Science June 2024, Vol.65, 1046. doi:

iovs Investigative ophthalmology & visual science
Follow @ARVOiovs
IOVS Home
Issues
ARVO JOURNALS
Investigative Ophthalmology & Visual Science
JOURNALS HOME
TOPICS


Topics
For Authors
About
Editorial Board
Journal of Vision
Translational Vision Science & Technology
ABOUT ARVO JOURNALS
Rights & Permissions
Privacy Statement
Advertising
Submit a Manuscript
Disclaimer
Contact Us
ARVO.org
ARVO
The Association for Research in Vision and Ophthalmology
Powered by
SILVERCHAIR
INFORMATION / SYSTEMS

Free for ARVO members
Frontiers in ocular gene therapy research
Virtual Conference | Nov. 13 – 14 | ARVO.org/gene-therapy
ARVO



June 2024
Volume 65, Issue 7
ISSUE

OPEN ACCESS

ARVO Annual Meeting Abstract | June 2024

Gildeuretinol Enables the Vitamin A Cycle

Hendrik P Scholl; Leonide Saad; Gabrielle DeBartolomeo; Neil M Bressler; Stephen H Tsang; Kimberly E Stepien; Paul S Bernstein; Byron L Lam; Michael B Gorin; Ilyas Washington; Christine Nichols Kay

+ Author Affiliations & Notes

Investigative Ophthalmology & Visual Science June 2024, Vol.65, 6438. doi:

91 Views
View Metrics
Advertisement

SHARE TOOLS

Abstract

Purpose : Gildeuretinol (formally ALK-001 and C20D3-Vitamin A) is a vitamin A substitute, designed to inhibit the pathological dimerization of vitamin A, a process thought to contribute to the development of Stargardt disease and blindness. We hypothesized that gildeuretinol could effectively replace retinol (vitamin A) in the vitamin A cycle to enable dark adaptation and vision.

Methods : In a multicenter double-masked, placebo-controlled, randomized clinical trial, subjects with Stargardt disease were assigned to gildeuretinol acetate 14 mg capsules, gildeuretinol acetate 24 mg capsules, or placebo capsules, taken once daily orally for 8 weeks. Plasma retinol and gildeuretinol levels were determined at 8 weeks. We evaluated mean change from baseline at 8 weeks in dark adaptation parameters, as measured by full field, psychophysical dark-adaptation testing acquired on an Espion 3. A six-question dark adaptation questionnaire was administered at baseline and week 8.

Results : Fifty-three patients were screened; 50 were assigned to gildeuretinol 14 mg capsule (n =15), gildeuretinol 24 mg capsule (n =15) or placebo capsule (n = 20). At the 8-week pharmacokinetic analysis, 87% and 92% of plasma vitamin A was in the form of gildeuretinol in the 14 and 24 mg cohorts, respectively. Because both treated cohorts had the same percentage of plasma gildeuretinol, the two doses were pooled for outcome analyses. Thirty nine patients underwent dark adaptation measurements (gildeuretinol n=21 and placebo n=18). We found no difference in dark adaptation parameters between gildeuretinol-treated and placebo cohorts (Table 1), despite plasma retinol being approximately 10% that of normal levels in the gildeuretinol cohort, normally defined as severe vitamin A deficiency. Forty-nine patients answered the dark adaptation questionnaire. There were no reported difficulty seeing at night or in dim light associated with gildeuretinol. There were no adverse events associated with gildeuretinol intake.

Conclusions : Gildeuretinol effectively substituted retinol, and enabled dark adaptation and vision just as retinol would in the vitamin A cycle. Gildeuretinol holds promise as a disease-modifying therapeutic that addresses the underlying cause of Stargardt disease, with the safety profile of a vitamin.

This abstract was presented at the 2024 ARVO Annual Meeting, held in Seattle, WA, May 5-9, 2024.

Parameter (relative units)	Gildeuretinol (n = 21)	Placebo (n = 18)	Difference	p-value
Cone threshold	0.017	-0.009	0.027 (0.1411)	0.852
Cone coefficient	0.211	-0.78	0.991 (1.2223)	0.426
Cone time constant	-2.442	-2.496	0.054 (2.0337)	0.979
Second rod recovery rate	-0.071	-0.657	0.586 (0.4894)	0.246
Cone rod breakpoint	0.169	1.048	-0.879 (0.5218)	0.104
Third rod recovery rate	0.077	0.622	-0.545 (0.4680)	0.258
Rod-rod breakpoint	-0.078	-0.056	-0.022 (0.5342)	0.967

View Original Download Slide

Table 1. Dark adaptation parameters, during 60 minutes of dark adaptation. P-value as determined from a two-sample t-test with unequal variances.

This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.


IOVS Home
Issues
Topics
For Authors
About
Editorial Board
Online ISSN: 1552-5783
Investigative Ophthalmology & Visual Science
Journal of Vision
Translational Vision Science & Technology
JOURNALS HOME
TOPICS
ABOUT ARVO JOURNALS
Rights & Permissions
Privacy Statement
Advertising
Submit a Manuscript
Disclaimer
Contact Us
ARVO.org
ARVO
The Association for Research in Vision and Ophthalmology
Powered by
SILVERCHAIR
INFORMATION / SYSTEMS
Copyright © 2024 Association for Research in Vision and Ophthalmology



WITH MORE THAN 30,000 PEOPLE IN THE U.S. STARGARDT DISEASE IS MORE COMMON THAN OTHER GENETIC DISEASES SUCH AS CF, PKU AND SMA

Of the six most common genetic, autosomal recessive diseases, Stargardt disease is the only one without a treatment.

Disease	US Patients	Incidence
Alpha-1 antitrypsin deficiency (A1AT)	~100,000	~3:10,000
Sickle cell disease (SCD)	~90,000	1:500-1,200 births
Stargardt disease* (STGD1)	>30,000	~1:8,000
Cystic fibrosis (CF)	30,000	~1:3,500 births

Phenylketonuria (PKU)	16,500	~1:16,000
Spinal muscular atrophy (SMA)	9,000	~1:8,000 births

*Reference: Worldwide carrier frequency and genetic prevalence of autosomal recessive inherited retinal diseases, 2019. Approximately 5% of the population is a carrier for an ABCA4 variant

THE ROOT CAUSE: DEFECTS IN THE ABCA4 GENE

Sight is made possible by a biochemical chain reaction in the eye: Vitamin A enables photoreceptors in the eye to convert light into electrical signals that are sent to the brain. Vitamin A is essential to the eye's ability to see but also has a propensity to form dimers – or clumps – that are toxic to retinal pigment epithelium (RPE) layer.

Mutations in the *ABCA4* gene were identified as the cause of Stargardt disease in 1997. The normal role of the ABCA4 protein is to ensure the flow of n-retinylidene-PE, a vitamin A isomer, through the photoreceptor membrane.

In Stargardt patients the ABCA4 protein is defective or absent, which allows excess vitamin A concentration and dimerization, and results in toxic by-products that irreversibly damage the RPE layer, **leading to progressive vision loss.**

GILDEURETINOL (ALK-001), A ONCE-A-DAY ORAL, INVESTIGATIONAL THERAPY FOR THE TREATMENT OF STARGARDT DISEASE

Gildeuretinol (ALK-001) is the first and only medicine in clinical development to selectively address the underlying mechanism of Stargardt disease, by reducing the rate of vitamin A dimerization in the eye.

Toxic vitamin A aggregates ("dimers") have been implicated in the pathophysiology of Stargardt and dry-AMD. Gildeuretinol is a chemically-modified vitamin A and is taken once daily by mouth.

In *in vitro* studies, researchers have demonstrated that gildeuretinol slowed dimerization of vitamin A by 4-5 fold, and in *in vivo* models, gildeuretinol has reduced vitamin A dimer formation in the eye by 80%, leading to preservation of visual function in animal models of Stargardt disease.

Gildeuretinol was designed to perform all of the functions of vitamin A needed to support sight, but without the tendency to dimerize or clump, thus avoiding the toxic by-products that damage the retina. Researchers engineered gildeuretinol as a novel, selectively modified version of vitamin A, where three hydrogen atoms are replaced with deuterium atoms, a stable, non-radioactive isotope of hydrogen. This modification is what dramatically reduces the



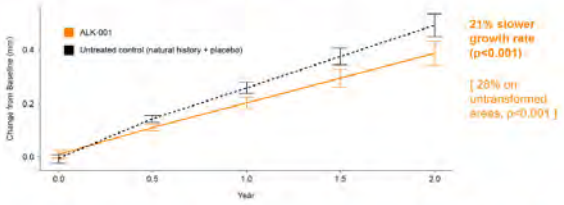
PUBLICATIONS

rate of dimerization.

GILDEURETINOL CLINICAL RESULTS: A FIRST FOR STARGARDT PATIENTS

In 2022, clinical investigators reported results from a double-masked, placebo-controlled, randomized Phase 2 study of gildeuretinol (ALK-001) in 50 patients with advanced Stargardt disease at the American Academy of Ophthalmology.

GILDEURETINOL SLOWS THE GROWTH RATE OF ATROPHIC LESIONS IN STARGARDT PATIENTS

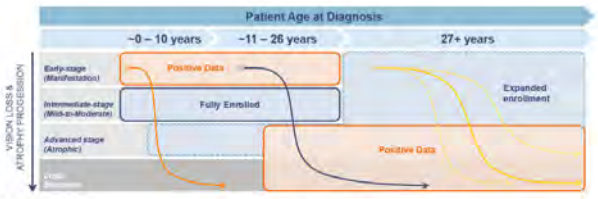


Gildeuretinol met the pre-specified primary efficacy endpoint with high statistical significance, with a consistent trend of clinical benefit seen in secondary efficacy analyses.

In the clinical trial known as TEASE-1, gildeuretinol dosed once a day resulted in decreased retinal damage as compared to placebo, based on observed growth rates in atrophic lesions as measured by fundus autofluorescence (FAF). Gildeuretinol was well-tolerated with a safety profile consistent with the well-characterized safety profile of vitamin A.

In addition, an innovative, open-label study in children, known as TEASE-3, has indicated an ability for gildeuretinol, when given early, to halt the disease process before progressive retinal damage and vision loss occurs. Results from this clinical trial are anticipated to be presented in an upcoming medical forum.

ALKEUS' CLINICAL PROGRAM WITH GILDEURETINOL IS DESIGNED TO SUPPORT BROAD USE IN STARGARDT DISEASE



References: Visual acuity loss and clinical observations in a large series of patients with Stargardt disease, 2003.
Visual Acuity Change over 12 Months in the Prospective Progression of Atrophy Secondary to Stargardt disease (ProgStar) Study, 2016.

Four clinical trials of gildeuretinol in Stargardt Disease are ongoing or completed, with the first two data readouts demonstrating positive clinical efficacy data.

PURSUING A RAPID PATH TO MARKET

The U.S. FDA has granted Breakthrough Therapy Designation and Orphan Drug Designation to gildeuretinol (ALK-001) for the treatment of Stargardt disease. Alkeus is engaged in discussions with regulatory authorities to define the most appropriate path to bring gildeuretinol to Stargardt disease patients as rapidly as possible. Alkeus plans to submit an NDA for approval of gildeuretinol in Stargardt disease in 2024.

BROAD POTENTIAL TO TREAT EYE DISEASE

The pathological features of Stargardt disease—lesions in the retinal pigmental epithelium (RPE) layer, visible using high-resolution optical imaging —are common across several degenerative eye diseases.

There is mounting scientific evidence that the same process—excessive vitamin A dimerization, leading to toxic by-products that irreversibly damage photoreceptors in the retina—drives the progressive lesion growth not just in Stargardt disease but in these other diseases as well.

In addition to Stargardt disease, gildeuretinol is being evaluated in *Geographic Atrophy (GA)*, an advanced form of dry age-related macular degeneration (dry AMD). More than 1 million people in the United States and more than 5 million people worldwide have GA.



Dry AMD is common in people over the age of 50. In dry AMD, layers of the retina slowly deteriorate over time. GA may occur in later-stage dry AMD patients, and is characterized by discrete areas of damage to the RPE layer, which leads to a progressive decline in central vision.

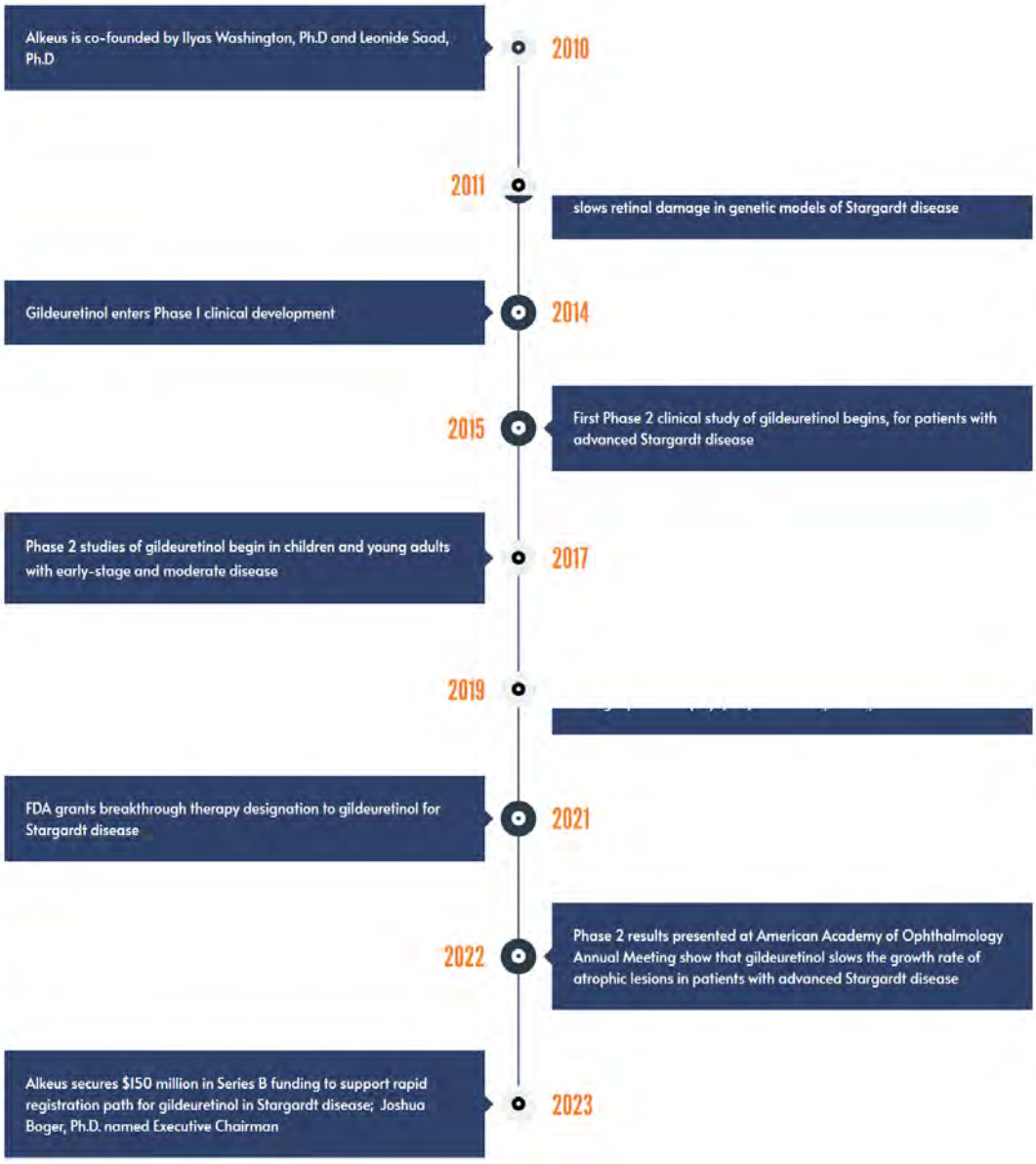
Although multiple mechanisms are associated with dry AMD and GA, it is clear that the toxic by-products of vitamin A are significant drivers of damage to the RPE layer.

In 2019, Alkeus initiated a Phase 3 study of gildeuretinol in Geographic Atrophy, with a primary goal of measuring ALK-001's ability to slow the growth rate of GA lesions. The trial is fully enrolled with 200 patients.

ABOUT ALKEUS

Alkeus was co-founded by Leonide Saad, Ph.D. and Ilyas Washington, Ph.D. with the goal of treating degenerative eye diseases in a completely new way: developing a molecule that could reduce the potential for toxicity when vitamin A dimerizes — clumps —in the eye. This dimerization is a key underlying contributor to the irreversible retinal damage that is common to a number of eye diseases.

Alkeus has steadily progressed its lead molecule gildeuretinol (ALK-001), demonstrating its tremendous promise and advancing a comprehensive clinical program.



ALKEUS TEAM

Leadership | Board of Directors



MICHEL DAHAN
President and Chief Executive Officer
Read Bio



TAMARA DILLON
Chief Human Resources Officer
Read Bio



SEEMI KHAN, M.D., M.P.H., M.B.A.
Chief Medical Officer
Read Bio



LEONIDE SAAD, PH.D.
Co-Founder and Chief Scientific Officer
Read Bio



DAVID SETBOUN, PHARM.D., M.B.A.
Chief Operating Officer
Read Bio



ERIC L. TRACHTENBERG, J.D., M.B.A.
Chief Legal Officer
Read Bio



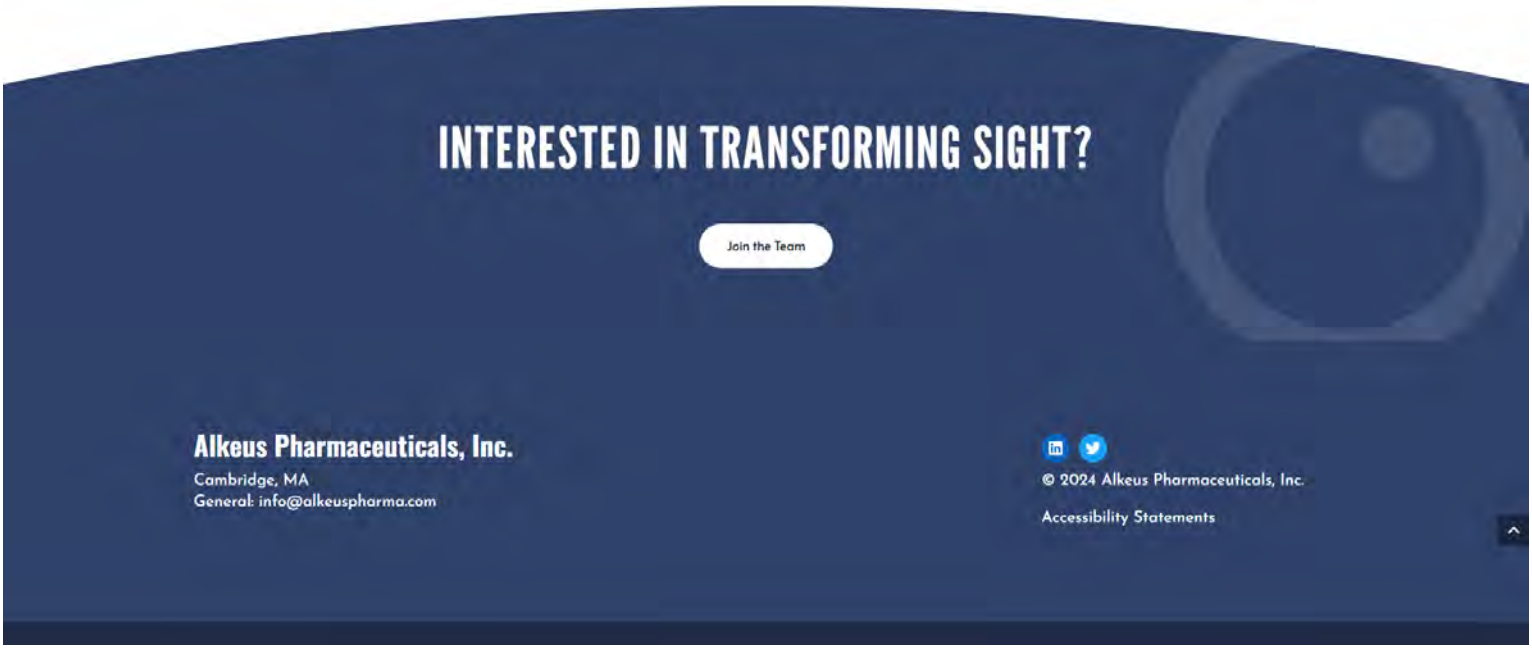
ILYAS WASHINGTON, PH.D.
Co-Founder
Read Bio

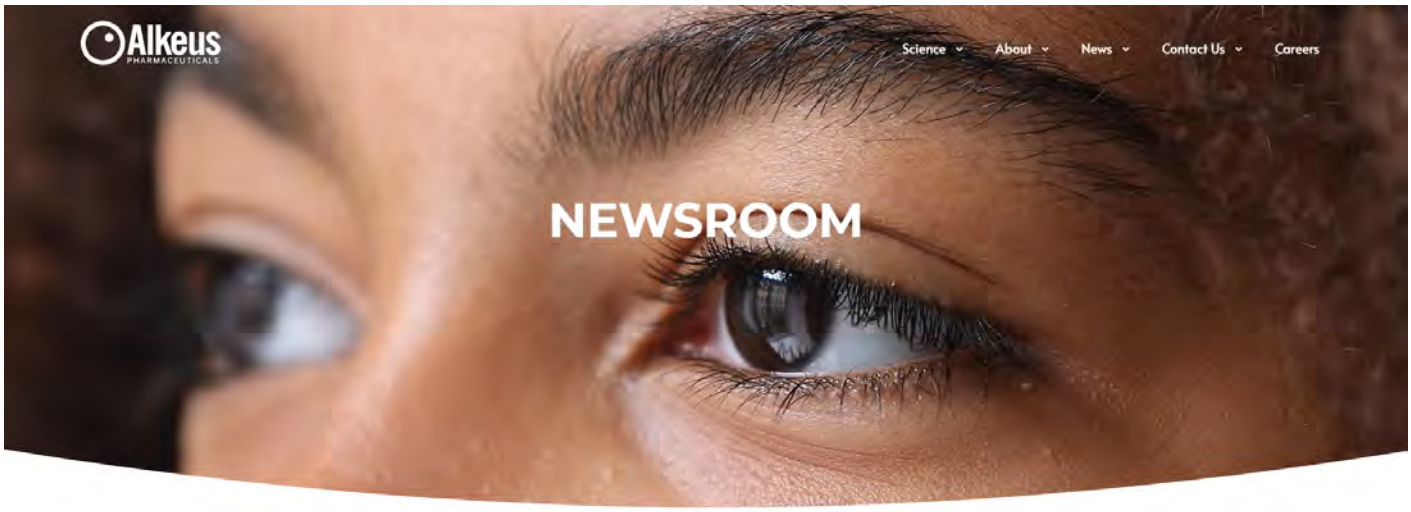
SEE LATEST NEWS

Alkeus Pharmaceuticals Announces Results from the SAGA Study of Oral Gildeuretinol in Patients with Geographic Atrophy Secondary to Age-Related Macular Degeneration
September 17, 2024 | Press Release

Alkeus Pharmaceuticals Announces Presentation of a TEASE-3 Study Update Showing Progression Stalled in Early-Stage Stargardt Disease Patients Treated with Gildeuretinol
July 18, 2024 | Press Release

Alkeus Pharmaceuticals Appoints Tamara Dillon as Chief Human Resources Officer
July 16, 2024 | Press Release


INTERESTED IN TRANSFORMING SIGHT?
Join the Team
Alkeus Pharmaceuticals, Inc.
Cambridge, MA
General: info@alkeuspharma.com
© 2024 Alkeus Pharmaceuticals, Inc.
Accessibility Statements



PRESS RELEASES | PUBLICATIONS

September 17, 2024

Alkeus Pharmaceuticals Announces Results from the SAGA Study of Oral Gildeuretinol in Patients with Geographic Atrophy Secondary to Age-Related Macular Degeneration

CAMBRIDGE, Mass., – Alkeus Pharmaceuticals, Inc. today announced that the SAGA study of oral gildeuretinol acetate (ALK-001) in patients with geographic atrophy (GA) secondary to age-related macular degeneration (AMD) demonstrated a reduction of 0.25 sqmm/year vs. placebo (p=0.07) in the primary endpoint of GA lesion growth rate at 24 months. Gildeuretinol demonstrated a statistically significant reduction in the loss of low luminance visual acuity (LLVA) at 24 months (p=0.03). Gildeuretinol showed a favorable safety profile consistent with other studies of gildeuretinol in Stargardt disease. The topline results will be presented as a late breaker at the 128th Annual Meeting of the American Academy of Ophthalmology (AAO) during Retina Subspecialty Day on Friday, October 18, in Chicago.

Learn More >

July 18, 2024

Alkeus Pharmaceuticals Announces Presentation of a TEASE-3 Study Update Showing Progression Stalled in Early-Stage Stargardt Disease Patients Treated with Gildeuretinol

CAMBRIDGE, Mass. – Alkeus Pharmaceuticals, Inc. today announced the presentation of interim data from its TEASE-3 study demonstrating that early-stage Stargardt disease patients treated with gildeuretinol acetate showed no disease progression and remained asymptomatic while on therapy ranging between two and six years. The study update was presented during the 42nd American Society of Retina Specialists (ASRS) Annual Scientific Meeting, being held July 17-20 in Stockholm, Sweden.

Learn More >

July 16, 2024

Alkeus Pharmaceuticals Appoints Tamara Dillon as Chief Human Resources Officer

CAMBRIDGE, Mass., – Alkeus Pharmaceuticals, Inc. today announced that Tamara Dillon has joined the company as Chief Human Resources Officer.

Learn More >

July 2, 2024

Accomplished Biotech Leader Michel Dahan Joins Alkeus as President and CEO

CAMBRIDGE, Mass. – Alkeus Pharmaceuticals, Inc. announced today that Michel Dahan has joined the

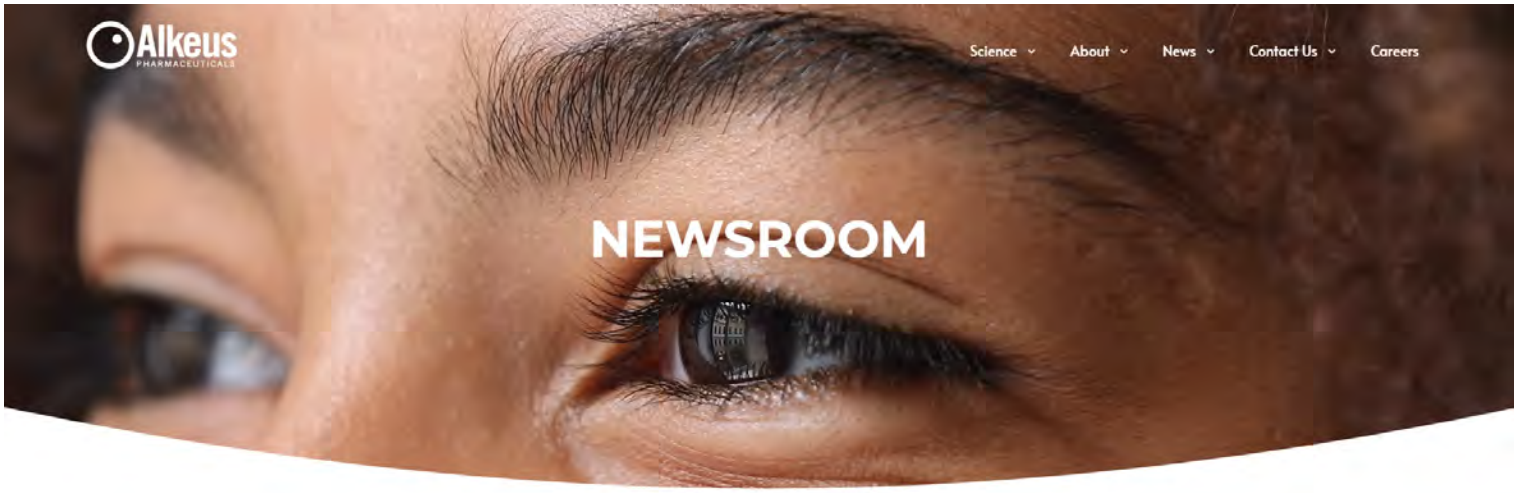
company as President and Chief Executive Officer and will be responsible for leading the organization's growth in preparation for commercial launch of its lead asset, gildeuretinol acetate, as a potential treatment for Stargardt disease. Alkeus Co-Founder Leonide Saad, Ph.D., has been named Chief Scientific Officer and will remain an integral part of the company's continued development of novel treatments for serious diseases of the eye.

Learn More >

Alkeus Pharmaceuticals, Inc.
Cambridge, MA
General: info@alkeuspharma.com

© 2024 Alkeus Pharmaceuticals, Inc.

Accessibility Statements



PRESS RELEASES | PUBLICATIONS

November 29, 2021

Alkeus Pharmaceuticals to Present at the 4th Annual Evercore ISI HealthCONx Conference

CAMBRIDGE, Mass. – Alkeus Pharmaceuticals, Inc. a late-stage biopharmaceutical company developing a novel treatment for Stargardt disease and geographic atrophy secondary to age-related macular degeneration, today announced that Leonide Saad, Chief Executive Officer of Alkeus Pharmaceuticals, is scheduled to participate in a virtual fireside chat at the 4th Annual Evercore ISI HealthCONx Conference, on Wednesday, December 1 at 4:45pm Eastern Time.

Learn More >

July 14, 2021

FDA Grants Alkeus Pharmaceuticals Breakthrough Therapy Designation for ALK-001 (C20-D3-vitamin A) for the Treatment of Stargardt Disease

SOMERVILLE, Mass. – Alkeus Pharmaceuticals, Inc. a private, late-stage biopharmaceutical company, today announced that the U.S. Food and Drug Administration (FDA) has granted Breakthrough Therapy Designation to ALK-001 for the treatment of Stargardt Disease.

Learn More >

Prev | 1 | ... | 3 | 4

Alkeus Pharmaceuticals, Inc.
Cambridge, MA
General: info@alkeuspharma.com

© 2024 Alkeus Pharmaceuticals, Inc.

Accessibility Statements

PRESS RELEASE

FDA Grants Alkeus Pharmaceuticals Breakthrough Therapy Designation for ALK-001 (C20-D3-vitamin A) for the Treatment of Stargardt Disease

Download Press Release

For all inquiries, please contact:

David Setboun, PharmD, MBA
Chief Operating Officer
media01@alkeuspharma.com

- Only drug to receive Breakthrough Therapy Designation for Stargardt Disease
- Alkeus Pharmaceuticals to discuss next steps toward filing an NDA with the FDA
- Ongoing clinical trial of ALK-001 in dry age-related macular degeneration

SOMERVILLE, Mass., Jul. 14, 2021 – Alkeus Pharmaceuticals, Inc. a private, late-stage biopharmaceutical company, today announced that the U.S. Food and Drug Administration (FDA) has granted Breakthrough Therapy Designation to ALK-001 for the treatment of Stargardt Disease.

ALK-001 (C20-D3-vitamin A) is a chemically-modified form of vitamin A developed to treat multiple retinal degenerative diseases. The investigational treatment is taken as a once-a-day. Clinical data indicates that ALK-001 safely slows the progression of Stargardt while preserving the normal visual cycle. ALK-001 is the only drug to receive Breakthrough Therapy Designation for Stargardt Disease.

Stargardt disease is a progressive inherited retinal degenerative disease that causes irreversible vision loss leading to blindness. An estimated 40 to 60,000 people in the United States have this rare and serious condition. Symptoms typically begin in childhood or adolescence. There is currently no approved therapy for Stargardt disease. Almost everyone diagnosed with the disease will become legally blind.

"Obtaining Breakthrough Therapy Designation is a transformative milestone in Stargardt disease," said Leonide Saad, PhD, CEO of Alkeus Pharmaceuticals. "The results from our Phase 2 trial provide a strong basis for regulatory filing and approval of ALK-001 for the treatment of Stargardt disease. We look forward to working with the FDA and other regulatory agencies so that we can bring ALK-001 to patients as quickly as possible."

The FDA granted ALK-001 Breakthrough Therapy Designation after reviewing data from Alkeus Pharmaceuticals' Phase 2, double-masked, randomized, placebo-controlled trial in Stargardt disease. Data from the trial and other ongoing studies are expected to be reported later in the year. Breakthrough Therapy Designation is a process designed by the FDA to expedite the development and review of promising experimental drugs. Previously, the FDA granted ALK-001 Orphan Drug Designation.

Clinical trials for ALK-001 are also underway for patients with dry age-related macular degeneration (AMD). AMD is the number one cause of unpreventable blindness in the USA. Information about clinical trials and expanded access (compassionate use) can be found on the company's website at www.alkeuspharma.com.

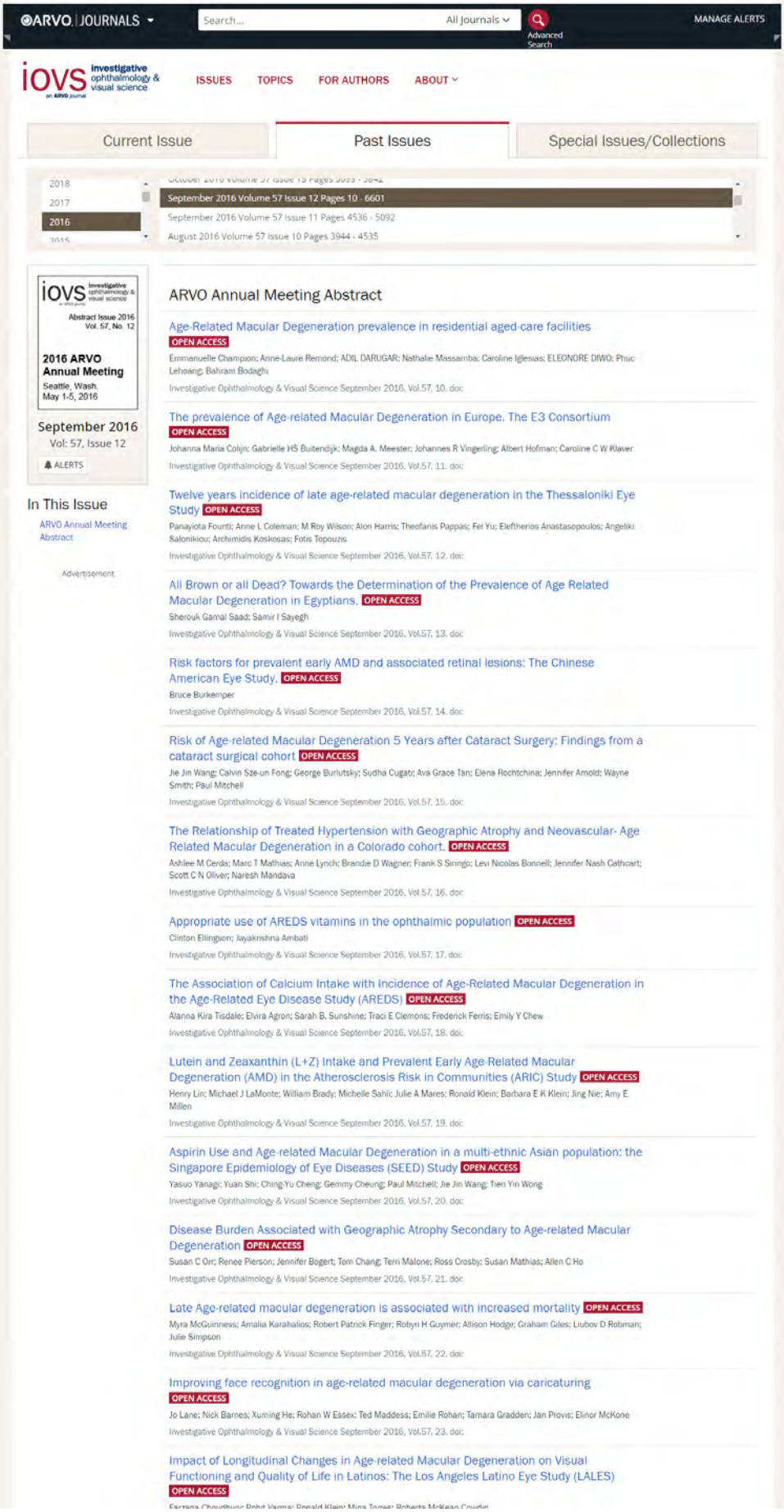
INTERESTED IN TRANSFORMING SIGHT?

Join the Team

Alkeus Pharmaceuticals, Inc.
Cambridge, MA
General: info@alkeuspharma.com

© 2024 Alkeus Pharmaceuticals, Inc.


Accessibility Statements


ARVO | JOURNALS
Search...
All Journals
Advanced Search
MANAGE ALERTS
iovs investigative ophthalmology & visual science
ISSUES
TOPICS
FOR AUTHORS
ABOUT
Current Issue
Past Issues
Special Issues/Collections
2018
2017
2016
September 2016 Volume 57 Issue 12 Pages 10 - 6601
September 2016 Volume 57 Issue 11 Pages 4536 - 5092
August 2016 Volume 57 Issue 10 Pages 3944 - 4535
iovs investigative ophthalmology & visual science
Abstract Issue 2016
Vol. 57, No. 12
2016 ARVO Annual Meeting
Seattle, Wash.
May 1-5, 2016
September 2016
Vol: 57, Issue 12
ALERTS
In This Issue
ARVO Annual Meeting Abstract
Advertisement
ARVO Annual Meeting Abstract
Age-Related Macular Degeneration prevalence in residential aged-care facilities
OPEN ACCESS
Emmanuelle Champion; Anne-Laure Remond; ADIL DARUGAR; Nathalie Massamba; Caroline Iglesias; ELEONORE DIWO; Phuc Lehoang; Bahram Bodaghi
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 10. doi:
The prevalence of Age-related Macular Degeneration in Europe. The E3 Consortium
OPEN ACCESS
Johanna Maria Colijn; Gabrielle HS Buitendijk; Magda A. Meester; Johannes R Vingerling; Albert Hofman; Caroline C W Klaver
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 11. doi:
Twelve years incidence of late age-related macular degeneration in the Thessaloniki Eye Study OPEN ACCESS
Panayiota Founti; Anne L Coleman; M Roy Wilson; Alon Harris; Theofanis Pappas; Fei Yu; Eleftherios Anastasopoulos; Angeliki Salonikiou; Archimidis Koskosas; Fotis Topouzis
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 12. doi:
All Brown or all Dead? Towards the Determination of the Prevalence of Age Related Macular Degeneration in Egyptians. OPEN ACCESS
Sherouk Gamal Saad; Samir I Sayegh
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 13. doi:
Risk factors for prevalent early AMD and associated retinal lesions: The Chinese American Eye Study. OPEN ACCESS
Bruce Burkemper
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 14. doi:
Risk of Age-related Macular Degeneration 5 Years after Cataract Surgery: Findings from a cataract surgical cohort OPEN ACCESS
Jie Jin Wang; Calvin Sze-un Fong; George Burlutsky; Sudha Cugati; Ava Grace Tan; Elena Rochtchina; Jennifer Arnold; Wayne Smith; Paul Mitchell
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 15. doi:
The Relationship of Treated Hypertension with Geographic Atrophy and Neovascular- Age Related Macular Degeneration in a Colorado cohort. OPEN ACCESS
Ashlee M Cerda; Marc T Mathias; Anne Lynch; Brandie D Wagner; Frank S Siringo; Levi Nicolas Bonnell; Jennifer Nash Cathcart; Scott C N Oliver; Naresh Mandava
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 16. doi:
Appropriate use of AREDS vitamins in the ophthalmic population OPEN ACCESS
Clinton Ellingson; Jayakrishna Ambati
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 17. doi:
The Association of Calcium Intake with Incidence of Age-Related Macular Degeneration in the Age-Related Eye Disease Study (AREDS) OPEN ACCESS
Alanna Kira Tisdale; Elvira Agron; Sarah B. Sunshine; Traci E Clemons; Frederick Ferris; Emily Y Chew
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 18. doi:
Lutein and Zeaxanthin (L+Z) Intake and Prevalent Early Age-Related Macular Degeneration (AMD) in the Atherosclerosis Risk in Communities (ARIC) Study OPEN ACCESS
Henry Lin; Michael J LaMonte; William Brady; Michelle Sahli; Julie A Mares; Ronald Klein; Barbara E K Klein; Jing Nie; Amy E Millen
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 19. doi:
Aspirin Use and Age-related Macular Degeneration in a multi-ethnic Asian population: the Singapore Epidemiology of Eye Diseases (SEED) Study OPEN ACCESS
Yasuo Yanagi; Yuan Shi; Ching-Yu Cheng; Gemmy Cheung; Paul Mitchell; Jie Jin Wang; Tien Yin Wong
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 20. doi:
Disease Burden Associated with Geographic Atrophy Secondary to Age-related Macular Degeneration OPEN ACCESS
Susan C Orr; Renee Pierson; Jennifer Bogert; Tom Chang; Terri Malone; Ross Crosby; Susan Mathias; Allen C Ho
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 21. doi:
Late Age-related macular degeneration is associated with increased mortality OPEN ACCESS
Myra McGuinness; Amalia Karahalios; Robert Patrick Finger; Robyn H Guymer; Allison Hodge; Graham Giles; Liubov D Robman; Julie Simpson
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 22. doi:
Improving face recognition in age-related macular degeneration via caricaturing
OPEN ACCESS
Jo Lane; Nick Barnes; Xuming He; Rohan W Essex; Ted Maddess; Emilie Rohan; Tamara Gradden; Jan Provis; Elinor McKone
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 23. doi:
Impact of Longitudinal Changes in Age-related Macular Degeneration on Visual Functioning and Quality of Life in Latinos: The Los Angeles Latino Eye Study (LALES)
OPEN ACCESS

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 24. doi:

Discordance between Blue-Light Autofluorescence and Near-Infrared Autofluorescence in Age-Related Macular Degeneration OPEN ACCESS

Michael J Heiferman; Amani A Fawzi

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 25. doi:

Correlation Between Drusen Volume and Choroidal Parameters in Non-Neovascular Age-Related Macular Degeneration OPEN ACCESS

Siva Balasubramanian; Muneeswar Gupta Nittala; Amir H Hariri; Srinivas R Sadda

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 26. doi:

Optical coherence tomography angiography characteristics of polypoidal choroidal vasculopathy OPEN ACCESS

Mayer Srour; Giuseppe Querques; Oudy Semoun; Ala Elameen; Alexandra Miere; Anne Sikorav; Olivia Zambrowski; Eric H Souied

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 27. doi:

Optical Coherence Tomography (OCT) biomarkers in naïve classic choroidal neovascular membranes (CNV) correlate strongly with fundus fluorescin angiography (FFA) findings. OPEN ACCESS

Fong May Chew; Nishal Patel

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 28. doi:

Reflectivity of cone photoreceptors in outer retinal tubulation (ORT) in age-related macular degeneration (AMD) OPEN ACCESS

Katie M Litts; Xiaolin Wang; Mark E Clark; Christine A Curcio; Yuhua Zhang

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 29. doi:

Organelle distribution and intracellular autofluorescence (AF) spectra in human retinal pigment epithelium (RPE) cells OPEN ACCESS

Katharina Müller; Rainer Heintzmann; Jost Hillenkamp; Christine A Curcio; Thomas Ach

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 30. doi:

ProAMD
Patient reported outcome documented by *AMD - A Metamorphopsia Detector*®
OPEN ACCESS

Daniela Claessens

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 31. doi:

Retinal pigment epithelium aperture: a previously unreported finding in the evolution of pigment epithelium detachment OPEN ACCESS

Giuseppe Querques; Eric H Souied; Ugo Introini; Federico Corvi; Vittorio Capuano; Lea Querques; Eliana Costanzo; Francesco Bandello

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 32. doi:

Retinal Layer Thickness Changes Associated with the Natural History of Drusen in Age-Related Macular Degeneration OPEN ACCESS

Lisa Nivison-Smith; Barbara Zangerl; Nagi Assaad; Erica L Fletcher; Michael Kalloniatis

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 33. doi:

Inner nuclear layer thickness predicts geographic atrophy progression in age-related macular degeneration. OPEN ACCESS

Andreas Ebneter; Damian Jaggi; Sebastian Wolf; Martin Zinkernagel

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 34. doi:

Microperimetric features of Geographic Atrophy areas identified at the *en-face* optical coherence tomography OPEN ACCESS

Elisabetta Pilotto; Enrica Convento; Clelia Karine Abalsamo; Evelyn Longhin; Francesca Guidolin; Edoardo Midena

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 35. doi:

Assessment of 12-month change in drusen volume on SD-OCT in dry Age Related Macular Degeneration OPEN ACCESS

Robert William Bjerregaard; Amitha Domalpally; Dawn Myers; Jeong Pak; Zhe Liu; Barbara A Blodi

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 36. doi:

Sex Hormone Deficiency and Drusen in Koreans OPEN ACCESS

Han Jo Kwon; Kyung Ho Kim; Sung Who Park; Ji Eun E Lee; Ik Soo Byon

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 37. doi:

Structural changes associated with delayed dark adaptation in age-related macular degeneration OPEN ACCESS

Ines Lains; Safa Rahmani; John B Miller; Samaneh Davoudi; Edem Tsikata; Teresa C Chen; Ivana K Kim; Joan W Miller; Deeba Husain

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 38. doi:

OCTAVE study : comparison of choroidal neovascularization patterns in optical coherence tomography angiography, fluorescein and indocyanine green angiography in age-related macular degene... OPEN ACCESS

Julie Espenan; Julien Gozlan; Matthieu Marchetti; Michèle Boissonnot; Nicolas Leveziel

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 39. doi:

Optical coherence tomography angiography of the foveal vasculature in geographic atrophy OPEN ACCESS

Hammurabi Bartuma; Urban Amrén; Manuel Casselholm-Desalles; Anders P Kvanta

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 40. doi:

Ability of OCT angiography to detect choroidal neovascularization in retinal pigment epithelial detachment associated with chronic central serous chorioretinopathy. OPEN ACCESS

Akiko Miki; Shigeru Honda; keiko otsuka; hisanori imai; Sentaro Kusuhara; Makoto Nakamura

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 42. doi:

AMD Drusenoid deposits "L",Lipid type and "P",Protein-cellular type, characterization,evolution,structural analysis with Multimodal Imaging and Morphology-Structural software OPEN ACCESS

Bruno Lay; CORINNE GONZALEZ

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 43. doi:

Impact of Optical Coherence Tomography Scanning Density on Quantitative Lesion Assessments in Neovascular Age-Related Macular Degeneration OPEN ACCESS
Swetha Bindu Velaga; Muneeswar Gupta Nittala; Ranjith Kumar Konduru; Srinivas R Sadda
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 44. doi:

Automated classification of age-related macular degeneration using choroidal optical coherence tomography imaging – a pilot study OPEN ACCESS
Louise Terry; Jingjing Deng; Xianghua Xie; Tom Margrain; Rachel V North; James Fergusson; Nick White; Ashley Wood
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 45. doi:

Retinal sensitivity at the junctional zone of eyes with atrophic age related macular degeneration. OPEN ACCESS
Amir H Hariri; Tudor Tepelus; Handan Akil; Muneeswar gupta Nittala; Srinivas R Sadda
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 46. doi:

Near-infrared fundus autofluorescence of the unaffected fellow eyes of patients with unilateral exudative age-related macular degeneration OPEN ACCESS
Tetsuya Yamagishi; Nobuhiro Terao; Yuto Katoh; Shigeru Kinoshita; Chie Sotozono
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 47. doi:

Scotopic and Mesopic Retinal Sensitivity in Age-Related Macular Degeneration in an Amish Population OPEN ACCESS
Muneeswar Gupta Nittala; David G Birch; Dwight Stambolian; Srinivas R Sadda
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 48. doi:

Local birefringence and polarization uniformity imaging of exudative macular degeneration OPEN ACCESS
Yoshiaki Yasuno; Young-Joo Hong; Shuichi Makita; Deepa Kasaragod; Masahiro Miura
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 49. doi:

Prevalence and incidence of epimacular membranes in patients with wet AMD OPEN ACCESS
Fanny Ricouard; Pauline Foveau; Anne Zimmermann; Jean Baptiste Conart; David Gaucher; Maher Saleh
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 50. doi:

Analysis of longitudinal changes of the outer retina in early and intermediate age-related macular degeneration OPEN ACCESS
Fan Jiang; Winston Lee; Rando Allikmets; Stanley Chang; Donald Charles Hood; Vivienne C. Greenstein
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 51. doi:

Retinal autofluorescence lifetime measurement suggest preservation of macular pigment in geographic atrophy OPEN ACCESS
Sebastian Wolf; Chantal Dysli; Martin Zinkernagel
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 52. doi:

Identification of subgroups in geographic atrophy using cluster analysis OPEN ACCESS
Marc Biarnes; Jordi Monés
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 53. doi:

Hyperspectral Autofluorescence Characterization of Transition to Atrophy in Donor Eyes with Advanced Age-Related Macular Degeneration (AMD) OPEN ACCESS
Yuehong Tong; Tal Ben Ami; Sungmin Hong; Rainer Heintzmann; Guido Gerig; Zsolt Ablonczy; Christine A Curcio; Thomas Ach; Theodore Smith
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 54. doi:

Choriocapillaris changes on OCT Angiography after Anti-VEGF injections in Exudative Age Related Macular Degeneration OPEN ACCESS
Shilpa Desai; Eduardo Amorim Novais; Nedda Sanayei; Ricardo Louzada; James Fugimoto; Caroline R Baumal; Jay S Duker; Nadia K Waheed
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 55. doi:

Optical coherence tomography angiography in inactive type 2 neovascularization undergoing monthly anti-VEGF treatment OPEN ACCESS
Fabio Scarinci; Maria Cristina Parravano; Lea Querques; Daniele De Geronimo; Paola Giorno; Monica Varano; Francesco Bandello; Giuseppe Querques
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 56. doi:

Adaptive optics fundus camera/Optical coherence tomography system for high resolution retinal imaging using a compact design OPEN ACCESS
Matthias Salas; Xavier Levecq; Barbara Lamory; Sonja Gudrun Prager; Julia Hafner; Markus Ritter; Ursula Schmidt-Erfurth; Wolfgang Drexler; Michael Pircher
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 57. doi:

Progress on Wavefront Sensorless Adaptive Optics for Preclinical Retinal Imaging OPEN ACCESS
Yifan Jian; Daniel Wahl; Myeong Jin Ju; Robert J Zawadzki; Stefano Bonora; Marinko Venci Sarunic
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 58. doi:

New benchtop multimodal adaptive optics small animal imager (MAOSI) OPEN ACCESS
R Daniel Ferguson; Ankit Patel; Gopi Maguluri; Mircea Mujat; Nicusor V Iftimia; James D Akula
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 59. doi:

Confocal adaptive optics differential phase contrast (AODPC) ophthalmoscopy OPEN ACCESS
Xiaolin Wang; Boyu Gu; Jing Lu; Christine A Curcio; Yuhua Zhang
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 60. doi:

Automated Detection of Cone Photoreceptors in Split Detector Adaptive Optics Scanning Light Ophthalmoscope Images OPEN ACCESS
David Cunefare; Robert F Cooper; Brian P Higgins; Alfredo Dubra; Joseph Carroll; Sina Farsiu
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 61. doi:

Non-confocal split-detection adaptive optics scanning light ophthalmoscope with small pupil for vascular imaging OPEN ACCESS
Nripun Sredar; Moataz M Razeen; Yusufu N B Sulai; Benjamin S Sajdak; Alfredo Dubra
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 62. doi:

Quantifying Peripapillary Capillaries in Patients with Glaucoma Compared to Age-Similar

Controls Using AOSLO OPEN ACCESS
Brett King; Lucie Sawides; Stephen A Burns
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 63. doi:

Evaluation of three different cone spacing metrics in adaptive optics flood illuminated retinal images OPEN ACCESS
Daniela Giannini; Giuseppe Lombardo; Letizia Mariotti; Nicholas Devaney; sebastiano serrao; Maurizio Vichi; Marco Lombardo
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 64. doi:

Wall To Lumen Ratio (WLR) In Clinically Involved And Uninvolved Areas Within Individual Diabetic Eyes OPEN ACCESS
Hind A. Othman; Thomas Gast; Stephen A Burns
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 65. doi:

Comparison of AO-SLO and OCT angiography in imaging of the hierarchical structure of retinal vessels OPEN ACCESS
Yoshihiro Kaizu; Shintaro Nakao; Muneo Yamaguchi; miho araki; Yoshiyuki Kobayashi; Takahito Nakama; Shigeo Yoshida; Yuji Oshima; Tatsuro Ishibashi; Koh-Hei Sonoda
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 66. doi:

Foveal microvascular imaging: Optical coherence tomography angiography (OCTA) vs. adaptive optics scanning light ophthalmoscope fluorescein angiography (AOSLO FA) OPEN ACCESS
Shelley Mo; Brian Krawitz; Eleni Efstathiadis; Lawrence Geyman; Toco Yuen Ping Chui; Joseph Carroll; Alfredo Dubra; Richard B Rosen
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 67. doi:

Adaptive Optics Free Photoreceptor Imaging – Comparison of Manual and Automated Cone Counts OPEN ACCESS
Padraig Joseph Mulholland; Juliane Matlach; Marketa Cilkova; Tony Redmond; David F Garway-Heath; Roger S Anderson
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 68. doi:

Understanding the changes of cone reflectance in adaptive optics flood illumination retinal images over 3 years OPEN ACCESS
Letizia Mariotti; Nicholas Devaney; Giuseppe Lombardo; Marco Lombardo
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 69. doi:

Pitfalls of Voronoi Tessellation (VT) in Evaluating Cone Packing OPEN ACCESS
James D Akula; Robert J Munro; Tara L Favazza; Emily A Swanson; Anne Moskowitz; Ronald M Hansen; Anne B Fulton
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 70. doi:

Could we use the Preferred Retinal Locus and a 50x50 µm Region Of Interest to evaluate cone density? OPEN ACCESS
Kelly WOOG; Alain Gaudric; Richard Legras
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 71. doi:

Characterization of Birdshot Chorioretinopathy Using Adaptive Optics Scanning Laser Ophthalmoscopy OPEN ACCESS
Sheena Khanna; Peter L Nesper; Debra A Goldstein; Anjum Faruk Koreishi; Amani A Fawzi
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 72. doi:

High resolution measures of cone photoreceptor structure correlate with measures of visual function in patients with inherited retinal degenerations and in healthy subjects OPEN ACCESS
Irina De la Huerta; Stephanie K. Lynch; Shiri Zayit-Soudry; Travis Porco; Austin Roorda; Jacque L Duncan
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 73. doi:

Cone photoreceptors migration in patient affected by acute multifocal placoid pigment epitelliopathy. OPEN ACCESS
Giuseppe Lo Giudice; Valerio Crepaldi; Antongiulio Catania; alessandro galan
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 74. doi:

Computational optical sectioning of flood-illuminated adaptive optics retinal images: initial results OPEN ACCESS
Travis B. Smith; Laurie M Renner; Martha Neuringer; Trevor J McGill
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 75. doi:

Wide-Field Sensorless Adaptive Optics Optical Coherence Tomography for Enhanced Visualization of the Retinal Periphery OPEN ACCESS
James Polans; Francesco LaRocca; Oscar Carrasco-Zevallos; Brenton Keller; Eleonora M Lad; Heather Whitson; Anthony N Kuo; Sina Farsiu; Joseph A. Izatt
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 76. doi:

Imaging of diabetic hard exudates : a comparison of retinal photographs, optical coherence tomography and adaptive optics OPEN ACCESS
Christophe HENRIOT; Mathieu Flores; Guillaume Debellemanière; Bernard Y Delbosc; Maher Saleh
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 77. doi:

Dynamism and ultrastructure of subretinal drusenoid deposits revealed by adaptive optics scanning laser ophthalmoscopy over 3.5 years OPEN ACCESS
Yuhua Zhang; Xiaolin Wang; Mark E Clark; Cynthia Owsley; Christine A Curcio
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 78. doi:

Unilateral isolated foveal hypoplasia OPEN ACCESS
Adam Jacobson; Thaddeus Wandel; Alan D Springer
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 79. doi:

Sodium Iodate Causes Photoreceptor Damage in Cynomolgus Monkeys OPEN ACCESS
Chang-Ning Liu; David Yates; Qinghai Peng; Wenhu Huang; Heather Devantier; Shirley Aguirre
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 80. doi:

Generation of a zebrafish model of achromatopsia using CRISPR/Cas9 genome editing OPEN ACCESS
Michael D Varnum; Tshering Sherpa; Pete Meighan
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 81. doi:

OCT evaluation of retinal lesions in spontaneously hyperglycemic baboons OPEN ACCESS

Jeffrey W Kiel; Anthony G Comuzzie; Daniel J Mojica; Carrie A Cooke; Jeong-Hyeon Sohn; Denise Armiger-George
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 83. doi:

Hypoxia alters the expression, movement, and secretion of APP in retinal pigmented epithelial (RPE) cells OPEN ACCESS
Philip Mzyk; Mary Christine McGahan
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 84. doi:

Over Expression of Sigma-1 Receptor Protects Against Retinal Ganglion Cell loss in an Optic Nerve Crush Model OPEN ACCESS
Dorette Z Ellis; Linya Li; Yang Liu; Yong H Park; Thomas Yorio
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 85. doi:

Increased expression of glucocorticoid receptor B induces a novel transforming growth factor beta-2 isoform in trabecular meshwork cells OPEN ACCESS
Adnan Dibas; Abbot F Clark; Thomas Yorio
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 86. doi:

THE EFFICACY AND PHARMACOKINETICS OF INTRAVITREAL FLURBIPROFEN OPEN ACCESS
Blazaki Styliani; Chrysanthi Taika; Eirini Tsiapa; Irini Naoumidi; Manolis Tzatzarakis; Christos Tsatsanis; Miltiadis K Tsilimbaris
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 87. doi:

Modification of preretinal oxygen tension related to intraocular pressure OPEN ACCESS
Juan Carlos Martinez; Karthik Murali; Amir H Kashani; Mark S Humayun
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 88. doi:

Retinal blood vessels diameters in unilateral ischemic central retinal vein occlusion using infrared imaging. OPEN ACCESS
Rafael Garcia; Maria Fernanda abalem; Rony Preti; Helen Nazareth Veloso Santos; Carricondo Pedro Carlos; Leandro C Zacharias; Sérgio Luis Gianotti Pimentel; Walter Y Takahashi; Mario L R Monteiro
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 89. doi:

Proteomic profiling of adenoid cystic carcinoma OPEN ACCESS
Neda Nikpoor; David T Tse; Daniel Peñaez
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 90. doi:

Retinal Embolic events following Transcatheter Aortic Valve Implantation (TAVI) for Aortic Stenosis. OPEN ACCESS
Nirodhini Narendran; William Fusi-Rubiano; Andrew Smallwood; Randhir Chavan; Yit C. Yang; Saib Khogali; James Cotton
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 91. doi:

Reduced response of retinal blood flow to flicker stimulation in patients with type 2 diabetes mellitus OPEN ACCESS
Takafumi Yoshioka; Taiji Nagaoka; Youngseok Song; Akitoshi Yoshida
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 92. doi:

Secondary ocular hypertension after dexamethasone intravitreal implant (Ozurdex) in the routine clinical practice OPEN ACCESS
Kornwipa Hemarat; Jacquelyn D. Kemmer; Alexander M. Eaton; Rahul N. Khurana; Jay M Stewart
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 93. doi:

Mouse RPE Cells Have an Unusually High Conductance and Permeability to Thiocyanate OPEN ACCESS
Bret A Hughes
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 94. doi:

Development and control of iris photosensitivity OPEN ACCESS
Joseph F Margiotta; Alexandra Fults-Ganey; Samantha Cole
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 95. doi:

Visual input plays a key role in the retinal protection induced by enriched environment against acute retinal ischemia OPEN ACCESS
Damian Dorfman; Marcos Luis Aranda; Maria Florencia González Fleitas; Hernan H Dieguez; Maria Inés Keller Sarmiento; Ruth E Rosenstein
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 96. doi:

Nicotine and cotinine influence human retinal pigment epithelial cell viability, migration and angiogenic factor secretion properties OPEN ACCESS
Xiaoyu Zhang
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 97. doi:

Insulin-like growth factor 2 is a native ligand of the retinal insulin receptor OPEN ACCESS
Thomas W Gardner; Mandy Losiewicz; Sergey Zolov; Steven F Abcouwer; Patrice E Fort
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 98. doi:

Activation of melanocortin receptors Mc1 and Mc5 attenuates retinal damage in experimental diabetic retinopathy. OPEN ACCESS
Luigi Di Pierna; Carlo Gesualdo; Rosa Maisto; Clara Di Filippo; Mauro Perretti; Francesco Testa; Settimio Rossi; Michele D'amico; Francesca Simonelli
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 99. doi:

Vitreous body: A barrier for AAV-mediated gene transfer to inner retinal neurons of macaque OPEN ACCESS
Tshitoko Kizito Tshilenge; Baptiste Ameline; Michel Weber; Guylène Le Meur; Jack-Yves Deschamps; Alexandra Mendes-Madeira; Steven Nedellec; Véronique Blouin; Virginie Pichard; Philippe Moullier; Fabienne Rolling
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 100. doi:

Novel Retinal Light Damage Device for Animal Models of Retinal Degeneration and Testing Gene Therapies OPEN ACCESS
Mark Christian Butler; Jack M Sullivan
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 101. doi:

Reducing retinal oxidative metabolism to arrest progression of ischemic retinopathies OPEN ACCESS
Liliana P Paris; Mann L Gantner; Peter D Westenskow; Tim U Krohne; Edith Aguilar; Yoshihiko Usui; Jennifer K Trombley; Daniel Feitelberg; Martin Friedlander
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 102. doi:

Impact of vital dyes on transduction efficiency of AAV vectors used in retinal gene therapy OPEN ACCESS

Anna Paola Salvetti; Maria Ines Patricio; Alun R Barnard; Robert Maclaren

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 104. doi:

Fumaric acid ester monomethyl fumarate suppresses inflammatory gene expression and Müller cell gliosis in retinal ischemia-reperfusion OPEN ACCESS

Hongkwan Cho; Zhenhua Xu; Matthew J. Hartsock; Elia J Duh

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 105. doi:

LUTEIN REACHES THE RETINA FOLLOWING IONTOPHORESIS APPLICATION OPEN ACCESS

Diogo Sousa-Martins; Sara Sousa; Joana Duarte; Marta Monteiro

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 106. doi:

Drug distribution to retinal pigment epithelium: studies on melanin binding, cellular kinetics and SPECT/CT imaging OPEN ACCESS

Anna-Kaisa Rimpelä; Mechthild Schmitt; Satu Latonen; Marja Hagström; Maxim Antopolsky; José Antonio Manzanares; Heidi Kidron; Arto Urtti

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 107. doi:

Diabetes compromises pH control in the rat retina. OPEN ACCESS

Andrey V Dmitriev; Desmond Henderson; Robert A Linsenmeier

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 108. doi:

Cholesterol homeostasis and retinal stress in anterior ischemic optic neuropathy OPEN ACCESS

Lionel Bretillon; Cynthia Fourgeux; Jacques Bouche-Pillon; Lucy Martine; Laurent Leclere; Niyazi Acar; Alain M Bron; Catherine P Garcher

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 109. doi:

Synaptic rectification controls nonlinear spatial integration of natural visual inputs OPEN ACCESS

Maxwell H Turner; Fred Rieke

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 110. doi:

Retinal defects in mice after Ivermectin treatment OPEN ACCESS

Micah A Chrenek; Jana T Sellers; Brooke Masters; Felix L Struebing; Rebecca King; Priscila P Cunha; Douglas Taylor; Jeffrey H Boatright; J M Nickerson; P. Michael Iuvone; Eldon E Geisert

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 111. doi:

Wnt pathway inhibitors regulate the tube formation of human retinal microvascular endothelial cells OPEN ACCESS

Chi Zhang; ALEXANDRO DAVID GUERRERO; FREDDI HUAN TRAN

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 112. doi:

Regulation of Potassium-Induced [^{3}H]D-Aspartate Release from Bovine Isolated Retina by the DHA-Metabolite , 4(S)-F_{4t}-Neuroprostane: Role of Arachidonic Acid Metabolites OPEN ACCESS

Catherine A Opere; Jamal Jamil; Emily Kawesa-Bass; Thierry Durand; Alexandre Guy; Jean-Marie Galano; Ya Fatou Njie-Mbye; Jenaye Robinson; Sunny E Ohia

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 113. doi:

Optimizing amyloid beta detection in retinas of a double transgenic Alzheimer s disease mouse model and of human subjects with dementia OPEN ACCESS

Lilla Knels; Silvana Hempel; Monika Valtink; Richard Funk; Marius Ader; Cornelia Schroeder; Jana Löffler

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 114. doi:

Dopamine acts presynaptically to suppress GABA-ergic mediated lateral inhibition to rod bipolar cells in mouse retina. OPEN ACCESS

Christine M Emnett; Peter D Lukasiewicz

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 115. doi:

Relaxation of retinal arterioles can be induced by veratridine, but not electrical field stimulation OPEN ACCESS

Nils Kratholm; Ulf Simonsen; Peter Skov Jensen; Sidse Kringelholt; Toke Bek

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 116. doi:

Establishment of lysosomal disease sialidosis patient-derived iPS cells and characterization of induced retinal pigment epithelial cells OPEN ACCESS

Takahiro Suzuki; Yasuyuki Suzuki

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 117. doi:

Evaluation of AAV-based optogene transfer for the treatment of canine models of inherited retinal dystrophies OPEN ACCESS

Baptiste Ameline; Kizito Tshitoko Tshilenge; Lyse Libeau; Alexandra Mendes-Madeira; Nathalie Provost; Michel Weber; Jack-Yves Deschamps; Véronique Blouin; Virginie Pichard; Philippe Moullier; Fabienne Rolling

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 118. doi:

PROTECTIVE EFFECTS OF TGF-β1 AGAINST AMYLOID-β_{1-42} OLIGOMERS-INDUCED RETINAL DAMAGE OPEN ACCESS

Claudio Bucolo; Vincenzo Fisichella; Giovanni Giurdanella; Chiara Bianca Maria Platania; Giovanni Luca Romano; Federica Geraci; Filippo Drago

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 119. doi:

Regional variation in Müller cell expression of stem cell-associated proteins in normal adult human retina OPEN ACCESS

Lay Khoon Too; Enisa Hasic; Gary Gracie; Michele C Madigan; Svetlana Cherepanoff

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 120. doi:

An assessment of the angiogenic effects of VEGF-A and ANGPTL4 in the mouse retina. OPEN ACCESS

Rajeevalochan wudali; Eunice Cheung; Angela Sun; Laura Winters; Frank Kuhnert; Stanley J Wiegand; Jingtai Cao; Gavin Thurston; Carl Romano; Ivan B Lobov

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 121. doi:

The effect of triamcinolone acetonide or bevacizumab on the levels of proinflammatory cytokines after retinal laser photocoagulation in pigmented rabbits

OPEN ACCESS

Yoshihiro Takamura; Shogo Arimura; Seiji Miyake; Takeshi Tomomatsu; Takehiro Matsumura; Makoto Gozawa; Yuji Takihara; Masaru Inatani

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 122. doi:

Wide-field, high-resolution retinal oximetry OPEN ACCESS

David Bragason; Sveinn Hakon Hardarson; Einar Stefansson

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 123. doi:

Evaluation of demographical, clinical and imaging characteristics of 304 retinitis pigmentosa (RP) patients screened for retinal prosthesis candidacy OPEN ACCESS

Dilek Güven; Mehmet Demir; Erdem Ergen; Semra Tiryaki Demir; Atilla Demir; hakan kacar

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 124. doi:

Japan Occult Macular Dystrophy Project: Association of Genotype and Photoreceptor Architecture OPEN ACCESS

Kaoru Fujinami; Shuhei Kameya; Shinji Ueno; Mineo Kondo; Takaaki Hayashi; Kei Shinoda; Shigeki Machida; Yozo Miyake; Takeshi Iwata; Kazushige Tsunoda

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 125. doi:

Novel Autosomal Dominant Retinitis Pigmentosa (adrP) Mutation with Features of Gyrate Atrophy OPEN ACCESS

James Kasenchak; Tamara Vrabec

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 126. doi:

A novel heterozygous mutation in PRPH2/RDS gene causing a spectrum of phenotypic manifestations in a family with autosomal dominant retinitis pigmentosa (adRP) OPEN ACCESS

Fares Antaki; Razek Georges Coussa; Christina Chakarova; Susan Wakil; Vincent Sun; Pierre Lachapelle; Allison Dorfman; Irma Lopez; Kunka Kamenarova; Shomi S Bhattacharya; Robert K Koenekoop

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 127. doi:

A new syndromic form of retinal degeneration due to mutations in the *PCYT1A* gene OPEN ACCESS

Mariaelena Filippelli; Rosa Boccia; Raffaella Colucci; Valentina Di Iorio; Anna Nesti; Maria Rosaria Barillari; Nicola Brunetti Pierri; Francesco Testa; Sandro Banfi; Francesca Simonelli

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 128. doi:

Next generation sequencing-based comprehensive molecular diagnosis of retinitis pigmentosa probands in Miami OPEN ACCESS

Jennifer Verriotto; Qi Zhang; Mingchu Xu; Yumei Li; Hui Wang; Lin Gan; Rui Chen; Byron L Lam

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 129. doi:

Comparative Measurements of Rod Function in Retinal Degenerations with Two-color Dark-adapted Perimetry OPEN ACCESS

Artur V Cideciyan; Jason Charng; Malgorzata Swider; Rebecca Sheplock; David B McGuigan; Rodrigo Matsui; Alejandro J Roman; Sharon B Schwartz; Samuel G Jacobson

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 131. doi:

High symmetry of visual field loss in X-linked retinitis pigmentosa OPEN ACCESS

Julia-Sophia Bellingrath; Immanuel Philip Seitz; Susanne Kohl; Eberhart Zrenner; Nicola Gloeckle; Holger Prokisch; Susan Downes; Simon Ramsden; Robert E MacLaren; Dominik M Fischer

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 132. doi:

Detectable rod function in patients with retinitis pigmentosa (RP) with or without a measureable rod electroretinogram (ERG) response OPEN ACCESS

Lea D Bennett; Martin Klein; Kelly Kiser; Donald Charles Hood; David G Birch

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 133. doi:

A Biomarker for Disease Course in Patients with Autosomal Dominant Retinitis Pigmentosa due to RHO Mutations OPEN ACCESS

Safa Rahmani; Jason Comander; Carol Weigel DiFranco; Bernard Rosner; Michael A Sandberg

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 134. doi:

Treatment of retinitis pigmentosa by Lycium barbarum OPEN ACCESS

Henry Ho-lung Chan; Christie Hang I Lam; Kwok-Fai So; Raymond Chuen-chung Chang; Jimmy Shiu Ming Lai; Chi-wai Do; Iris FF Benzie; Serena ZC Li; Kaiyip Choi; Man Pan Chin; Wing Yan Yu

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 135. doi:

The Impact of Exercise on Quality of Life and Progression of Disease in Retinitis Pigmentosa OPEN ACCESS

Joshua Levinson; Ethan Joseph; Joe Nocera; Laura Ward; Machelle T Pardue; Beau B Bruce; Jiong Yan

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 136. doi:

Transcorneal electrical stimulation in patients with retinitis pigmentosa: significant increase in photopic b-wave amplitude after one year OPEN ACCESS

Florian Gekeler; Mariya Gosheva; Johanna Pach; Barbara Wilhelm; Karl Ulrich Bartz-Schmidt; Eberhart Zrenner; Andreas Schatz

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 137. doi:

Transcorneal electrical stimulation for patients with retinitis pigmentosa – Safety and efficacy evidence from a multicentric observation study – TESOLA OPEN ACCESS

Andreas Schatz; Johanna Pach; Mariya Gosheva; Barbara Wilhelm; Tobias Peters; Peter Martus; Ida Zündorf; Karl-Ulrich Bartz-Schmidt; Eberhart Zrenner; Florian Gekeler

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 138. doi:

Gene Therapy Utilizing Short Hairpin RNAs for Autosomal Dominant Retinitis Pigmentosa OPEN ACCESS

Michael Massengill; William W Hauswirth; Alfred S Lewin

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 139. doi:

The National Eye Institute Prospective *ABCA4* Retinopathy Natural History Study: Autofluorescence Imaging Analysis OPEN ACCESS

Laryssa Huryn; Brett G Jeffrey; Aarti Hinduja; Catherine A Cukras; Wadih M Zein; Robert B Hufnagel; Yuri V Sergeev; Benedetto Falsini; Amy Turriff; Denise Cunningham; Brian Patrick Brooks

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 140. doi:

The National Eye Institute Prospective *ABCA4* Retinopathy Natural History Study: Fundus Guided Retinal Sensitivity Over 1 Year OPEN ACCESS

Brett G Jeffrey; Mallika Nimmagadda; Aarti Hinduja; Amy Turriff; Laryssa Huryn; Robert B Hufnagel; Catherine A Cukras; Wadih M

Zein; Brian Patrick Brooks

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 141. doi:

En-face imaging as a method for monitoring changes in the inner segment (IS)/outer segment (OS) band in retinitis pigmentosa OPEN ACCESS

Jason Nunez; Donald Charles Hood; Daiyan Xin; Stephen H Tsang; Juan Reynaud; David G Birch; Brad Fortune; Vivienne C. Greenstein

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 142. doi:

Inner Retinal Thickness in Late Stage Retinitis Pigmentosa OPEN ACCESS

Kirsten G Locke; Kelly I Locke-Reddin; Donald Charles Hood; David G Birch

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 143. doi:

Increased Velocity of Retinal Blood Flow in RP subjects with Significantly Improved Visual Function following Transcorneal Electrical Stimulation in a Randomized Controlled Trial OPEN ACCESS

Ava Katherine Bittner; Kenneth R Seger; Samantha Kayser; J C Ramella-Roman

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 144. doi:

Reduced Central Retinal Artery Blood Flow is Related to Decreased Central Visual Function in Retinitis Pigmentosa Patients OPEN ACCESS

Samantha Kayser; Deborah Mendelsohn; Jorge Han; Patricia Vargas; Brennan Nelson; Alexandra Benavente-Perez; Ava Katherine Bittner

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 145. doi:

Wide-field MultiColor Spectral Imaging and Wide-field Spectral Domain Optical Coherence Tomography Imaging in Retinitis Pigmentosa OPEN ACCESS

Ulrich Kellner; Simone Kellner; Silke Weinitz; Ghazaleh Farmand; Birgit Lindau; Heidi Barbara Stoehr; Bernhard HF Weber

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 146. doi:

Wide-field MultiColor Spectral Imaging and Wide-field Spectral Domain Optical Coherence Tomography Imaging in ABCA4-related retinal dystrophies OPEN ACCESS

Simone Kellner; Silke Weinitz; Ghazaleh Farmand; Heidi Barbara Stoehr; Bernhard HF Weber; Ulrich Kellner

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 147. doi:

Quantifying Fundus Autofluorescence Rings in Patients with Retinitis Pigmentosa OPEN ACCESS

Kaspar Schürch; Stephen H Tsang; Winston Lee; Katherine Boudreault; Tobias Duncker; Russell L Woods; Francois C Delori; Janet R Sparrow

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 148. doi:

Natural history study of *RPE65* associated autosomal recessive retinal dystrophies. OPEN ACCESS

Laurence Pierrache; suzanne yzer; Maria M. van Genderen; José Schuil; Nienke Boonstra; Jan-Willem R Pott; Mary J. van Schooneveld; Frans P Cremers; Caroline C W Klaver; Ingeborgh Van Den Born

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 150. doi:

Clinical phenotype and progression of Usher syndrome related to mutations in *MYO7A* or *USH2A* OPEN ACCESS

Francesco Testa; Raffaella Colucci; Antonella De Benedictis; Vincenzo Marcelli; Elio Marciano; Alberto Auricchio; Anne Kurtenbach; Christine Petit; Crystel Bonnet; Eberhart Zrenner; Francesca Simonelli

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 151. doi:

Clinical characterization and genotype-phenotype correlations in *PDE6A*-related retinitis pigmentosa OPEN ACCESS

Ditta Zobor; Laura Kühlewein; Nicole Weisschuh; Christian P Hamel; Bart Peter Leroy; Sten Andreasson; Ayuso Carmen; Günther Rudolph; Bernd Wissinger; Susanne Kohl; Eberhart Zrenner

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 152. doi:

The prevalence of cystic macula lesions in genetically confirmed Usher syndrome patients OPEN ACCESS

Ieva Sliesoraityte; Saddek Mohand-Said; Larissa Moutsimilli; Tunde Peto; Jose Sahel

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 153. doi:

Correlation of Macular Thickness (Spectral-domain OCT) and Retinal Vascular Perfusion Indices by the Novel Technology of OCT-Angiography in Retinitis Pigmentosa OPEN ACCESS

Sandeep Grover; Kumar Sambhav

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 154. doi:

Structural loss precedes visual acuity loss in the fovea of patients with retinal degeneration OPEN ACCESS

Asma Saud; Kavitha Ratnam; Jia Qin; Panagiota Loumou; Shane Griffin; Austin Roorda; Travis Porco; Jacque L. Duncan

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 155. doi:

Fragile Maculas in Patients with Retinal Degeneration due to *RPGR-ORF15* Mutations: Spatio-temporal Models of Disease Progression OPEN ACCESS

Jason Charng; Malgorzata Swider; Rebecca Sheplock; Alexander Sumaroka; Alejandro J Roman; Marc Christopher Peden; Elise Heon; Sharon B Schwartz; Samuel G Jacobson; Artur V Cideciyan

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 156. doi:

Retinitis pigmentosa or severe hydroychloroquine retinopathy? OPEN ACCESS

Michael Marmor

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 157. doi:

Clinical presentation and management of Familial Exudative Vitreoretinopathy OPEN ACCESS

Ismaël Chehaibou; Ana Clément; Florence Metge; Catherine Edelson; Aude Affortit; Pascal Dureau; Georges Caputo

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 158. doi:

Clinical presentation and disease course in Choroideremia patients OPEN ACCESS

Raffaella Colucci; Rosa Boccia; Valentina Di Iorio; Ada Orneo; Paolo Melillo; Settimio Rossi; Michele Della Corte; Francesco Testa; Francesca Simonelli

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 159. doi:

Extramacular fibrosis in Coats' disease OPEN ACCESS

Alejandra Daruich; Alexandre Matet; Marie-Claire Gaillard; Hoai Viet Tran; Francis L Munier

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 160. doi:

Targeting retinal degeneration in ABCr $^{-/-}$ mice with dietary saffron. OPEN ACCESS

Stefano Di Marco; Darin Zerti; Rita Maccarone; Benedetto Falsini; Silvia Bisti
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 161. doi:

Angiogenic Complications Exhibited in Patients with Inherited Retinal Degenerations
OPEN ACCESS
Qian Li; Xiaoyan Peng; Yang Li; Xiaoqing Zhu
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 162. doi:

Progression of macular atrophy in pattern dystrophies. OPEN ACCESS
Céline Mebsout Pallado; Anne Sikorav; Oudy Semoun; Camille JUNG; Eric H Souied
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 163. doi:

PARP inhibition preserves photoreceptors in different *Pde6a* mutant animal models for Retinitis Pigmentosa OPEN ACCESS
Kangwei Jiao; Ayse Sahaboglu; Eberhart Zrenner; Marius Ueffing; Per A R Ekstrom; Francois Paquet-Durand
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 164. doi:

cGMP-cGKII signalling contributes to cone photoreceptor degeneration in achromatopsia
OPEN ACCESS
Stylianos Michalakis; Mirja Koch; Hongwei Ma; Xi-Qin Ding; Martin Biel
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 165. doi:

Study of pro-apoptotic and pro-survival pathways at late stage disease in two non-allelic forms of photoreceptor degeneration OPEN ACCESS
Raghavi Sudharsan; Gustavo D Aguirre; William A Beltran
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 166. doi:

RPGRIP1 mutant dogs show variable cone ERG functions OPEN ACCESS
Gautami Das; Evelyn Santana; Simone Iwabe; Gustavo D Aguirre; Keiko Miyadera
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 167. doi:

Bio-energetic preservation of cones in a mouse model of retinitis pigmentosa OPEN ACCESS
Daniel Narayan; Glyn Chidlow; John P M Wood; Robert James Casson
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 168. doi:

Whole-organism High-throughput Screen for Compounds Promoting Rod Photoreceptor Survival in an Inducible Zebrafish Model of Retinitis Pigmentosa OPEN ACCESS
Liyun Zhang; Conan Chen; Jeff S Mumm
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 169. doi:

The G-domain of the Joubert syndrome protein ARL13B interacts with tubulin and contributes to uniform distribution along the cilium OPEN ACCESS
Ekaterina Revenkova; Luca Gusella; Carlo Iomini
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 170. doi:

Dissection of the isoform-specific roles of CLUAP1 in ciliary transport OPEN ACCESS
Karsten Boldt; Tina Beyer; Nicola Horn; Yasmin Wissinger; Marius Ueffing
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 171. doi:

Characterizations of constitutively produced exosomes by photoreceptor cells OPEN ACCESS
Jonathan Luisi; Nick Motamedi; Wen Huang; Shuang Zhu; John Wiktorowicz; Wenbo Zhang; Massoud Motamedi
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 172. doi:

Functional Analysis of *RP1L1* R45W Mutant Responsible for Occult Macular Dystrophy
OPEN ACCESS
Daisuke Iejima; Kazushige Tsunoda; Takeshi Iwata
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 173. doi:

Genetic deletion of S-opsin prevents rapid cone photoreceptor degeneration in the Guanylate Cyclase-1 knockout model of Leber congenital amaurosis OPEN ACCESS
Nduka Enemchukwu; Sam Ham; Yingbin Fu
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 174. doi:

Double Knockout of Centrin 2 and 3 Causes Photoreceptor Degeneration in Mouse
OPEN ACCESS
Guoxin Ying; Jeanne M Frederick; Wolfgang Baehr
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 175. doi:

Modeling ciliogenesis in Leber congenital amaurosis using fibroblasts from patients with CEP290 mutations OPEN ACCESS
Lauren Killingsworth; Hiroko Shimada-Ishii; Milton English; Jacklyn Mahgerefteh; Sharon Wolfe; Tiziana Cogliati; Brian Brooks; Samuel G Jacobson; Anand Swaroop
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 176. doi:

AMPKα2 plays a unique role in Cone function and survival OPEN ACCESS
Lei Xu; John Ash
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 177. doi:

Morphometric analysis of photoreceptors in the zebrafish *pde6c* mutant with and without exposure to Schisandrin B
OPEN ACCESS
Yuk Fai Leung; Liyun Zhang; Lue Xiang; yiwen liu; Prahatha Venkatraman; Zi-Bing Jin; Chi Pui Calvin Pang; Kam Ming Ko; Ping Ma; Mingzhi Zhang
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 178. doi:

A unique role for PGC-1β in regulating photoreceptor resistance to oxidative stress
OPEN ACCESS
Casey Keuthan; John Ash
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 179. doi:

Hyaluronic acid-based hydrogels enhance isolated rod photoreceptor survival *in vitro* through mTOR activation OPEN ACCESS
Nikolaos Mitrousis; Roger Y Tam; Alexander EG Baker; Derek van der Kooy; Molly Shoichet
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 180. doi:

Inhibition of Type II Iodothyronine Deiodinase Preserves Cones in Mouse Models of Retinal Degeneration OPEN ACCESS

Fan Yang; Hongwei Ma; Josh Belcher; Michael Redmond; Xi-Qin Ding
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 181. doi:

Resvega in the regulation of autophagy OPEN ACCESS
Celine Olmiere; Ali Koskela; Mika Reinisalo; Reijo Karjalainen; Kai Kaarniranta
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 182. doi:

Resveratrol Reduces Ischemia/Reperfusion-induced Apoptosis through Let-7 Family in Retina OPEN ACCESS
Hyemin Seong; In Young Chung; Jong Moon Park; Seongwook Seo; Sang Soo Kang
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 183. doi:

Tubby Regulates the Oxidative Pathway in the Retina Via Interaction with Estrogen Related Receptor Beta (Esrrβ) OPEN ACCESS
Arnold Salazar; Peipei Pan; Nora Blanca Caberoy
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 184. doi:

The role of autophagy in catabolism of visual transduction proteins OPEN ACCESS
Jingyu Yao; Lin Jia; Kecia L Feathers; Cheng-mao Lin; Daniel Klionsky; Thomas A Ferguson; David N Zacks
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 185. doi:

Study of the neuroprotective effects of BDNF, bFGF, CNTF or several doses of PEDF in a focal Light-emission-diode (LED) - induced phototoxicity model in adult albino mice OPEN ACCESS
F Javier Valiente-Soriano; Diego Garcia-Ayuso; Arturo Ortin-Martinez; Manuel Jimenez-Lopez; Yolanda Caja-Matas; Antonio Cánovas-León; Jose Manuel Bernal-Garro; S Patricia Becerra; Maria Paz Villegas-Pérez; Manuel Vidal-Sanz
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 186. doi:

Pigment epithelium-derived factor (PEDF) prevents apoptosis and promotes apical localization of opsin in retina photoreceptors OPEN ACCESS
S Patricia Becerra; Germán Michelis; Lorena Germán; Nora Patricia Rotstein; Luis Politi
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 188. doi:

Bardet-Biedl syndrome-8 (*Bbs8*) is critical for mouse cone photoreceptor function and viability OPEN ACCESS
Tanya Lee Dilan; Thamaraiselvi Saravanan; Visvanathan Ramamurthy
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 189. doi:

Optical and Neural Factors Determine the Color of "The Dress" OPEN ACCESS
Jeff C Rabin; Brooke Houser; Carolyn Talbert; Ruh Patel
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 190. doi:

Necessary colour correction for the implementation of the Cambridge Colour Test on a LCD monitor OPEN ACCESS
Caterina Ripamonti; Jakob S. Thomassen
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 191. doi:

Effect of "color-correcting glasses" on chromatic discrimination in subjects with congenital color vision deficiency OPEN ACCESS
Rebecca Mastey; Emily J Patterson; Phyllis Summerfelt; Jolene Luther; Jay Neitz; Maureen Neitz; Joseph Carroll
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 192. doi:

The impact of melanopsin activation levels on color perception OPEN ACCESS
Dingcai Cao; Pablo A Barrionuevo
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 193. doi:

The Difference of Luminance Sensitivity for Congenital Color Vision Defect using Flicker Method on Liquid Crystal Display OPEN ACCESS
Yoshiki Tanaka; Sho Yokoyama; Hideki Nakamura; Kazuo Ichikawa; Shoko Tanabe; Kato Yukihito; Rie Horai; Kiyoshi Tanaka
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 194. doi:

Transmittance influence of vision aids and intraocular implants on the retinal color stimulus and its quantification OPEN ACCESS
Stephan Reiss; Karsten Sperlich; Martin Kunert; Heinrich Stolz; Rudolf Guthoff; Anselm Jünemann; Oliver Stachs
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 195. doi:

Characterization of two-photon vision by measurements of sensitivity threshold OPEN ACCESS
Katarzyna Komar; Grazyna Palczewska; Jianye Zhang; Maciej Nowakowski; Zhiqian Dong; Krzysztof Palczewski; Maciej Wojtkowski
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 196. doi:

Ability to perceive blur in central and near-peripheral retina in myopia OPEN ACCESS
Lenna E. Walker; Guido Maiello; Peter Bex; Fuensanta Vera-Diaz; Nancy J Coletta
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 197. doi:

Indoor and Outdoor Eye Movements in Myopia OPEN ACCESS
Amy Zhang; Fuensanta Vera-Diaz
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 198. doi:

Fixation Instability in Myopia OPEN ACCESS
Nancy J Coletta; Lenna E. Walker; Fuensanta Vera-Diaz
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 199. doi:

Reference Data for Fixation Stability in Normal Subjects Measured with Bivariate Contour Ellipse Area (BCEA) in MAIA Microperimetry OPEN ACCESS
Marco U Morales; Saker Saker; Craig Wilde; Aristophanes Pallikaris; Neil Notaroberto; Rubinstein Martin; Michael K Smolek; Winfried M K Amoaku
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 200. doi:

Reaction times in elite athletes and the influence of saccades OPEN ACCESS
Brendan T Barrett; Julie M Harris; John G Buckley; Simon J Bennett; Jonathan Flavell; Nathan C Beebe; Andrew J Scally; Alice G Cruickshank
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 201. doi:

Contrast sensitivity in the periphery as a function of defocus OPEN ACCESS
Robert Rosen; Silvestre Manzanera; Patricia A Piers; Pablo Artal
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 202. doi:

Characterizing the Signal Gain and Internal Noise Profile of Spatial Vision with qCSF
OPEN ACCESS
Fang Hou; Luis A Lesmes; Chang-Bing Huang; Zhong-Lin Lu
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 203. doi:

Application of chromatic and spatial noise to mask stimulus for luminance contrast threshold estimates OPEN ACCESS
Givago S Souza; Natalie Adam Walker; Erika Abieyuwa Odigie; Diego Leite Guimarães; Railson Cruz Salomão; Leticia Miquilini; Eliza Maria da Costa Brito Lacerda; Malinda EC Fitzgerald; Luiz Carlos L Silveira
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 204. doi:

Could tolerance to blur predict inter-individual variations of neural contrast sensitivity and/or loss of contrast sensitivity due to defocus or astigmatism? OPEN ACCESS
Richard Legras; David Rio; Gildas Marin
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 205. doi:

Performance, usability and comparison of three and four alternate forced choice versions of the handheld Radial Shape Discrimination test OPEN ACCESS
Jae Ku; Ashli Milling; Paul Knox
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 206. doi:

The association between pattern glare and global motion detection
OPEN ACCESS
CUI YU; Hua Bi; Ge Wu; LING XU; WEI HE; Bin Zhang
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 207. doi:

Effect of Energy Drinks on CFF OPEN ACCESS
Sneha Bagavandoss; Jeung Kim; Patricia Cisarik
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 208. doi:

Understanding the (lack of) relationship between Straylight and Visual Acuity with clinical examples OPEN ACCESS
Thomas J T P Van Den Berg; Ivanka J.E. van der Meulen
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 209. doi:

Optimal Viewing Distance for Reading Text of Small Font OPEN ACCESS
Yu-Chi Tai
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 210. doi:

A model to predict Snellen visual acuity in patients with a common presenting complaint
OPEN ACCESS
Amy Yuan; Michael Ehrlich
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 211. doi:

Contrast sensitivity and aberrations in good and supranormal visual acuity OPEN ACCESS
Jukka Ari Olavi Moilanen; Essi Peltomaa; Juha M. Holopainen
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 212. doi:

Evaluating the goodness of various equations to model the contrast sensitivity function of the human eye OPEN ACCESS
Alexander Leube; Tim Tobias Schilling; Arne Ohlendorf; Siegfried Wahl
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 213. doi:

Evaluation of blink rate in awakening and sleepiness conditions OPEN ACCESS
Dominique Bremond-Gignac; Mathieu Requier; Philippe Peyrard
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 214. doi:

Visual impact of artificially induced intraocular scatter with a liquid crystal phase modulator OPEN ACCESS
Augusto Arias Gallego; Alexandros Pennos; Harilaos S Ginis; Pablo Artal
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 215. doi:

Ocular clinical imaging and histopathological correlation: identifying the optimal fixation protocol OPEN ACCESS
Carlos Augusto Moreira; Pablo Zoroquiain; Christina Mastromonaco; Evangelina Esposito; Jacqueline Coblentz; Andre C Romano; Miguel N Burnier
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 216. doi:

Isolation and Expansion of Porcine Non-pigmented Epithelial Cells OPEN ACCESS
Yuan Dong; Kaushali Thakore-Shah; Eifren Ray Baclagon; Sophie Xiaohui Deng
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 217. doi:

Details of the collagen and elastin architecture in the human conjunctiva, Tenon's layer, and sclera revealed by two-photon excited fluorescence microscopy OPEN ACCESS
Choul Yong Park; Martha Kim; Jimmy K Lee; Roy S Chuck
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 218. doi:

Characterization of tet-On *Krt4-rtTA* Driver Mice Created via CRISPR/Cas9-mediated Knock-in Strategy
OPEN ACCESS
Jianhua Zhang; Fei Dong; Yujin Zhang; Chia-Yang Liu; Yueh-Chiang Hu; Winston W Y Kao
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 219. doi:

Biomimetic Hybrid Scaffolds for eye orbital bone tissue engineering OPEN ACCESS
Davood Kharaghani; Masoumeh Meskinfam; Serena Bertoldi; Rana Imani; Sahar Balagholi; Mozhgan Rezaeikanavi; M. Cristina Tanzi; Silvia Farè
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 221. doi:

A Novel CT Based Technique for the Calculation of Bony Orbital Volume OPEN ACCESS
Shoaib Ugradar; Naresh Joshi; Daniel Rootman; Nigel Davies; Robert Goldberg
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 222. doi:

Investigating the genetic architecture of ocular health and disease in Mexican American families: The San Antonio Family Eye Study (SAFES). OPEN ACCESS
Kent L Anderson; Andrew C Bowman; Matthew P Johnson
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 223. doi:

Glasses for Microtia OPEN ACCESS
Lauren Maloley; James Hermsen; Donny Suh
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 224. doi:

Impairment of development of orbicularis oculi muscle and meibomian gland in *Six1/4* double knockout mice OPEN ACCESS
Shin Mizoguchi; Keiko Ikeda; Yilu Xie; Yuka Okada; James V Jester; Shizuya Saika
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 225. doi:

Retinoic acid and Pitx2 have reciprocal effects on neural crest migration in a zebrafish model of anterior segment dysgenesis OPEN ACCESS
Elisa Schley; Bahaar Chawla; Antionette L. Williams; Brenda L Bohnsack
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 227. doi:

Anterior chamber anatomy is altered in SPARC-deficient mice OPEN ACCESS
Henrietta Ho; Hla Myint Htoon; Li Zhen Toh; Chan Nyein Lwin; Tina T Wong; Li Fong Seet
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 228. doi:

Lymphatic markers in the normal and lesioned rat optic nerve OPEN ACCESS
Andrea Trost; Falk Schroedl; Alexandra Kaser-Eichberger; Barbara Bogner; Daniela Bruckner; Christian Runge; Karolina Motloch; Ludwig M Heindl; Herbert Reitsamer
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 229. doi:

PITX2, *FOXC1* and *CYP1B1* mediate ocular fissure closure via interactions between the neural crest and optic cup OPEN ACCESS
Antionette L. Williams; Brenda L Bohnsack
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 230. doi:

Molecular profiling of the developing lacrimal gland OPEN ACCESS
Galina Dvoriantchikova; Steve Pappas; Gabriel Gaidosh; Wensi Tao; David T Tse; Dmitry V Ivanov; Daniel Pelaez
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 231. doi:

Comparative proteomic profiling of cultured RPE cells derived from human embryonic stem cells vs. rhesus monkey OPEN ACCESS
Bruce A Pfeffer; Chengjian Tu; Jun Li; Jun Qu; Steven J Fliesler
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 232. doi:

In vivo quantification of macular RPE cell density in infant monkeys using fundus photography OPEN ACCESS
Lauren M Renner; Emily Johnson; Kasie W. Paul; Travis B. Smith; Trevor J McGill; Martha Neuringer
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 233. doi:

Assessment of Phagocytic Function of Human Retinal Pigment Epithelium in Vitro OPEN ACCESS
George Inana; Chris Murat; Weijun An; Ian Harris; Jing Cao
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 235. doi:

Semaphorin 4D inhibits photoreceptor outer segment phagocytosis by retinal pigment epithelial cells OPEN ACCESS
Ayelen Bulloj; Silvia C Finnemann
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 236. doi:

Contribution of annexin A5 to diurnal phagocytosis by the retinal pigment epithelium OPEN ACCESS
CHEN YU; Luis E Munoz; Sebastian Boeltz; Silvia C Finnemann
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 237. doi:

Discovering Novel Genes and Pathways Involved in Maintenance of Epithelial Phenotype in Retinal Pigment Epithelium Cells OPEN ACCESS
Justin R Chang; Balendu Shekhar Jha; Madhu Lal; Ruchi Sharma; Marc Ferrer; Kapil Bharti
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 238. doi:

F-actin organization as potency indicator for high-quality, functional human RPE cell culture OPEN ACCESS
Claudia Müller; Silvia C Finnemann
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 239. doi:

Molecular Mechanisms of Oxytocinergic Signaling and its Inhibition of Kir7.1 in the RPE OPEN ACCESS
Nathaniel York; Patrick Halbach; Michelle Chiu; Ian Bird; De-Ann M Pillers; Bikash R Pattnaik
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 240. doi:

Choroid endothelial cells regulate RPE tight junctions through modulation of Bruch's membrane assembly OPEN ACCESS
Ignacio Benedicto; Guillermo Lehmann-Mantaras; Michael Ginsberg; Daniel J. Nolan; Olivier Elemento; Nazia M Alam; Glen T. Prusky; Arvydas Maminishkis; Sheldon S Miller; Shahin Rafii; Enrique J Rodriguez-Boulan
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 241. doi:

Helping retina to breathe by increasing fetal hemoglobin production in RPE: relevance to outer retinal preservation in hypoxic conditions characteristic of aging and diabetes OPEN ACCESS
Pamela M Martin; Wanwisa Promsote; Folami Lamoke Powell; Alan Saul; Vadivel Ganapathy; Pamela M Martin
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 242. doi:

Functional studies of sodium/proton exchanger 8 in adult mouse retina OPEN ACCESS
Chun-hong Xia; Mei Li; Audrey Kim; Ian Ferguson; Xiaohua Gong
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 243. doi:

Anticancer Drug Cisplatin Differentially Affects Retina Pigment Epithelial Cells Depending on Mitochondrial Backgrounds OPEN ACCESS
Tej Patel; Cristina M Kenney; Catherine Y Liu; Marilyn Chwa; Shari R Atilano; Jon Lucas Norman
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 244. doi:

Dissecting Exosome Biogenesis in Adult Human Retinal Pigment Epithelial Cells (ARPE19):
Specific Interaction of αB-crystallin with Rab GTPase27b OPEN ACCESS
Rajendra K Gangalum; Ankur M Bhat; Sirus A Kohan; Suraj P Bhat

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 245. doi:

PYK2 plays a role in matrix contraction by RPE-derived cells OPEN ACCESS
Shigeo Tamiya; Kevin McDonald; Henry J Kaplan
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 246. doi:

MDM2 inhibition suppresses NF-κB-mediated inflammation in retinal pigment epithelium cells OPEN ACCESS
Biraj Mahato
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 247. doi:

Glutaredoxin 2 (Grx2) Protects Retinal Pigment Epithelial Cells from Oxidative Damage by Regulating Autophagy OPEN ACCESS
Xiaobin Liu; Christy Xavier; Hongji Wu
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 248. doi:

Optimization of Culture Conditions for Human Retinal Progenitor Cells OPEN ACCESS
Danhong Zhu; Christine Spee; David R Hinton
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 249. doi:

Computational Analysis of iPSC-Derived RPE Shape and Primary Cilium Location to Create Predictive Models of Cell Function OPEN ACCESS
Nathan A Hotaling; Nicholas Schaub; Jorge Ferrari; Balendu Jha; Carl Simon Jr.; Kapil Bharti
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 250. doi:

Primary Cilia Regulates Human iPSC-RPE Maturation via Regulation of WNT Signaling OPEN ACCESS
Qin Wan; Balendu Jha; Helen May-Simera; Ruchi Sharma; Juliet Hartford; Vladimir Khristov; Kiyoharu Miyagishima; Mostafa Reza Lotfi; Sheldon S Miller; Kapil Bharti
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 252. doi:

Ex-vivo assessment of metabolic alterations of retinal pigment epithelial cells using Fluorescence Lifetime Imaging Ophthalmoscopy (FLIO) OPEN ACCESS
Natalie Blimke; Joachim Pruessner; Lars Alt; Gereon Huttmann; Ralf Brinkmann; Yoko Miura
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 253. doi:

Feedback Regulation of IRE1 During Unfolded Protein Response in RPE OPEN ACCESS
Sarah Melissa P. Jacobo; Maximilian J Gerhardt; arogya Khadka; Daniel Diaz-Aguilar; Magali Saint-Geniez
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 254. doi:

Usher proteins are engaged in vesicular trafficking in human retinal pigment epithelial and fibroblasts cells OPEN ACCESS
Bhagwat V. Alapure; Marianne Hathaway; Jennifer J Lentz
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 255. doi:

Treatment of Haplogroup H and K ARPE-19 Cybrids with β-Amyloid OPEN ACCESS
Kunal Thaker; Marilyn Chwa; Shari R Atilano; Tej Patel; Cristina M Kenney
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 256. doi:

Validation of pluripotent stem cell derived RPE (scRPE) as a pure and renewable source for disease modeling and assay development OPEN ACCESS
Ulrich F O Luhmann; Sonja Schlicht; Faye M Drawnel; Silke Zimmermann; Carolin Willburger; Claire Hippert; Verena Kuppers; Jean-Baptiste Vallier; Jean-Philippe Carralot; Marco Prunotto; Mark Burcin
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 257. doi:

A Porcine Model of Retinal Pigment Epithelium (RPE) Injury to Test the Efficacy of Human Induced Pluripotent Stem Cell - derived RPE (hiPSC-RPE) Transplants. OPEN ACCESS
Juan Amaral; Maria Mercedes Campos; Arvydas Maminishkis; Vladimir Khristov; Raymond Zhou; Steve T Charles; Boris Stanzel; Balendu Jha; Irina Bunea; Sheldon S Miller; Kapil Bharti
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 258. doi:

Development of a high content imaging photoreceptor outer segment phagocytosis assay in inducible pluripotent stem cell (iPSc)-derived RPE cells OPEN ACCESS
Megan Jabour; Heather MacLeod; Frada Berenshteyn; Arnaud Lacoste; Kathryn McAllister
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 259. doi:

Autophagy machinery is functional in human pluripotent stem cell-derived retinal pigment epithelial cells OPEN ACCESS
Kati M Juuti-Uusitalo; Niko Kivinen; Johanna Viiri; Juha Hyttinen; Arto Koistinen; Hannu M T Uusitalo; Debasish Sinha; Heli Skottman; Kai Kaarniranta
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 260. doi:

Ano2 contributes to the outwardly rectifying Ca^{2+}-dependent Cl^- conductance in the retinal pigment epithelium OPEN ACCESS
Olaf Strauss; Nadine Reichhart; Susanne Keckeis
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 261. doi:

Evaluation of the proliferative capacity of canine retinal pigment epithelial cells harvested from different regions of the fundus. OPEN ACCESS
Freya M Mowat; Jonathan Hash; Philip Mzyk; Jill Harned; Steven Nagar; Mary Christine McGahan
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 262. doi:

Increased expression and apical distribution of betaA3/A1-Crystallin in polarized RPE cells OPEN ACCESS
Hiroto Terasaki; Parameswaran G Sreekumar; Shozo Sonoda; Christine Spee; Taiji Sakamoto; David R Hinton; Ram Kannan
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 263. doi:

Modulation of Epithelial Mesenchymal Transition (EMT) Through the Notch Signaling Pathway in Human Retinal Pigment Epithelial Cells OPEN ACCESS
Jinggang Yin; Junming Yue; Gunnan zhao; Wenying Huo; Weihong Huo; Edward Chaum
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 264. doi:

A cell-based model to study wound repair in retinal pigmented epithelial cells OPEN ACCESS
YingHsuan Shih; Monte J Radeke; Pete Coffey
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 265. doi:

Fluorescence Lifetime Imaging Ophthalmoscopy of in-vitro retinal pigment epithelial cells

under different glucose conditions OPEN ACCESS
Joachim Pruessner; Natalie Blimke; Lars Alt; Gereon Huttmann; Ralf Brinkmann; Yoko Miura
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 266. doi:

Phagocytosis of photoreceptor outer segments regulates mTORC1 activity in the retinal pigment epithelium OPEN ACCESS
Bo Yu; Pei Xu; Zhen-Yang Zhao; Yan Chen
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 267. doi:

hiPSC-derived RPE cells: Characterization of blood-retinal barrier properties and drug permeability OPEN ACCESS
Jenni J. Hakkarainen; Julien Maruotti; Aila Seppanen; Brigitte Onteniente; Giedrius Kalesnykas; Mika Reinisalo
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 268. doi:

Corneal Toxicity of ABT-414 in Glioblastoma (GBM): Clinical Manifestations, Ophthalmological Findings and Management OPEN ACCESS
Marian Macsai; Ashiyana Nanani; Hui Gan; Andrew Lassman; Ryan Merrell; Erica Gomez; Rajendar Mittapalli; Hao Xiong; Christopher Ocampo; Kyle Holen; Golnaz Moazami
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 269. doi:

Volumetric Single-Layer Inner Retinal Analysis in Patients with Hydroxychloroquine Toxicity OPEN ACCESS
Vishal Parikh; Yasha Modi; Adrian Au; Justis P Ehlers; Andrew Schachat; Rishi P Singh
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 270. doi:

Efficacy of Rat Primary Cells transfected with Pigment Epithelium-Derived Factor using the *Sleeping Beauty* Transposon system in choroidal neovascularization OPEN ACCESS
Maria Hernandez; Laura Garcia-Garcia; Sergio Recalde; Patricia Fernandez; Juan Roberto Rodriguez; Jaione Bezunartea-Bezunartea; Daniel Scherman; Sandra Johnen; Gabriele Thumann; Alfredo Garcia-Layana
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 271. doi:

Age-related choroidal and retinal changes in Sprague-Dawley and Fischer 344 Rats. OPEN ACCESS
Malinda EC Fitzgerald; Chunyan Li; Nobel Del Mar; Ryan W Piche; Anton Reiner
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 273. doi:

Anti-VEGF Drug Interference in the R&D Systems Quantikine VEGF-A ELISA Kit OPEN ACCESS
Albert Francis Torri; Camille Georgaros; Ashique Rafique; Glane Sumner
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 274. doi:

Increased uptake of lipophilic immunosuppressive compounds in cornea and retina based on solubilization in an aqueous formulation. OPEN ACCESS
Sabine Nakowitsch; Cornelia Kaintz; Philipp Graf; Marielle Koenig-Schuster; Eva Prieschl-Grassauer; Angelika Bodenteich; Andreas Grassauer
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 275. doi:

Functional and Morphological Changes Following Macular Pucker Surgery After Topical Administration of Indomethacin 0.5%, Bromfenac 0.09%, Nepafenac 0.1%, or Placebo OPEN ACCESS
Raffaele Turano; Andrea Russo; Elena Gambicorti; Anna Cancarini; Sarah Duse; Francesco Morescalchi; Ciro Costagliola; Francesco Semeraro
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 276. doi:

Pharmacological normalization of the complement system dysregulation in the animal model of enhanced lipofuscin formation. OPEN ACCESS
Konstantin Petrukhin; Boglarka Racz
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 277. doi:

Thin Outer Nuclear Layer and Retinal Volume Measurements with Automated Segmentation on Optical Coherence Tomography Supports Hydroxychloroquine Toxicity OPEN ACCESS
Akshay Jain; Zach Dupureur; Alexandra Almasov; Michael S. Tsipursky; Leanne Labriola
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 278. doi:

Analysis of choroidal effusion fluid using Light's criteria in acute systemic lupus erythematous (SLE) OPEN ACCESS
James A Stefater; Dean Eliott; Leo A Kim
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 280. doi:

RT-qPCR quantification of mRNAs specific of Pigment Epithelium-Derived Factor (PEDF) and Vascular Endothelial Growth Factor (VEGF) in Rat eyes injected in the subretinal space with Primar... OPEN ACCESS
Sergio Recalde; Laurence Jeanson-LEH; Patricia Fernandez; Maria Hernandez; Laura Garcia-Garcia; Jaione Bezunartea-Bezunartea; Daniel Scherman; Séverine Pouillot; Gabriele Thumann; Alfredo Garcia-Layana
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 281. doi:

Lymphocytic Microparticles Modulate Angiogenic Properties of Macrophages in Laser-induced Choroidal Neovascularization OPEN ACCESS
Houda Tahiri; Samy Omri; CHUN YANG; Sylvain Chemtob; Pierre Hardy
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 282. doi:

ELU Study: Aflibercept decreases the number of follow-up and intravitreal injection visits compared with ranibizumab, in patients with exudative (wet) age-related macular degeneration OPEN ACCESS
frederic queguiner; Kristina Beziganyan
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 283. doi:

Cumulative dosing enhances the beneficial effects of antisense oligonucleotide treatment on visual function in a mouse model of Usher Syndrome. OPEN ACCESS
Russell Amato; Robert Follett Rosencrans; Francine M Jodelka; Frederic Depreux; Nicolas G Bazan; Frank Rigo; Michelle Hastings; Jennifer J Lentz
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 285. doi:

Efficacy of Suprachoroidal Aflibercept in a Laser Induced Choroidal Neovascularization Model OPEN ACCESS
Samirkumar Rajnikant Patel; Jennifer Kissner; Rafal Fargo; Vladimir Zarnitsyn; Glenn Noronha
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 286. doi:

Effectiveness of AR-13154 monotherapy and combination therapy in animal models of wet age-related macular degeneration and proliferative diabetic retinopathy OPEN ACCESS
Cheng-Wen Lin; Jill M Sturdivant; Mitchell A deLong; Casey Kopczynski
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 287. doi:

Development of a hydrogel flowable dressing for the prevention of corneal scarring OPEN ACCESS
Gurpreet Chouhan; Felicity De Cogan; Lisa J Hill; Saaeha Rauz; Ann Logan; Liam M. Grover
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 288. doi:

Biocompatibility Assessment of End-Thiolated Hyaluronate Coated Gold Nanoparticles on Retinal Pigment Epithelial (ARPE-19) cells OPEN ACCESS
Bedia Begum Karakocak; Joshua Tyler Davis; Pratim Biswas; Nathan Ravi
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 289. doi:

Differential autophagic effects of vital dyes in retinal pigment epithelial and photoreceptor cells OPEN ACCESS
Shwu-Jiuan Sheu; Yi-An Chen; Chih-Wen Shu
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 290. doi:

Computational Prediction of Intravitreal Pharmacokinetics of Macromolecules: Tool for Ocular Drug Development OPEN ACCESS
Eva Maria del Amo Páez; Arto Urtti
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 291. doi:

The influence of drop size of tropicamide 0.5% eye drops on pupil dilation. OPEN ACCESS
Hans Van Der Heiden; Nynke A.M. Troelstra; Janneke van Lith; Jacques Verzijl
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 292. doi:

Evaluation of cytotoxicity of palomid 529 on human retinal pigment epithelial cells and choroidal vascular endothelial cells OPEN ACCESS
Bharani Krishna Mynampati Arunadithya; Kumar Sambhav; KV Chalam
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 293. doi:

Human umbilical tissue-derived cells rescue phagocytosis in cultured retinal pigment epithelial cells from Royal College of Surgeons rat through CD36 and integrin αvβ5 OPEN ACCESS
Jing Cao; Christopher Murat; Weijun An; Ian Harris; George Inana
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 294. doi:

Spectral-Domain Optical Coherence Tomography for Early Detection of Hydroxychloroquine Toxicity OPEN ACCESS
Hemang K. Pandya; Hunter Porter; Vinay A Shah; Nawajes A Mandal
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 295. doi:

Ocular Tolerability and Toxicokinetics of Suprachoroidally Administered CLS-TA, Triamcinolone Acetonide Injectable Suspension, in Combination with Intravitreal Eylea in Rabbits OPEN ACCESS
Donna Taraborelli; Brian Burke; Glenn Noronha
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 296. doi:

Combined effects of benzalkonium chloride and UV irradiation on the bovine lens *in vitro* OPEN ACCESS
Jordan Rossy; David J McCanna; Jake Sivak
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 297. doi:

Chemotherapy with biological agents and ocular side effects OPEN ACCESS
Dimosthenis Mantopoulos; Elaine Michele Binkley; Anne L Kunkler; Kari Kendra; Colleen M Cebulla
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 298. doi:

Ocular side effects of traditional chemotherapeutics and small molecule inhibitors OPEN ACCESS
Anne L Kunkler; Elaine Michele Binkley; Dimosthenis Mantopoulos; Kari Kendra; Colleen M Cebulla
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 299. doi:

Visual alterations in a cohort of young male patients with acute/subacute intoxication with mercury vapor OPEN ACCESS
José-Carlos Pastor; Iraxte Zabalza; Ruben Cuadrado; Jose Alberto de Lazaro; Angela Morejon; Yrbani Lantigua; Rosa Coco
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 300. doi:

Pilot Study Determining Impact of Best Practices Alerts on Hydroxychloroquine Screening Practice Patterns OPEN ACCESS
Adrian Au; Vishal Parikh; Yasha Modi; Justis P Ehlers; Andrew Schachat; Rishi P Singh
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 301. doi:

Conjunctival transcriptome changes in vernal keratoconjunctivitis OPEN ACCESS
Andrea Leonardi; Philippe Daull; Jean-Sebastien Garrigue; Elena Tarricone; Mylene Docquier; Paola Brun
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 302. doi:

Steroid sparing effect of 0.1% tacrolimus eye drops for treatment of shield ulcer and corneal epitheliopathy in refractory allergic ocular diseases OPEN ACCESS
Dai Miyazaki; Atsuki Fukushima; Yuichi Ohashi; Nobuyuki Ebihara; Eiichi Uchio; Shigeki Okamoto; Jun Shoji; Etsuko Takamura; Yayoi Nakagawa; Kenichi Namba; Hiroshi Fujishima
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 303. doi:

The Role of Th2 cytokines in Mouse Models of Papain-Induced Conjunctivitis. OPEN ACCESS
Jobu Sugita; Akira Matsuda; Yosuke Asada; Nobuyuki Ebihara; Akira Murakami; Susumu Nakae
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 304. doi:

Reducing nasal and ocular itching with a novel drug in the BioCube® allergy chamber OPEN ACCESS
Paul J Gomes; J. Ernest Villafranca; Erik Viirre; Elliott Lasser; Mark B Abelson
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 305. doi:

The roles of IL-33 in ragweed-induced experimental allergic conjunctivitis with lacrimal gland excision OPEN ACCESS
Yosuke Asada; Susumu Nakae; Jobu Sugita; Nobuyuki Ebihara; Akira Matsuda

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 306. doi:

Phase 3 Multi-Center Trial Evaluating the Efficacy, Safety and Tolerability of Isunakinra (EBI-005) in Subjects with Moderate to Severe Allergic Conjunctivitis
OPEN ACCESS
Michael H Goldstein; Leontia Burke; Karen L Tubridy; Karen Dewar; Paul J Gomes
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 307. doi:

TRPV1 antagonist suppresses allergy response in allergic conjunctivitis Murine Model, rather than TRPA1 antagonist
OPEN ACCESS
Ji Young Kwon; Hyun Soo Lee; Chang Rae Rho; HeeJung Ju; Choun-Ki Joo
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 308. doi:

Clinical and histological evaluation of sirolimus eye drops and sirolimus intraperitoneal injection in mice with experimental allergic conjunctivitis OPEN ACCESS
Nan Wang; Zhenyu Song; Xiuping Liu; Chulong Huang; Kaili Wu
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 309. doi:

Incidence and severity of itchy palate following conjunctival allergen challenge
OPEN ACCESS
Emily Schoemmell; Yesha Raval; Donna L Welch; Paul J Gomes; Keith Jeffrey Lane
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 310. doi:

Allergic eye disease (AED) progression in the mouse model is associated with quantitative changes in conjunctival innate lymphoid populations. OPEN ACCESS
Rachel Smith; Nancy Reyes; Daniel R Saban
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 311. doi:

Superior efficacy of Lastacaft® versus Pataday in grass- and tree-allergic subjects
OPEN ACCESS
Stacey L Ackerman; Joseph B Cirilino; Julia M Williams; David A Hollander
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 312. doi:

Altered patterns of fungal keratitis in London: an 8-year retrospective observational study
OPEN ACCESS
Hon Shing Ong; Stephen J Tuft; John Kenneth George Dart; Matthew Burton
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 313. doi:

The role of Mannose Receptor during Aspergillus fumigatus infection and the interaction with Dectin-1
in Corneal Epithelial Cells OPEN ACCESS
Guiqiu Zhao; Jing Lin; Qian Wang; Qiang Xu
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 314. doi:

Serratia marcescens: Blowing Corneal Epithelial Cell Bubbles with GumB OPEN ACCESS
Robert M Q Shanks; Kimberly M Brothers; Nicholas Stella; Julianna M Bachinski
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 315. doi:

A role for NLRC4 in resistance of BALB/c mice infected with *P. aeruginosa*.
OPEN ACCESS
Sharon McClellan; Kerry Vistisen; Linda D Hazlett
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 316. doi:

IL-6 Contributes to Corneal Nerve Degeneration Following HSV-1 Infection OPEN ACCESS
Ana J Chucair-Elliott; Daniel J Carr
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 317. doi:

Expression of ICOS and Foxp3 on T cells infiltrating in corneal allografts OPEN ACCESS
Hiroko Taniguchi; Tomoyuki Kunisnige; Hisaya Akiba; Hideo Yagita; Ryo Abe; Junko Hori
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 318. doi:

Role of V-domain Ig suppressor of T cell activation (VISTA) in Anterior Chamber Associated Immune Deviation OPEN ACCESS
Tomoyuki Kunishige; Hiroko Taniguchi; Tatsukuni Ohno; Miyuki Azuma; Junko Hori
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 319. doi:

Corneal burn in one eye leads to neurogenic conjunctival inflammation of the fellow eye
OPEN ACCESS
Jeremias Gaston Galletti; Mauricio Guzman; Irene Keitelman; Florencia Sabbione; Analia S Trevani; Mirta N Giordano
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 320. doi:

Corneal epithelial cells suppress intracellular replication by clearing cytoplasmic *Pseudomonas aeruginosa* OPEN ACCESS
Abby Kroken; David J Evans; Suzanne M J Fleiszig
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 321. doi:

Differential changes in intraocular pressure and corneal manifestations in individuals with viral endotheliitis after keratoplasty OPEN ACCESS
Yukiko Morita; Naoyuki Morishige; Naoyuki Yamada; Koh-hei Sonoda
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 322. doi:

Corneal Lymphangiogenesis in a murine bacterial keratitis model. OPEN ACCESS
Akitomo Narimatsu; Tkaaki Hattori; Naoto Koike; Kazuki Tajima; Hayate Nakagawa; Haruki Katahira; Shigeto Kumakura; Hiroshi Goto
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 323. doi:

Tumor necrosis factor-α-inducible protein 2 is indispensable for host defense against *Candida albicans* keratitis OPEN ACCESS
Bing Xu; Nan Gao; Fushin X Yu
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 324. doi:

Clinical keratitis isolates of *Pseudomonas aeruginosa* develop resistant biofilms
OPEN ACCESS
Ben Wucher; Jordan Reed; Paul Dunman; Rachel Wozniak
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 325. doi:

Bacterial Keratitis in Central Virginia OPEN ACCESS

Thomas Chris McCurry; Chang Lee; Jeffrey Golen
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 326. doi:

NLRP3 inflammasome activation after ultraviolet B irradiation in human corneal epithelial cells OPEN ACCESS
Eveliina Korhonen; Niina Piippo; Maria Hytti; Kai Kaarniranta; Anu Kauppinen
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 327. doi:

Efficacy of a fixed combination of three antibiotics against *Candida* species OPEN ACCESS
Andreana Marino; Valeria D'Angelo; Carmela Giovanna Spoto; Vincenzo Papa; Anna Rita Blanco
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 328. doi:

Neutralization of Fibroblast Growth Factor-2 (FGF-2) Suppresses HSV-1-Induced Corneal Lymphangiogenesis OPEN ACCESS
Hem Raj Gurung; Daniel J Carr
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 329. doi:

Advanced age is the most significant risk factor of persistent epithelial defect after treatment of refractory keratitis OPEN ACCESS
Daisuke Shimizu; Dai Miyazaki; Yoshitsugu Inoue
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 330. doi:

Plasmacytoid Dendritic Cells Mediate T cell Responses by Direct Interaction in Lymph Nodes during Herpes Simplex Virus-1 Keratitis OPEN ACCESS
Victor Sendra; Arsia Jamali; Maria Jose Lopez; Pedram Hamrah
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 331. doi:

Temporal antimicrobial effect of photodynamic therapy with TONS504 on *Pseudomonas aeruginosa* OPEN ACCESS
Kentaro Sueoka; Taiichiro Chikama; Miftahul Akhyar Latief; Ji-Ae Ko; Yoshiaki Kiuchi; Takemasa Sakaguchi; Akira Obana
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 332. doi:

Membrane Selectivity of Cationic Polyamides and Rational Design of Proteolytic-resistant Antimicrobial Peptides OPEN ACCESS
Rajamani Lakshminarayanan; Veluchamy A Barathi; Mayandi Venkatesh; Navin Kumar Verma; Shouping Liu; Xian Jun Loh; Roger W Beuerman
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 333. doi:

Evaluation of *Moraxella* keratitis at a tertiary referral centre OPEN ACCESS
Dilys Lola Oladiwura; Ore-Oluwa Erikitola; Sanjay Mantry; Kanna Ramaesh; Deepa Anijeet
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 334. doi:

Neurogenic Homeostasis of Corneal Immunity: Peripheral Nerve Regulates Innate Immunity through Vasoactive Intestinal Peptide OPEN ACCESS
Takefumi Yamaguchi; Kazunari Higa; Murat Dogru; Yoshiyuki Satake; Jun Shimazaki
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 335. doi:

Activation of cytotoxic T lymphocytes by corneal endothelial cells after infection of human cytomegalovirus OPEN ACCESS
RYU UOTANI; Dai Miyazaki; Yoshitsugu Inoue; Tatsuo Suzutani
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 336. doi:

Interleukine-23, but Not Interleukine-2, Promotes the Generation of Memory Th17 Cells in Dry Eye Disease OPEN ACCESS
Yihe Chen; Sunil Chauhan; Anna Marmalidou; Reza Dana
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 337. doi:

Development of hypoxia in the corneal epithelium of herpes simplex virus-1 infected eyes OPEN ACCESS
pushpa rao; Subhash Gaddipati; Andrew Jerome; Susmit Suvas
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 339. doi:

The ExoU genomic island is responsible for the greatly increased virulence of *P. aeruginosa* strain 19660 in the cornea. OPEN ACCESS
Chairut Vareechon; Valerie Lozada; Jonida Toska; Stephanie Zmina; Eric Pearlman; Arne Rietsch
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 340. doi:

Bacterial Keratitis: Isolated Organisms and Antibiotic Resistance Patterns OPEN ACCESS
Michelle Peng; Vicky Cevallos; Jennifer Rose-Nussbaumer
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 341. doi:

PAECILOMYCES KERATITIS:A CHALLENGING INFECTION OPEN ACCESS
Aline Couto; Maria Cecilia Zorat-Yu; Ana Luisa Hofling-Lima; Denise de Freitas
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 342. doi:

The antifungal efficacy of amphotericin B against Fusarium and Aspergillus in corneal storage media OPEN ACCESS
Katherine Duncan; Jeff Parker; Caroline Hoover; Bennie H Jeng
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 343. doi:

The Resurgence of Penicillin-Susceptible *Staphylococcus aureus* Isolated from Infectious Keratitis OPEN ACCESS
Regis P Kowalski; Lisa M Karenchak; Eric G Romanowski; Robert M Q Shanks; Deepinder Dhaliwal; Alex Mammen
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 344. doi:

Adenovirus-Induced MUC16 Ectodomain Release Correlates with Decreased Barrier Function and Increased Adenoviral Infection of Corneal Epithelial Cells OPEN ACCESS
Balaraj Balaram Menon; Xiaohong Zhou; Sandra Spurr-Michaud; Jaya Rajaiya; James Chodosh; Ilene K Gipson
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 345. doi:

Comparison of reproducibility in quantitative evaluation of glaucoma between structure and function OPEN ACCESS
Daisuke Shiba; Eri Hirano; Sayaka Adachi; Takeshi Ono; Kenya Yuki; Kazuo Tsubota
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 346. doi:

Intra and Inter-observer Agreement of Structural and Functional Glaucoma-Progression Software OPEN ACCESS

Alfonso Anton-Lopez; Javier Moreno-Montanes; Vanesa Anton; Gema Rebolleda; Jose Maria Martinez de la Casa; Jose M Larrosa; Fernando Ussa; Maria Garcia-Granero

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 347. doi:

The Retinal Ganglion Cell Index and Longitudinal Changes in Quality of Life ofPatients with Glaucoma. OPEN ACCESS

Chuniwei Zhang; Carolina Pelegrini Gracitelli; Alberto Diniz-Filho; Ricardo Yuji Abe; Linda M Zangwill; Robert N Weinreb; Felipe A Medeiros

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 348. doi:

Detection of Glaucoma Progression with the RGC Index in High- versus Low-Risk Eyes OPEN ACCESS

Courtney Ondeck; Linda M Zangwill; Robert N Weinreb; Alberto Diniz-Filho; Felipe A Medeiros

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 349. doi:

Baseline structural parameters measured with optical coherence tomography predict functional progression in open-angle glaucoma patients after five years OPEN ACCESS

Nicholas Moore; Alon Harris; Brent A Siesky; Amelia Huang; Colin Ridenour; Ingrida Januleviciene; Lina Siaudvytyte; George Eckert; Alice Chandra Verticchio Vercellin; Thomas A Ciulla

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 350. doi:

Optic nerve head parameters are more predictive of functional progression in open-angle glaucoma patients with diabetes mellitus over a five-year period OPEN ACCESS

Rehan M Hussain; Alon Harris; Alice Chandra Verticchio Vercellin; Amelia Huang; Nicholas Moore; Ingrida Januleviciene; Lina Siaudvytyte; George Eckert; Brent A Siesky

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 351. doi:

Functional and structural glaucoma progression after five years in patients with lowered intraocular pressure OPEN ACCESS

Rachel Frantz; Alon Harris; Alice Chandra Verticchio Vercellin; Nicholas Moore; Tyler Joseph Knight; Betul Kaskan; George Eckert; Darrell WuDunn; Brent A Siesky

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 352. doi:

Progression in Glaucoma Suspects is Detected Earlier with Imaging than Standard Automated Perimetry OPEN ACCESS

Alberto Diniz-Filho; Linda M Zangwill; Akram Belghith; Robert N Weinreb; Felipe A Medeiros

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 353. doi:

African Descent and Evaluation Study (ADAGES): The relationship between the presence and enlargement of beta-zone parapapillary atrophy (bPPA), African (AD) or European descent (ED), and ... OPEN ACCESS

James Thomas Murphy; Chad Kaplan; C Gustavo De Moraes; Dana Blumberg; Alon Skaat; George A Cioffi; Christopher A Girkin; Felipe A Medeiros; Robert N Weinreb; Linda M Zangwill; Jeffrey M Liebmann

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 355. doi:

Ancestry, beta-zone parapapillary atrophy (bPPA), and visual field progression in ocular hypertensive eyes in the African Descent and Glaucoma Evaluation Study (ADAGES) OPEN ACCESS

Jeremy Reimann; James Murphy; Chad Kaplan; C Gustavo De Moraes; Alon Skaat; Lama Al-Aswad; Christopher A Girkin; Felipe A Medeiros; Robert N Weinreb; Linda M Zangwill; Jeffrey M Liebmann

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 356. doi:

Peripapillary Retinal Nerve Fiber Layer (RNFL) Vascular Microcirculation in Glaucomatous Eyes with Asymmetric Hemifield Visual Field (VF) Loss OPEN ACCESS

Joanne C Wen; Chieh-Li Chen; Karine D Bojikian; Qinqin Zhang; Chen Xin; Raghu C Mudumbai; Murray A Johnstone; Philip P Chen; Ruikang K Wang

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 357. doi:

Peripapillary Retinal Nerve Fiber Layer and Macular Retinal Thickness in Asian Glaucoma Patients with Hyperopia and Myopia OPEN ACCESS

Jayant Venkatramani Iyer; Hla Myint Htoon; Tin Aung; Daniel Hsien Wen Su

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 358. doi:

The Visual Field Progression Pattern in Myopic Open Angle Glaucoma with Optic Nerve Head Tilt OPEN ACCESS

Jong Chul Han; En Jung Lee; Changwon Kee

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 359. doi:

Structure/Function Correlation of Optical Coherence Tomography in the Central and Peripheral Visual Fields OPEN ACCESS

Eric Lee; Robert Wanzek; Andrew Turpin; Luke Chong; Trina Eden; Michael Wall

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 360. doi:

The structure/function relationship between wide-scan binocular OCT images and the binocular visual field in glaucoma patients OPEN ACCESS

Masaaki Yoshida; Shiho Kunimatsu-Sanuki; Kazuko Omodaka; Toru Nakazawa

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 361. doi:

STRUCTURAL AND FUNCTIONAL ASSESSMENT OF GLAUCOMATOUS PATIENTS WITH HIGH AND LOW-TENSION OPTIC DISC HEMORRHAGES: A COMPARATIVE STUDY OPEN ACCESS

Leticia Sant' Ana Cardoso Silva; Flavio S S Lopes; Robert Ritch; Tiago Santos Prata

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 362. doi:

The relationship between retinal vessels and retinal nerve fiber trajectories in the temporal retina OPEN ACCESS

Fumi Tanabe; Chota Matsumoto; Allison M McKendrick; Sachiko Okuyama; Shigeki Hashimoto

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 363. doi:

The Horizontal Raphe in Structure Function Relationships OPEN ACCESS

Seth Bronstein; Shannon Xinnan Wang; Kelsey Evans; Nimesh Bhikhu Patel

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 364. doi:

Customized Imaging and analysis protocols for detecting glaucomatous retinal nerve fiber bundle (RNFB) reflectance abnormality in the temporal raphe. OPEN ACCESS

Bright Senyo Ashimatey; William H Swanson; Brett King

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 365. doi:

Exploring the structure-function relationship of retinal ganglion cells in the macula with a simple linear model OPEN ACCESS

Jacoby Allen Shelton; Donald Charles Hood

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 366. doi:

Sampling the visual field based on an individual's Retinal Nerve Fiber Layer (RNFL) thickness OPEN ACCESS

Shonraj Ballae Ganeshrao; Allison M McKendrick; Andrew Turpin

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 367. doi:

Relating Macula Structure to Function in Healthy Eyes OPEN ACCESS

Shannon Xinnan Wang; Seth Bronstein; Kelsey Evans; Nimesh Bhikhu Patel

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 368. doi:

Assessment of Change in Retinal Layers at the Macula in Glaucoma Patients and Correlation to Visual Field Index OPEN ACCESS

Colby Argo; Mohammad Ali Sadiq; Muhammad Hassan; Rubbia Afridi; Aniruddha Agarwal; Jacob Parriott; Mohamed Kamel Soliman; Salman Sarwar; Yasir Jamal Sepah

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 369. doi:

Correlation of local glaucomatous damage in RNFL attenuation coefficient and thickness maps with visual field defects OPEN ACCESS

Gijs Thepass; Jelena Novosel; Hans G Lemij; Koen Vermeer

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 370. doi:

Measurements of the Inner Macular Thickness As an Indicator to Evaluate Foveal Visual Function in Open-angle Glaucoma. OPEN ACCESS

Takeo Fukuchi; Shun Ochiai; Yuta Sakaue; Tetsuya Togano; Aki Suetake; Ryoko Igarashi

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 371. doi:

Structure-Function Relationships in Glaucoma after Normalization of Minimum Rim Width and Comparison to Retinal Nerve Fiber Layer OPEN ACCESS

Navid Amini; Fardeh Sharifipour; Pablo Romero; Sharon Henry; Simon K Law; Joseph Caprioli; Kouros Nouri-Mahdavi

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 372. doi:

Diagnostic Innovations in Glaucoma Study (DIGS): Comparing the Rates of Macular Ganglion Cell layer loss in Healthy, non-progressing Glaucoma and progressing glaucoma Eyes OPEN ACCESS

Naama Hammel; Akram Belghith; Felipe A Medeiros; Luke Saunders; Saif Baig; Robert N Weinreb; Linda M Zangwill

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 373. doi:

Predicting prevalence and severity of glaucomatous 10-2 visual field loss using 24-2, retinal nerve fiber layer, and macular thickness parameters OPEN ACCESS

Michael Sullivan-Mee; My Tho Karin Tran; Denise Pensyl; Suchitra Katiyar; Grace Tsan

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 374. doi:

Nasal Peripapillary Retinal Nerve Fiber Layer and Structure-Function Relationship in Glaucoma OPEN ACCESS

eunjoo Yoo; Chungkwon Yoo; Ji-Hye Park; Yong Yeon Kim

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 375. doi:

Exploring the Structure-Function Relationship for Perimetry Stimulus Sizes III, V and VI and OCT in Early Glaucoma OPEN ACCESS

Sandy Steudel; Thomas Callan; Gary C Lee; Esther Young; Paul H. Artes; Michael Wall; John G Flanagan

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 376. doi:

Structure-function relationship between Heidelberg Retina Tomography (HRT) and Heidelberg Edge Perimeter (HEP) parameters in glaucoma suspects OPEN ACCESS

Moritz Pettenkofer; C.P. Lohmann; Lukas Reznicek

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 377. doi:

Correlation of optic nerve OCT on Zeiss Cirrus HD and Humphrey visual field defects at WJB Dorn VA; does signal strength matter? OPEN ACCESS

Kelton Wigington; Riley Stroman; Daniela Whiteside

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 378. doi:

Correlation between functional and structural damages one year or more after a single episode of acute primary angle closure in Brazilians OPEN ACCESS

Rafael Vidal Merula; Sebastiao Cronemberger; Erica A Borges; Nassin Calixto

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 379. doi:

Long-term outcome of visual field and retinal nerve fiber layer progression in young patients with normal-tension glaucoma OPEN ACCESS

Eunoo Bak; Ko Eun Kim; Ki Ho Park; Dong Myung Kim; Young Kook Kim; Jin Wook Jeoung

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 380. doi:

What Does High Variance of Optical Coherence Tomography (OCT) Retinal Nerve Fiber Layer (RNFL) Thickness Measurements Imply? OPEN ACCESS

Anusha Alathur Rangarajan; Hiroshi Ishikawa; Gadi Wollstein; Larry Kagemann; Ian A Sigal; Richard Anthony Bilonick; Joel S Schuman

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 381. doi:

Glaucoma increases retinal surface contour variability as measured by optical coherence tomography OPEN ACCESS

Ou Tan; Liang Liu; John C Morrison; David Huang

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 382. doi:

Measurement of the Hypotenuse of the Vertical Optic Nerve Head Cupping (HVOC) with Spectral Domain Optic Coherence Tomography: Evaluation of a Potential Novel Parameter for Glaucoma Struc... OPEN ACCESS

Fabio Lavinsky; Nedio Castoldi; Camila Zanella Benfica; Paulo Augusto de Arruda Mello

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 383. doi:

Sensitivity and specificity of Machine Learning Classifiers using SD-OCT and Standard Automated Perimetry compared to Glaucoma Specialists, General Ophthalmologists, the OCT database and ... OPEN ACCESS

Leonardo Shigueoka; Edson Gomi; Marcelo Dias; Vital P Costa

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 384. doi:

Structure function analysis in early glaucoma: Improved sensitivity of the mf103 compared to the G2 test pattern OPEN ACCESS

Liva Brandao; Matthias Monhart; Andreas Schötzau; Anna Ledolter; Anja M Palmowski-Wolfe

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 385. doi:

Comparing three different modes of electroretinography in experimental glaucoma: diagnostic performance and correlation to structure OPEN ACCESS

Laura J Wilsey; Sowjanya Gowrisankaran; Grant Cull; Christy A Hardin; Claude F Burgoyne; Brad Fortune

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 386. doi:

Quantifying the Afferent Pupillary Defect: The Afferent Pupillary Response as Measured by Automated Pupillometry in Relation to Inter-Eye Average Retinal Nerve Fiber Layer Thickness in Gl... OPEN ACCESS

Jimmy Yan Hu; Chetra Yean; Anurag Shrivastava

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 387. doi:

Pupillary response to blue light correlates with severity of glaucomatous neural damage OPEN ACCESS

Nabin Joshi; Suresh Viswanathan; Mitchell W Dul

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 388. doi:

A new ocular explant model to study living optic nerve head events in experimental mouse glaucoma OPEN ACCESS

Elizabeth Cone Kimball; Mary Ellen Pease; Matthew Steinhart; Ericka N Oglesby; Cathy Nguyen; Ian F Pitha; Harry A Quigley

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 389. doi:

Use of Environmental Conditions to Enhance the Induction of Keratoconjunctivitis Sicca in Mice, Rabbits, and Dogs OPEN ACCESS

Glenwood G Gum; Matthew Lyulkin; Vatsala Naageshwaran; Emily Rose; Annabelle Kraus; Nurith Amitai

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 390. doi:

Evaluation of extraction and mass spectrometry methods for detection of possible lipid mediators of inflammation in tears. OPEN ACCESS

Shyam Panthi; Jianzhong CHEN; Landon Wilson; Jason J Nichols

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 391. doi:

Multiplicities of Lacrimal Gland Disease Phenotypes OPEN ACCESS

Austin K Mircheff; Yanru Wang; Joel E Schechter; Meng Li; Warren Tong; Mayssa Attar; Murty Chengalvala; Joe Harmuth; Jeffery J Prusakiewicz

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 392. doi:

Transient receptor potential vanilloid type 1 (TRPV1) related-responses to ocular surface agression OPEN ACCESS

Eduardo M Rocha; Lara Dias; Jayter Silva Paula; Larissa Ferreira; Jacqueline Faustino; Ana Carolina Dias

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 393. doi:

Age-associated alterations in dendritic cells promote generation of Th1 cells OPEN ACCESS

Fang Bian; Yangyan Xiao; Flavia L Barbosa; Stephen C Pflugfelder; Cintia S De Paiva

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 394. doi:

A topically delivered synthetic metalloporphyrin SOD mimetic improves hallmarks of dry-eye disease pathology. OPEN ACCESS

Simon Kaja; Peter Koulen; Jooseppi Puranen; Symantas Ragauskas

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 396. doi:

Tear fluid proteome reveals inflammation and immune response proteins as potential predictive biomarkers of the effects of desiccating stress and dry eye treatments OPEN ACCESS

Ulla Aapola; Janika Nättinen; Antti Jylhä; Jose Pinto-Fraga; Alberto López-Miguel; Maria J González-Garcia; Amalia Enriquez-De-Salamanca; Michael E Stern; Margarita Calonge; Hannu M T Uusitalo; Roger W Beuerman

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 397. doi:

Synergistic upregulation of neuropeptide Y and Y1 receptor found responsible for obesity-induced dry eye disease OPEN ACCESS

Hyung Keun Lee; Yong woo Ji; Na Hyun Kim; Sun-Bi Um; Jong Suk Song; Wungrak Choi; Hyeon Chang Kim

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 398. doi:

Anti-oxidative and Anti-inflammatory Effects of Chamaecyparis obtusa on Corneal Epithelium Cell and in Experimental Dry Eye OPEN ACCESS

Lian Cui; Ying Li; Hyoseok Lee; Yong Seok Park; Ji Suk Choi; Kyung Chul Yoon

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 399. doi:

The Blockade of IL-6 counterparts the Osmolar Stress-induced Apoptotic Change and Junctional Instability in Human Conjunctival Epithelial Cells. OPEN ACCESS

HeeJung Ju; Yong Soo Byon; Ji Young Kwon; Young-Sik Yoo; Jun-Sub Choi; Jeewon Mok; Choun-Ki Joo

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 400. doi:

CORNEAL SURFACE TEMPERATURE, AND TEARING AND BLINKING RATES DURING ALLERGIC KERATOCONJUNCTIVITIS IN THE GUINEA PIG. OPEN ACCESS

M Carmen Acosta; Carolina Luna; Susana Quirce; Adolfo Aracil; Carlos Belmonte; Juana Gallar

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 401. doi:

AGING EFFECTS ON CORNEAL COLD THERMORECEPTOR NEURONS AND CORNEAL NERVES ARE RELATED WITH CHANGES IN BASAL TEARING AND BLINKING RATES OPEN ACCESS

Almudena Íñigo-Portugués; Omar Gonzalez Gonzalez; Ignacio Alcalde; Federico Bech; Juana Gallar; Jesus Merayo-Lloves; Carlos Belmonte

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 402. doi:

Short exposure to hyperosmolar tears produces profound anatomical and physiological changes in rodent corneal nerves: Implications for dry eye disease. OPEN ACCESS

Kamila K Mizerska; Harumitsu Hirata; Valentina Dallacasagrande; Carl F Marfurt; Mark Rosenblatt

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 403. doi:

Interferon-gamma as a potential biomarker for the inflammation associated with dry eye

disease OPEN ACCESS

Laura Elizabeth Downie; Weiguang Zeng; Edin Mifsud; Chinn Yi Wong; Nicholas Williamson; Ching-Seng Ang; Algis J Vingrys; David Jackson

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 404. doi:

The role of IL-1R and MyD88 in a murine model of experimental dry eye OPEN ACCESS

Justin A Courson; Carolina Lema; Betty Zhang; Rachel L Redfern

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 405. doi:

Chemokine and Cytokine gene expressions on conjunctival impression cytology and their correlations with HLA DR-A and HLA DR-B1 OPEN ACCESS

Karima Kessal; Hong Liang; Ghislaine rabut; Philippe Daull; Jean-Sebastien Garrigue; Mylene Docquier; Stéphane Melik-Parsadaniantz; Christophe Baudouin; Francoise Brignole-Baudouin

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 406. doi:

Efficacy of PPL-003 and the Role of NFκB Activation in a Rat Model of Dry Eye Disease OPEN ACCESS

Bruce H. Littman; Frank W Marcoux; Jeffrey Adam Jamison

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 407. doi:

Anti-inflammatory effects of *Diospyros kaki* in Mouse Dry Eye Model OPEN ACCESS

Kyung-A Kim; Sung Jae Yang; Tae-Jin Kim; Suk Woo Kang; Sang Hoon Jung

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 408. doi:

Anti-inflammatory effects of collagen type II 1α based novel peptide in a dry eye mouse model OPEN ACCESS

Hye Sook Lee; Chae Eun Kim; Soo Young Bang; JaeWook Yang

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 409. doi:

The effect of a new ocular surface modulator in controlling inflammation in an in vitro model of dry eye OPEN ACCESS

Stefano Barabino; Barbara De Servi; Salvatore Aragona; Marisa Meloni

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 410. doi:

Expresssion of CD147 and Cyclophilin A in Dry Eye Disease OPEN ACCESS

Tracy Thuy Nguyen; Sonal Sathe; Meredith Stallone

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 411. doi:

Repetitive magnetic stimulation protects corneal epithelium in a dry eye model in rabbits OPEN ACCESS

Tomer Carmeli; Ifat Sher-Rosenthal; Ygal Rotenstreich

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 412. doi:

Substance P suppresses Foxp3 expression in regulatory T cells in dry eye disease OPEN ACCESS

Anna Marmalidou; Alireza Mashaghi-Tabari; Takenori Inomata; Yihe Chen; Sunil Chauhan; Reza Dana

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 413. doi:

Suppression of Cholecystokinin Response by Rebamipide in Trigeminal Ganglion Cells OPEN ACCESS

Yoshiaki Tagawa; Kousuke Noda; Ryo Miyamoto; Ken-ichi Otsuguro; Erdal Tan Ishizuka; Takeshi Ohguchi; Atsuhiro Kanda; Susumu Ishida

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 414. doi:

Phenylboronic acid based polymeric micelles for mucoadhesive anterior segment ocular drug delivery. OPEN ACCESS

Ben B Muirhead; Graeme Prosperi-Porta; Heather Sheardown

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 415. doi:

The immediate and longer term effects of menthol-containing artificial tears on rat eyes OPEN ACCESS

Jong Suk Song

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 416. doi:

Omega-3 Fatty Acids using a F6H8-Carrier as Topical Therapy in Experimental Dry Eye Disease OPEN ACCESS

Uta Gehlsen; Tobias Braun; Philipp Steven

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 417. doi:

An eye drop with enhanced hyaluronic acid (HA) retention and delivery OPEN ACCESS

Anirudha Singh; David Lee; Qiaozhi Lu; Jennifer Elisseeff

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 418. doi:

Additive Effect of 0.05% Cyclosporine/0.3% Sodium Hyaluronate Combination Eye Drops in the Treatment of the Dry Eye Disease OPEN ACCESS

Guangjin Im; Sangjun Park; Hohan Yang; Yujin Kim; Hyeonkyu Go; Hansol Kwon; Myungjin Kim

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 419. doi:

Comparison of 0.3% Hypotonic Sodium Hyaluronate and Isotonic Sodium Hyaluronate Eye Drops in Experimental Dry Eye OPEN ACCESS

Ying Li; Lian Cui; Yeon Soo Kang; Ji Suk Choi; Hyoseok Lee; In Cheon You; Kyung Chul Yoon

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 420. doi:

Comparative efficacy of cyclosporine eye drop formulations in a mouse model of dry eye OPEN ACCESS

Jean-Sebastien Garrigue; Philippe Daull; Laurence Feraille; Stefano Barabino

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 421. doi:

Efficacy of a preservative-free cationic emulsion vehicle eye drop in a mouse model of dry eye OPEN ACCESS

Yann Quentric; Philippe Daull; Laurence Feraille; Pierre-Paul Elena; Jean-Sebastien Garrigue

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 422. doi:

Sustained Delivery of Cyclosporine from an Intracanalicular Depot in a Canine Model OPEN ACCESS

Daniel Lee Smoot; Rami F Elhayek; Zachary Lattrell; Mike McGrath; Timothy Jarrett; Courtney Rosales; Peter K Jarrett; Amar Sawhney

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 423. doi:

Lacritin acutely enhances corneal nerve sensitivity to ocular surface dryness as a key stimulus for basal tear production: Implications for dry eye disease. OPEN ACCESS

Valentina Dallacasagrande; Harumitsu Hirata; Kamila K Mizerska; Toin H. van Kuppevelt; Robert L McKown; Gordon W Laurie

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 424. doi:

Galectin-1 ameliorates dry eye disease OPEN ACCESS

Paula Kataguiri; Wei-Sheng Chen; Zhiyi Cao; Victor Sendra; Pedram Hamrah; Driss Zoukhri; Kenneth Kenyon; M. Elizabeth Fini; Shinwu Jeong; Noorjahan A Panjwani

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 425. doi:

Conjunctival Goblet Cells modulate dendritic cell maturation and retinoic acid producing capacity OPEN ACCESS

Yangyan Xiao; Terry G Coursey; De-Quan Li; Cintia S De Paiva; Johanna Tukler Henriksson; Stephen C Pflugfelder

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 426. doi:

Assessment of transepidermal water loss of the ocular surface and periorbital skin in dry eye patients. OPEN ACCESS

Hyun Sun Jeon; Sang Woong Youn; Hee Eun Jeon; Joon-Young Hyon

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 427. doi:

Fluorescence Quenching at Fluorescein Concentrations Used for Diagnosis in Ocular Surface Disease OPEN ACCESS

Ben J Glasgow

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 428. doi:

Altered Impulse Activity of Corneal Sensory Nerves Caused by Unilateral UV-Induced Corneal Inflammation also Develops in the Contralateral Eye Sensory Nerves OPEN ACCESS

Juana Gallar; Carolina Luna; Susana Quirce; Carlos Belmonte; M Carmen Acosta

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 429. doi:

Structural and functional changes of lacrimal gland functional unit in CFTR knockout mice OPEN ACCESS

Chuanqing Ding; Mate Katona; Eszter Vizvari; Orsolya Berczeli; Andrea Facsko; Zoltan Rakonczay Jr; Peter Hegyi; Edit Toth-Molnar

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 430. doi:

Effects of silk fibroin in a dry eye mouse model OPEN ACCESS

Chae Eun Kim; Jihyun Lee; So Yeon Choi; Min Chae Lee; Chan Hum Park; JaeWook Yang

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 431. doi:

OCT-based whole eye biometry system OPEN ACCESS

Mircea Mujat; Ankit Patel; Gopi Maguluri; Nicusor V Iftimia; James D Akula; Anne B Fulton; R Daniel Ferguson

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 433. doi:

Truly simultaneous OCT of the anterior and posterior eye with full anterior chamber depth and 30° retinal field of view OPEN ACCESS

Ryan P McNabb; Brenton Keller; Joseph A. Izatt; Anthony N Kuo

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 434. doi:

Automated analysis of retinal extracellular space using Optical Coherence Tomography. A non-invasive indirect identification of the sites of alterations of the Blood-Retinal Barrier OPEN ACCESS

Torcato Santos; José G Cunha-Vaz

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 435. doi:

Structure and vasculature of the human corneo-scleral limbus as imaged in-vivo with sub-micrometer axial resolution OCT OPEN ACCESS

Kostadinka K Bizheva; Bingyao Tan; Erik Mason; Benjamin MacLellan; Lacey Haines; Ameneh Boroomand; Alexander Wong; Luigina Sorbara

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 436. doi:

Long-Depth-Range Swept-Source OCT Instrument for Imaging Crystalline Lens Opacities OPEN ACCESS

Ireneusz Grulkowski; Lukasz Cwiklinski; Silvestre Manzanera; Juan Mompeán; Pablo Artal; Maciej D Wojtkowski

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 437. doi:

Anterior Segment Angiography with AngioPlex OCT Angiography on Cirrus 5000 SD-OCT OPEN ACCESS

YINGJIAN WANG; Lin An; Patricia Sha; Venu Manne; Mary K Durbin; Jochen Straub

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 438. doi:

The Assessment of Henle Fiber Layer-Related Imaging Patterns on Directional OCT Scans of the Macula OPEN ACCESS

Gabor Mark Somfai; Jing Tian; Delia DeBuc; Heinrich Gerding

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 439. doi:

Longitudinal change of macular, ganglion cell layer, and retinal nerve fiber layer thickness after vitrectomy: twelve-month observational study OPEN ACCESS

Jung Yeul Kim; Min Su Kim; Hyung bin Lim; Kyung sup Shin

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 440. doi:

Wide-field Swept Source OCT en-face image montages in healthy eyes OPEN ACCESS

Jochen Straub; Conor Leahy; Jennifer Yen Luu

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 441. doi:

Ultrawide-field OCT angiography with a 200kHz swept-source OCT system OPEN ACCESS

Gangjun Liu; Jie Wang; Miao Zhang; Yali Jia; David Huang

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 442. doi:

Single volume widefield retinal and choroidal OCT angiography of patients with MHz-OCT over 45° field of view OPEN ACCESS

Jan Philip Kolb; Thomas Klein; Kathrin J. Mohler; Wolfgang Wieser; Aljoscha S. Neubauer; Marcus Kernt; Anselm Kampik; Armin Wolf; Robert Huber

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 443. doi:

OCT Angiography of the Human Choriocapillaris at 1.7M A-scans/second OPEN ACCESS
Justin V Migacz; Iwona M Gorczynska; Ravi Sankar Jonnal; Robert J Zawadzki; John S Werner
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 444. doi:

Widefield Swept-Source Optical Coherence Tomography Angiography OPEN ACCESS
Anoush Shahidzadeh; Alice Yon Kim; Hassan A Aziz; Mary K Durbin; Carmen A Puliafito; Amir H Kashani
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 445. doi:

Automated Retinal Segmentation for Widefield OCT, with applications to OCT Angiography OPEN ACCESS
Giovanni Gregori; Philip J Rosenfeld; Luiz Roisman; Karen B Schaal
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 446. doi:

Automated Ischemia Segmentation using OCT Angiography in Diabetic Retinopathy OPEN ACCESS
Emily Cole; Sabin Dang; Eduardo Amorim Novais; Ricardo Louzada; Caroline R Baumal; Andre J Witkin; Nadia K Waheed; Jay S Duker; Elias Reichel
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 447. doi:

Artifact Removal and 3D Visualization for OCT Angiography OPEN ACCESS
Brian Soetikno; Justin Park; Hao F Zhang; Amani A Fawzi
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 448. doi:

A novel approach to reducing decorrelation tail artifacts in OCT angiography OPEN ACCESS
Homayoun Bagherinia; Jesse J Jung; Soraya Rofagha; Patty Chung; Scott Lee; Michael Chen
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 449. doi:

Projection-Resolved Optical Coherence Tomographic Angiography OPEN ACCESS
Zhang Miao; Thomas S Hwang; J. Peter Campbell; Steven T Bailey; David J Wilson; David Huang; Yali Jia
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 450. doi:

Sensitivity enhancement of intrinsic optical signal recording through split-spectrum-optical coherence tomography OPEN ACCESS
Damber Thapa; Benquan Wang; Yiming Lu; Taeyoon Son; Xincheng Yao
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 451. doi:

Swept source OCT angiography based on ratio analysis OPEN ACCESS
Charles A Reisman; Zhenguo Wang; Jonathan Jiaoshin Liu; Qi Yang; Ying Dong; Kinpui Chan
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 452. doi:

Contrast-enhanced OCT angiography of the choriocapillaris OPEN ACCESS
Vivek Jay Srinivasan; Conrad Merkle; Marcel Bernucci; Conor Leahy
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 453. doi:

OCT retinal angiography using neural networks OPEN ACCESS
Maciej Szkulmowski; Daniel Ruminski; Pawel Liskowski; Bartosz Wieloch; Krzysztof Krawiec; Bartosz Sikorski; Maciej D Wojtkowski
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 454. doi:

Speckle-noise free choroidal angiography and vessel surface area measurement with Spectral OCT OPEN ACCESS
Peter Maloca
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 455. doi:

Methods for Quantification of Image Quality in OCT Angiography Images OPEN ACCESS
Carmen Jan Yoo; Michael Chen; Mary K Durbin; Zhongdi Chu; Ruikang K Wang; Chieh-Li Chen; Jesse J Jung; Scott Lee
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 456. doi:

OCT Angiography Volume Image Compression OPEN ACCESS
Milton Wei
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 457. doi:

Level-Set Algorithm to Improve the Reliability of Vessel Density and Avascular Area Measurements in Optical Coherence Tomography Angiography OPEN ACCESS
Audra Miller; Changlei Dongye; Thomas S Hwang; Yali Jia
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 458. doi:

Automated Quantitative Analysis of the Fovea using OCT Angiography OPEN ACCESS
Morgan Heisler; Pavle Prentasic; Sieun Lee; Zaid Mammo; Ahmad Ibrahim; Andrew Merkur; Eduardo Navajas; Mirza Faisal Beg; Sven Loncaric; Marinko Venci Sarunic
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 459. doi:

Reproducibility of Foveal Avascular Zone measurements across four different Optical Coherence Tomography Angiography systems OPEN ACCESS
Mariano Cozzi; Stefano Erba; Alessandro Invernizzi; Marco Pellegrini; Giovanni Staurenghi
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 460. doi:

Total Retinal Blood Flow Measurements with En Face Doppler Optical Coherence Tomography in Eyes with Central Retinal Vein Occlusion OPEN ACCESS
Mark Lane; ByungKun Lee; Nadia K Waheed; Talisa E de Carlo; Mehreen Adhi; WooJhon Choi; Eric M Moult; Jay S Duker; James G Fujimoto
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 462. doi:

Quantitative Multifunctional OCT imaging of nonpathologic optic nerve head OPEN ACCESS
Young-Joo Hong; Aaron C Chan; Deepa Kasaragod; Satoshi Sugiyama; Shuichi Makita; Yasushi Ikuno; Masahiro Miura; Yoshiaki Yasuno
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 463. doi:

Sensitivity of Spectral Domain OCTA Imaging with Polarization and Beam defocus OPEN ACCESS
Venu Manne; Patricia Sha; Jochen Straub; Mary K Durbin
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 464. doi:

Ellipsoid Zone Thickness Measured by Ultrahigh Resolution Spectral-Domain Optical Coherence Tomography. OPEN ACCESS
Yoshitsugu Matsui; Masaharu Mizuochi; Eriko Uchiyama; Mineo Kondo
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 465. doi:

Ultrahigh Speed Ophthalmic Surgical OCT for Intraoperative OCT Angiography and Widefield Imaging OPEN ACCESS

Chen D Lu; Andre J Witkin; Nadia K Waheed; Benjamin Potsaid; Jonathan Jiaoshin Liu; Eric M Moult; Vijaysekhar Jayaraman; Kinpui Chan; Jay S Duker; James G Fujimoto

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 466. doi:

4D Microscope-Integrated OCT to Visualize Depth-Related Steps During Anterior Segment and External Eye Procedures OPEN ACCESS

Paramjit K Bhullar; Neel D Pasricha; Oscar M Zevallos-Carrasco; Christian Viehland; Brenton Keller; Melissa B Daluvoy; Pratap Challa; Sharon F Freedman; Joseph A Izatt; Cynthia A Toth; Anthony N Kuo

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 467. doi:

Multimodal imaging including intraoperative optical coherence tomography (OCT) and en face OCT to visualize immediate effect and extent of internal limiting membrane (ILM) peeling in macu... OPEN ACCESS

Steven John Ryder; Justin Townsend

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 468. doi:

Imaging of Pediatric Retinal Pathology with Long Working Distance Swept Source Optical Coherence Tomography OPEN ACCESS

Ruobing Qian; Oscar Carrasco-Zevallos; Shwetha Mangalesh; Neeru Sarin; Lejla Vajzovic; Cynthia A Toth; Joseph A. Izatt

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 469. doi:

Retinal imaging with full-field optical coherence microscopy OPEN ACCESS

Kate Grieve; Vincent Borderie; Michel Paques

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 470. doi:

Dual-band optical coherence tomography using a single supercontinuum laser source OPEN ACCESS

Siyu Chen; Xiao Shu; Ji Yi; Amani A Fawzi; Hao F Zhang

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 471. doi:

Localized absorption measurements for possible oxygen saturation using visible-light spectroscopic optical coherence tomography OPEN ACCESS

Ranjan Rajendram; Felix Fleischhauer; Sophie Cajujolle; Michael Maria; Thomas Feuchter; Lasse Leick; Adrian Podoleanu

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 472. doi:

Spectralis SD-OCT fovea to disc alignment technology versus anatomic positioning system in healthy population OPEN ACCESS

Lorena Solé González; Rodrigo Abreu-González; Marta Alonso Plasencia; Pedro Abreu-González; Jose Augusto Abreu Reyes

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 473. doi:

12% fat milk as OCT contrast agent for ex vivo imaging. OPEN ACCESS

Christian van Oterendorp; Viktoria Mans; Charlotte Fischer; Mohammed Khattab; Thomas Wecker

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 474. doi:

Inflammatory cytokines primes retinal pigment epithelial cells to complement activation and deposition of membrane attack complexes by the alternative pathway OPEN ACCESS

Carsten Faber; Christian Tagmose; Peter Garred; Mogens Holst Nissen

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 475. doi:

Newly generated antibodies affect the functional role of CFHR3 in complement and AMD OPEN ACCESS

Nicole Schäfer; Catharina Busch; Joerg Reinders; Bernhard Weber; Christine Skerka; Diana Pauly

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 476. doi:

Protective Roles of γδT-Cells in Model of RPE Injury OPEN ACCESS

Zhen-Yang Zhao; Pei Xu; Valentina Reffatto; Yuejin Liang; Jiaren Sun; Yan Chen; Deming Sun; Jiyang Cai

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 477. doi:

Connecting the innate and adaptive immune responses in mouse choroidal neovascularization via the anaphylatoxin C5a and γδT-cells. OPEN ACCESS

Gloriane Schnabolk; Beth Coughlin; Kusumam Joseph; Himanshu Raikwar; Kannan Kunchithapautham; Krista Johnson; Kristi Moore; Yi Wang; Baerbel Rohrer

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 478. doi:

Complement activation on photoreceptor outer segments triggers their phagocytosis by macrophages and results in photoreceptor degeneration OPEN ACCESS

Kenneth Katschke; Hongkang Xi; Tom Truong; Justin Elstrott; Mike Reichelt; Jianhua Tao; Christian Cox; Lauri Diehl; Menno Van Lookeren Campagne

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 479. doi:

Interleukin-33 (IL-33) regulates mononuclear phagocytes in the degenerating retina OPEN ACCESS

Hongkang Xi; Kenneth Katschke; Yun Li; Tom Truong; Wyne Lee; Lauri Diehl; Jianhua Tao; Jeffrey Eastham-Anderson; Justin Elstrott; Menno Van Lookeren Campagne

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 480. doi:

Inflammatory vicious cycle between retinal pigment epithelium (RPE) and macrophages reduces the phagocytic function of RPE OPEN ACCESS

Takahiro Yamawaki; Jun Yamada; Eiko Ito; Shigeru Kinoshita; Chie Sotozono; Jyunji Hamuro

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 481. doi:

Ocular complement activation and inhibition in rodent models of endotoxin-induced uveitis OPEN ACCESS

Maura Crowley; Omar Delgado; Karen Anderson; Wei Zheng; Holger Sellner; Nello Mainolfi; Muneto Mogi; Bruce D Jaffee; Sha-Mei Liao

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 482. doi:

Inflammation is the Sine qua non for progression of age-related macular degeneration. OPEN ACCESS

Sayan Ghosh; Peng Shang; Stacey L Hose; Jiang Qian; J Samuel Zigler; Debasish Sinha

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 483. doi:

Ocular inflammatory cell infiltrates and angiogenesis are augmented by administration of the toll-like receptor-2 (TLR-2) ligand in a mouse model of choroidal neovascularization (CNV) OPEN ACCESS

Stephen H Poor; Yubin Qiu; Adrian Will-Orrego; Elizabeth Fassbender; Siyuan Shen; Maura Crowley; Sha-Mei Liao; Bruce D Jaffee
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 484. doi:

Effect of geldanamycin on the NLRP3 inflammasome in human retinal pigment epithelial cells OPEN ACCESS
Anu Kauppinen; Niina Piippo; Eveliina Korhonen; Maria Hytti; Kinnunen Kati; Kai Kaarniranta
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 485. doi:

Non-canonical NLRP3 Inflammasome activation in Geographic Atrophy OPEN ACCESS
Nagaraj Kerur; Younghee Kim; Shinichi Fukuda; Reo Yasuma; Ana Bastos-Carvalho; Daipayan Banerjee; Benjamin Fowler; Tetsuhiro Yasuma; Bradley D Gelfand; Jayakrishna Ambati
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 486. doi:

Role of interferon signaling in *Alu* RNA-induced AMD OPEN ACCESS
Daipayan Banerjee; Younghee Kim; Shinichi Fukuda; Reo Yasuma; Ana Bastos-Carvalho; Benjamin Fowler; Tetsuhiro Yasuma; Bradley D Gelfand; Nagaraj Kerur; Jayakrishna Ambati
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 487. doi:

S100 alone and in combination with HSP27 leads to specific retinal ganglion cell loss in an IOP-independent glaucoma model OPEN ACCESS
Stephanie C Joachim; Christina Casola; Sabrina Reinehr; Sandra Kuehn; H Burkhard Dick
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 488. doi:

Distinctive Epitopes for Carbonic Anhydrase II Autoantibodies in Autoimmune Retinopathy and Cancer-Associated Retinopathy OPEN ACCESS
Grazyna Adamus; Sufang Yang
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 489. doi:

The innate immune receptor Nlrp12 participates in protection against experimental autoimmune uveitis OPEN ACCESS
Emily E Vance; Ellen J Lee; Brieanna Brown; Paige E Snow; Agna Truax; Jenny P Ting; Rachel R Caspi; Holly Lallman Rosenzweig
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 490. doi:

Lipoxin A_4 Regulates T cell Responses in Experimental Autoimmune Uveitis OPEN ACCESS
Jessica Wei; Victoria Ly; Karsten Gronert
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 491. doi:

Longitudinal assessment of retinal layer thickness changes and corresponding functional loss in eyes with Autoimmune Retinopathy OPEN ACCESS
Jacob Parriott; Muhammad Hassan; Aniruddha Agarwal; Mohammad Ali Sadiq; Rubbia Afridi; Colby Argo; Mohamed Kamel Soliman; Salman Sarwar; Quan Dong Nguyen; Yasir Jamal Sepah
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 492. doi:

Levels of corticosteroids positively correlate with IL-10+FoxP3$^+$CD25$^+$CD4$^+$ T regulatory cells but not with CD4$^+$IL-17$^+$ Th17 cells in Behçet's Disease OPEN ACCESS
Xiaozhe Zhang; David Yang; Grazyna Galatowicz; Susan Lightman; Virginia L Calder
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 494. doi:

IL-10- and IL-35-expressing cells are highly enriched among peripheral blood B cells during experimental autoimmune uveitis OPEN ACCESS
Chengrong Yu; Rashid M Mahdi; Charles E Egwuagu
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 495. doi:

Red blood cell biomechanics in birdshot retinochoroidopathy using dual-trap optical tweezers technique – A possible hypothesis for non retinal vascular occlusion.
OPEN ACCESS
Joao Cardoso; Christopher Richards; Thomas Smart; Rhythm Bhatnagar; David Shima; Phil Jones; Carlos Pavesio; Rupesh Agrawal
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 496. doi:

Association between clinical severity and increased frequency of NKT cells in Human Graves Orbitopathy OPEN ACCESS
Sandra Salazar; Luis Alberto Salazar; JOSE LUIS TOVILLA CANALES; Arriozola Rodriguez Karen Janeth; Maria C Jimenez-Martinez
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 497. doi:

Gynecological CAR, PEDF Hypersensitivity, and the HeLa Connection
Charles E. Thirkill Ph.D.
Ocular Immunology, Lab 1220 Surge III, 1263 Bioletti Way, U.C.Davis, CA. 95616.
OPEN ACCESS
Charles E Thirkill
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 498. doi:

A Retrospective Review of the Clinical Implications of Biopsy Results in Mucous Membrane Pemphigoid OPEN ACCESS
Mary Tien Labowsky; Christine Shieh; Jason Liss; Melissa Daluvoy; Russell Hall
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 499. doi:

Ocular Inflammatory Disease Observed in Rheumatology Clinic at a Tertiary-Care Hospital.
OPEN ACCESS
Asima Bajwa; Gabriella Dimarco; Peter A Netland; Donald L Kimpel
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 500. doi:

Serum cytokine concentrations before and after starting of infliximab therapy OPEN ACCESS
Hisae Nakahara; Toshikatsu Kaburaki; Rie Tanaka; Kazuyoshi Ohtomo; Mitsuko Takamoto; Ayako Karakawa; Kimiko Okinaga; Junko Matsuda; Yujiro Fujino; Hidetoshi Kawashima; Makoto Aihara
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 501. doi:

Fungal components trigger induction of EAU through a Card9-dependent mechanism
OPEN ACCESS
Brieanna Brown; Ellen J Lee; Paige Snow; Emily Vance; Rachel R Caspi; Holly Lallman Rosenzweig
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 502. doi:

Phage immunoprecipitation sequencing of autoantigens in autoimmune retinopathy
OPEN ACCESS
Lucia Sobrin; Samaneh Davoudi; Ilya Leskov; Evangelia Papavasileiou
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 503. doi:

Long-term Complete Remission of Ocular Cicatricial Pemphigoid off Immunomodulatory

Therapy OPEN ACCESS
Caiyun You; Lina Ma; Stephen D Anesi; C. Stephen Foster
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 504. doi:

Identification of uveitis-associated gut bacteria OPEN ACCESS
Iris Lee; Lisa Karstens; Christina Metea; Cathleen Moscibrocki; Mark Asquith; Yukiko K Nakamura; Phoebe Lin
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 505. doi:

Nod2 controls susceptibility to autoimmune uveitis through control of a Th17-driven response OPEN ACCESS
Paige E Snow; Ellen J Lee; Joao M Furtado; Brieanna Brown; Emily Vance; Jae Dugan; Phyllis Silver; Justine R Smith; Rachel R Caspi; Holly Lalliman Rosenzweig
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 507. doi:

Retinal microglial cells are suppressed in phagocytic activity OPEN ACCESS
Andrew W Taylor; Eric Wang; Tat Fong Ng
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 508. doi:

Induction of Tregs in Uveitis Patients Through the MC5r-A2Ar Pathway OPEN ACCESS
Darren J Lee; Andrew W Taylor; Rebekah deCosier
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 509. doi:

Treat-and-Extend Regimen using Ranibizumab for Polypoidal Choroidal Vasculopathy: One Year Results OPEN ACCESS
Seok Jae Lee; Kang Yeun Pak; Sung Who Park; Ik Soo Byon; Ji Eun E Lee
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 510. doi:

Short-term efficacy of intravitreal aflibercept depending on subtypes of polypoidal choroidal vasculopathy: polypoidal choroidal neovascularization or idiopathic choroidal vasculopathy OPEN ACCESS
Min Sagong; Seongyong Jeong; Moohyun Kim; Sooncheol Cha; JunHyuk Son
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 511. doi:

Intravitreal Aflibercept Injections in the Management of Treatment Refractory Polypoidal Choroidal Vasculopathy OPEN ACCESS
Laurence Shen Lim; Wei Yan Ng; Ian Yeo; Ranjana Mathur; Gemmy Cheung; Tien Yin Wong
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 512. doi:

Effects of Aflibercept on Patients with Polypoidal Choroidal Vasculopathy: One-year results of VAULT Study OPEN ACCESS
Hyun Woong Kim; Joo Eun Lee; Jae Pil Shin; Woohyok Chang; Yu Cheol Kim; Sang Joon Lee; In Young Chung; Ji Eun E Lee
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 513. doi:

2-year results of switching to aflibercept for polypoidal choroidal vasculopathy in patients refractory to ranibizumab OPEN ACCESS
Takeya Kohno; Manabu Yamamoto; Akira Cho; Kumiko Hirayama; Ayako Yasui; Shinsuke Ataka; Michiko Hirabayashi; Kunihiko Shiraki
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 514. doi:

One-year outcomes with ranibizumab in treatment naïve patients with neovascular age-related macular degeneration: an interim analysis from the LUMINOUS™ study OPEN ACCESS
Christopher Brand; Sue Lacey
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 515. doi:

Changes in Neovascular Activity Following Continuous Anti-Vascular Endothelial Growth Factor Administration in the VIEW Studies OPEN ACCESS
Darius M Moshfeghi
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 516. doi:

One year visual and anatomic outcomes in eyes receiving aflibercept according to a fixed-interval dosing (Q8W) for neovascular age-related macular degeneration. OPEN ACCESS
Osama Kanavati; Hussein Almuhtaseb; Georgios I Agorogiannis; Srini Goverdhan; Andrew J Lotery
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 517. doi:

Evaluation of both native and pathological vascular changes occurring during the Aflibercept intravitreal injections' loading phase in treatment-naïve wet AMD patients. OPEN ACCESS
Enrico Borrelli; Lisa Toto; Paolo Carpineto; Rodolfo Mastropasqua; Luca Di Antonio; Michele Palmieri; Filomena Pinto; Leonardo Mastropasqua
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 518. doi:

Change in Pigment Epithelial Detachment Volume and its Relationship with Subretinal Fluid and Visual Acuity in Patients with Exudative AMD after Aflibercept Switch Therapy. Post hoc analy... OPEN ACCESS
Camille JUNG; Rocio Blanco-Garavito; Oudy Semoun; Joel Uzzan; Florence Coscas; Maddalena Quaranta-El Maftouhi; Jose Sahel; Jean-Francois Korobelnik; Nathalie Puche; Giuseppe Querques; Eric H Souied
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 519. doi:

Long term visual outcomes in ranibizumab non-responders: patients with neovascular age-related macular degeneration switched from ranibizumab to aflibercept OPEN ACCESS
Farid Afshar; Emily Fletcher; Quresh Mohamed; Rob Johnston
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 520. doi:

Twelve-Month Outcomes of "Treat and Extend" aflibercept Therapy for Neovascular Age-Related Macular Degeneration OPEN ACCESS
Daniel Barthelmes; Vuong Nguyen; Jennifer Arnold; Ian McAllister; Robyn Guymer; Rohan Essex; Stephanie Young; Mark C Gillies
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 521. doi:

Aflibercept as a Second Line Therapy for Neovascular Age Related Macular Degeneration Following Initial Bevacizumab Therapy OPEN ACCESS
Ori Segal; Liran Tiosano; Ayala Pollack; Rita Ehrlich; Itamar Klemperer; Yoreh Barak; nurit mathalone; Michaela Goldstein; Itay Chowers
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 522. doi:

Twelve months outcomes of ranibizumab vs. aflibercept for neovascular age-related

macular degeneration: observational study data OPEN ACCESS
Mark C Gillies; Richard Walton; Jennifer Arnold; Rohan Essex; Nigel Morlet; Daniel Barthelmes
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 523. doi:

Real Life Use of Aflibercept In FraNce: oBservatiOnal study in Wet AMD: the RAINBOW study OPEN ACCESS
OUBRAHAM-MEBROUKINE Hassiba; Celine Faure; Florence Coscas; Thi Ha Chau Tran; Benedicte Bnend-Joulain; Laurent Velasque; Isabelle Aubry; Michel Weber; Salomon Y Cohen
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 524. doi:

Combined Cell and Gene Therapy towards the Treatment of Age-Related Macular Degeneration and Diabetic Retinopathy OPEN ACCESS
Sabiha Hacibekiroglu; Iacovos P Michael; Peter D Westenskow; Brian Ballios; Nikolaos Mitrousis; Jingsheng Tuo; Chi-Chao Chan; Derek van der Kooy; Molly Shoichet; Martin Friedlander; Andras Nagy
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 525. doi:

Association of serum neutralizing antibodies with safety and efficacy outcomes in a Phase 2a trial of rAAV.sFlt-1 in the treatment of wet AMD OPEN ACCESS
Elizabeth P Rakoczy; Chooi-May Lai; Aaron Magno; Martyn French; Samuel Bradley Barone; Steven D Schwartz; Mark Blumenkranz; Mariapia Degli-Esposti; Ian J Constable
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 526. doi:

Extended Release of anti-VEGF Biologics from Biodegradable Hydrogel Implants for the Treatment of Age Related Macular Degeneration OPEN ACCESS
Gary Owens; Melissa Sandahl; Melissa Hernandez; Andres Garcia; Stuart Williams; Tomas Navratil; Rhett Schiffman
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 527. doi:

A Phase III b, Multicenter Study of the Efficacy and Safety of Aflibercept Switch in Patients With Exudative AMD With Retinal Pigment Epithelium Detachment, Previously Treated With Ranibi... OPEN ACCESS
Rocio Blanco-Garavito; Camille JUNG; Joel Uzzan; Florence Coscas; Maddalena QUARANTA EL-MAFTOUHI; Jose Sahel; Jean-Francois Korobelnik; Ruxandra HERA; Giuseppe Querques; Oudy Semoun; Eric H Souied
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 528. doi:

Two year results of intravitreal aflibercept injections for neovascular age-related macular degeneration using a treat and extend regimen
OPEN ACCESS
Mio Hosokawa; Yuki Morizane; Shuhei Kimura; Mika Hosogi; Shinichiro Doi; Fumio Shiraga
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 529. doi:

Sustained Delivery of Ranibizumab: The LADDER Trial of the Ranibizumab Port Delivery System OPEN ACCESS
J Jill Hopkins; Carl D Regillo; Aaron Osborne; Steven F Francom; Giulio Barteselli
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 530. doi:

Baseline characteristics and 1-year outcomes of patients with neovascular age-related macular degeneration from the real-world LUMINOUS™ study: global results vs Australian cohort OPEN ACCESS
Robyn H Guymer; Wayne Macfadden
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 531. doi:

Two year visual outcome of patients with wet age related macular degeneration in a multi-office retina practice in the United States OPEN ACCESS
Marina Gilca; Kourous A Rezaei
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 532. doi:

Association of fluid recurrence with visual maintenance following the loading phase in anti-VEGF therapy for neovascular AMD OPEN ACCESS
Sebastian M Waldstein; Victor Chong; Michael Larsen; James Warburton; Andreas Weichselberger; Jonathan Wright; Ursula Schmidt-Erfurth
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 533. doi:

Ranibizumab in patients with neovascular age-related macular degeneration in real-world clinical settings in France: 1-year data from the LUMINOUS™ study OPEN ACCESS
Vittorio Capuano; OUBRAHAM-MEBROUKINE Hassiba; Benjamin Wolff; Salomon Y Cohen; Catherine P Garcher; Jean-Francois Korobelnik; Ramin Tadayoni; Christian Delhay; Audrey Derveloy; Eric H Souied
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 534. doi:

Intravitreal Aflibercept For Neovascular Polypoidal Choroidal Vasculopathy In A Predominantly Non-Asian Population: 1-Year Rival Trial Results OPEN ACCESS
Dennis M Marcus; Amina Farooq; Heather Frazier; Chelsea Fechter; William Baker Marcus; Harinderjit Singh
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 535. doi:

Intravitreal aflibercept in wet age-related macular degeneration patients from Japan: 6-month outcomes of J-PMS OPEN ACCESS
R Mori; M Ohji; K Takahashi; Tatsuro Ishibashi; H Migita; T Sakaguchi; L Inuyama; M Yuzawa
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 536. doi:

Long-Term Outcomes Of Intravitreal Ranibizumab In Patients With Neovascular Age-Related Macular Degeneration. Besides Clinical Trials OPEN ACCESS
Jose juan Escobar; Roberto Gallego; Beatriz Romero
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 537. doi:

Canadian Treat and Extend Analysis Trial with Ranibizumab in Patients with Neovascular AMD: Interim Analysis of the CANTREAT Study OPEN ACCESS
Peter Kertes; Tom Sheidow; Geoff Williams; Mark Greve; Ivan John Gallic; Emmanouil Rampakakis; Bernard Bourgault; Anne-Sophie Courseau
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 538. doi:

Comparison of anti-VEGF ranibizumab^{R} and aflibercept^{R} : a 18 months, real-life study in naïve patients OPEN ACCESS
Arnaud George; Valérie Reitzer; Jean Paul Bellamy
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 539. doi:

The Shot-term Outcomes of Treat and Extend Regimens: Aflibercept versus Ranibizumab
OPEN ACCESS
Kwan Bok Lee; Jung-Il Han; Dong-Won Lee; Moon-Jung Choi; Young Ju Lew; Hyung-Suk Kim; Han-Joo Cho; Jae-Hui Kim
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 540. doi:

Long-term outcomes of intravitreal anti-VEGF therapy in eyes with both neovascular age-related macular degeneration and diabetic retinopathy. OPEN ACCESS
Lea Querques; Francesco Bandello; Federico Corvi; Carlo La Spina; Lucia Benatti; David Sarraf; K Bailey Freund; Maurizio Battaglia Parodi; Eric H Souied; Giuseppe Querques
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 541. doi:

AFLIBERCEPT IN TREATMENT-NAÏVE PATIENTS WITH NEOVASCULAR AGE-RELATED MACULAR DEGENERATION: PROSPECTIVE PILOT STUDY OPEN ACCESS
Patricia Udaondo; SALVADOR GARCIA-DELPECH; DAVID SALOM; Ana Hervas-Ontiveros; Ricardo Diaz-Cespedes
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 542. doi:

Effect of Intravitreal Aflibercept for Refractory Pigment Epithelial Detachment and/or Subretinal Fluid Secondary to Age-Related Macular Degeneration OPEN ACCESS
Hyung Woo Kwak; Yonguk Kim; Ji Ho Yang; Seung-Young Yu
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 543. doi:

Efficacy and Safety of Aflibercept in Fibrovascular Retinal Pigment Epithelium Detachment refractory to prior ranibizumab therapy in neovascular Age-related macular degeneration (AMD). OPEN ACCESS
Thi Ha Chau Tran; Stephane DUMAS; Florence Coscas
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 544. doi:

2nd Year Visual Acuity Outcomes of AMD patients treated with Aflibercept : Data Analysis from the UK Aflibercept users group OPEN ACCESS
Hussein Almuhtaseb; James S Talks; Rob Johnston; Andrew J Lotery
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 545. doi:

Anti-VEGF injection patterns and five year functional outcomes in patients with choroidal neovascularization or macular edema OPEN ACCESS
Thomas Wecker; Christoph Ehlken; Anima Buehler; Clemens Lange; Hansjürgen Agostini; Daniel Boehringer; Andreas Stahl
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 546. doi:

Intravitreal Ranibizumab Therapy for Neovascular Age-Related Macular Degeneration and the Risk of Stroke: A 5-Year Follow-up Cohort Study OPEN ACCESS
Sung Soo Kim; Tyler Hyungtaek Rim; Christopher Seungkyu Lee; SungChul Lee; Do Wook Kim; Hyun Ju Park
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 547. doi:

Two year visual outcomes in patients with neovascular age-related macular degeneration treated with ranibizumab stratified by patient age and baseline visual acuity OPEN ACCESS
Elewys Hearne; Farid Afshar; Emily Fletcher; Quresh Mohamed; Rob Johnston
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 548. doi:

Non-responders to multiple ranibizumab injections in treatment of exudative age-related macular degeneration and the effect of the switch treatment to aflibercept. OPEN ACCESS
katerina manethova; Jan Ernest; Pavel Nemec; Leos Rejmont; Fredy Manolo Folleco
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 549. doi:

Eight Week Maintenance Dosing of Intravitreal Bevacizumab for Neovacular Age-Related Macular Degeneration OPEN ACCESS
Tomas A Moreno; Shriji Patel; Stephen J Kim
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 550. doi:

Bevacizumab dosing every 2 weeks for neovascular age-related macular degeneration refractory to monthly dosing OPEN ACCESS
Amit Meshi; Ori Segal
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 551. doi:

Randomized Clinical Trial Evaluating Reflux, IOP, and Pain, Following Intravitreal Anti Vascular Endothelial Growth Factors Injections Using 30g and 32g Needles OPEN ACCESS
Saeed Alshahrani; Vasudha Gupta; Uriel Rubin; Tom Gonder; Isabella Ircher; Sanjay Sharma
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 552. doi:

The CNV Associated with PRPH2 C213W Missense Mutation Responds Favorably to Anti-VEGF Injections OPEN ACCESS
Monique J Leys; J Vernon Odom
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 553. doi:

Photoregulation of rod precursor cell proliferation in the adult zebrafish retina OPEN ACCESS
Manuela Lahne; Samantha Piekos; Kristin M Ackerman; David R Hyde
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 554. doi:

Thyroid hormone receptor β and *gdf6a* may interact to specify cone photoreceptor identity OPEN ACCESS
Michele G DuVal; Ramona Rosca; Quinton Schmidt; Elizabeth Hodges; W Ted Allison
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 555. doi:

Human Cone Precursor Program Underlying a Proliferative Response to pRB Loss OPEN ACCESS
Hardeep Pal Singh; Sijia Wang; David Cobrinik
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 556. doi:

The roles of nicotinamide nucleotide adenylyltransferase 1 gene in developing mouse retina OPEN ACCESS
Akira Murakami; Yuki Yoshikawa; Sumiko Watanabe
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 557. doi:

A role for both *kif7* and *kif17* in early photoreceptor development OPEN ACCESS
Tylor R Lewis; Sean R Kundinger; Amira L Pavlovich; Jonathan R Bostrom; Brian Link; Joseph C Besharse
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 558. doi:

PERK and XBP1s differentially regulate CXCL10 and CCL2 production in photoreceptor cells OPEN ACCESS
Shuang Zhu; Hua Liu; Yonju Ha; Dianshuai Gao; Wenbo Zhang
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 559. doi:

All Foveas Are Not Created Equally OPEN ACCESS
Alan D Springer; Anita E. Hendrickson

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 560. doi:

RGR-opsin and exon-6-skipping RGR-d isoform in human cone photoreceptors OPEN ACCESS
Zhaoxia Zhang; Henry KW Fong
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 561. doi:

Role of Type II deiodinase (Dio2) and circadian clock gene Bmal1 in photoreceptor development OPEN ACCESS
Onkar Sawant; Banumathi Tamilselvan; Amanda Horton; Ivy S Samuels; Sujata Rao
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 563. doi:

Thyroid Hormone Regulates mRNA Expression of the Vitamin D Receptor in Mouse Photoreceptors
OPEN ACCESS
Martin Glösmann; Reinhard Ertl; Tanja Himmel; Stefan Kummer; Ursula Reichart
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 564. doi:

NESPRIN1 FORMS ROOTLETIN-LIKE CYTOSKELETAL STRUCTURES IN ROD AND CONE PHOTORECEPTORS OPEN ACCESS
Didier Hodzic; Chloe Potter; Wanqiu Zhu
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 565. doi:

Quantification of Mitochondrial Structure in Photoreceptors OPEN ACCESS
Stephanie Sloat; Connor Jankowski; Rachel Hutto; Michelle Giarmarco; Whitney M Cleghorn; Van Tran; Gayatri Shandar; Susan E Brockerhoff; James Hurley
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 566. doi:

Membrane trafficking regulation of intracellular ciliogenesis initiation and progression in RPE-1 cells and photoreceptors OPEN ACCESS
Christine Insinna; Quanlong Lu; Carolyn Ott; Jennifer Lippincott-Schwartz; Peter Jackson; Christopher Westlake
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 567. doi:

Routing of opsin to the cilium OPEN ACCESS
Abhishek Chadha; Stefanie Volland; David S Williams
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 568. doi:

Do they have spinules the cone pedicles of sturgeon retina? OPEN ACCESS
Joaquin De Juan; Bassima Boughlala; Alba Isabel De Juan; Noemi Martinez-Ruiz; Maria Angeles Esteban
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 569. doi:

Characterization of primary cilium in ocular tissues in a Cilia^{GFP} mouse model OPEN ACCESS
Heather Marie Broadley; Na Luo; Xinyao Hu; Yang Sun
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 570. doi:

STORM super resolution imaging of the connecting cilium in thin retinal sections
OPEN ACCESS
Michael Robichaux; Theodore G Wensel
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 571. doi:

Identification and Characterisation of Novel Cone Photoreceptor-Enriched Factors Conserved in Zebrafish, Mouse and Human OPEN ACCESS
Andrew Smith; Conor Daly; Ross F Collery; Vijender Chaitankar; Matthew Brooks; Tiziana Cogliati; Anand Swaroop; Breandan N Kennedy
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 572. doi:

Study of Selected Rod Photoreceptor-Enriched Transcripts in Zebrafish Retina OPEN ACCESS
CHI SUN; Deborah L Stenkamp
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 573. doi:

Endosome-dependent Rhodopsin trafficking for outer segment renewal OPEN ACCESS
Ya-Chu Hsu; Jen-Zen Chuang; Roland Thuenauer; Ching-Kang Jason Chen; Yu-Ting Yan; Ching-Hwa Sung
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 574. doi:

Contributions of Grk1b and Grk7a to the Cone Photoresponse in Zebrafish Larvae
OPEN ACCESS
Jared David Chrispell; D Joshua Cameron; Shoji Osawa; Ellen R Weiss
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 575. doi:

The role of thyroid hormone in the differential regulation of tandemly duplicated opsin genes in zebrafish OPEN ACCESS
Robert Mackin; Carmina Gutierrez; Diana Mitchell; Deborah L Stenkamp
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 576. doi:

Inflammation, MMP9 expression, and photoreceptor regeneration in the adult zebrafish retina OPEN ACCESS
Nicholas Jeremy Silva; Jingling Li; David R Hyde; Peter F Hitchcock
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 577. doi:

Differential gene expression in developing *rd1* mouse retina OPEN ACCESS
Jiyao Zhu; Judy M Ogilvie
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 578. doi:

The Neuroprotective Effect of Rapamycin as a Modulator of the mTOR-NF-κB Axis during Retinal Inflammation OPEN ACCESS
Tomohiro Okamoto; Mamoru Kamoshita; Hideto Osada; Eriko Toda; Norihiro Nagai; Kazuo Tsubota; Yoko Ozawa
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 579. doi:

Manipulating photoreceptor gene expression with putative Nr2e3 modulators OPEN ACCESS
Paul A Nakamura; Shibing Tang; Sheng Ding; Thomas A Reh
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 580. doi:

The Joubert Syndrome protein Ahi1 is required for photoreceptor outer segment formation in zebrafish OPEN ACCESS
Emma M Lessieur; Glenn Lobo; Brian D Perkins
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 581. doi:

Time-lapse near infrared microscopy reveals stimulus-evoked photoreceptor outer

Segment shrinkage and shift OPEN ACCESS
Xincheng Yao; Xiaohui Zhao; Damber Thapa; Benquan Wang; Yiming Lu
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 582. doi:

The Rod Connexin is Connexin36 OPEN ACCESS
Nange Jin; Friso Postma; Sean Youn; Eduardo Silveyra; David Paul; Stephen C Massey; Christophe P. Ribelayga
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 583. doi:

Neuronatin is a novel stress responsive protein of rod photoreceptors OPEN ACCESS
Priyamvada M Pitale; Vishal M Shinde; Wayne Howse; Oleg Gorbatyuk; Marina S Gorbatyuk
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 584. doi:

Calcium uptake by mitochondria is required to maintain distinct Ca^{2+} pools in cone photoreceptors OPEN ACCESS
Whitney M Cleghorn; Michelle Giarmarco; James Hurley; Susan E Brockerhoff
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 585. doi:

Thyroxin b2 receptor (trb2) overexpression alters cone spectra in zebrafish. OPEN ACCESS
Annika Balraj; Takeshi Yoshimatsu; Ralph F Nelson
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 586. doi:

The Role of Thyroid Hormone Receptor B2 (trβ2) in Photoreceptor Opsin Development OPEN ACCESS
Sara Patterson; Takeshi Yoshimatsu; Tara Suresh; Ralph F Nelson
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 587. doi:

GABA-mediated horizontal cell signaling switches back and forth between cones at night and ON-cone bipolar cells in the day OPEN ACCESS
Stuart C Mangel
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 588. doi:

Unexpected functional roles of horizontal cells in the retinal circuit OPEN ACCESS
Taro Chaya; Akihiro Matsumoto; Yuko Sugita; Satoshi Watanabe; Ryusuke Kuwahara; Masao Tachibana; Takahisa Furukawa
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 589. doi:

Membrane topology analysis of the ON bipolar cell transduction channel subunit TRPM1 OPEN ACCESS
Melina A Agosto; Theodore G Wensel
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 590. doi:

Vesicular ATP pools in zebrafish horizontal cells OPEN ACCESS
Salvatore L Stella; Dillon McDevitt
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 591. doi:

Simulation analysis of negative feedback in the outer retina OPEN ACCESS
Hiroaki Kunisada; Yoshimi Kamiyama
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 592. doi:

Divergence of visual signals in parallel ON cone bipolar cell pathways of the mouse retina OPEN ACCESS
Sidney P. Kuo; Haruhisa Okawa; Justin Pacholec; Rachel O Wong; Fred Rieke
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 593. doi:

Dopamine D1 receptors are involved in light-adapted changes to bipolar cell spontaneous inhibition and receptive field surrounds OPEN ACCESS
Erika D Eggers; Reece Mazade; Michael Flood
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 594. doi:

Na-K-2Cl cotransporter deficiency in the retinas affects the visual contrast sensitivity OPEN ACCESS
Wen Shen
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 595. doi:

Rod bipolar cells in the adult mammalian retina actively search for and selectively synapse with healthy rod photoreceptors OPEN ACCESS
Corinne Beier; Anahit Hovhannisyan; Sydney Weiser; Seung Jun Lee; Jennifer Kung; Dae Yeong Lee; Philip Huie; Roopa Dalal; Daniel V Palanker; Alexander Sher
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 596. doi:

Connectivity map of bipolar cells and photoreceptors in the outer mouse retina OPEN ACCESS
Timm Schubert; Christian Behrens; Thomas Euler; Philipp Berens
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 597. doi:

Optogenetic visual restoration using ChrimsonR: Photoactivation below safety radiation limit in retinal ganglion cell populations from non-human primates OPEN ACCESS
Gregory Gauvain; Romain Caplette; Céline Jaillard; Antoine J Chaffiol; Melissa Desrosiers; Olivier Marre; Deniz Dalkara; José-Alain Sahel; Anne Douar; Didier Pruneau; Serge A Picaud
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 598. doi:

Optogenetic visual restoration using ChrimsonR: Photocurrent analysis in primate retinal ganglion cells by using two-photon guided patch-clamp recording OPEN ACCESS
Antoine J Chaffiol; Céline Jaillard; Melissa Desrosiers; Gregory Gauvain; Joël Chavas; Deniz Dalkara; Didier Pruneau; José-Alain Sahel; Jens Duebel
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 599. doi:

Optogenetic visual restoration using ChrimsonR: Validation in degenerative rodent models, rd1 and P23H. OPEN ACCESS
Romain Caplette; Elisabeth Dubus; Gregory Gauvain; Olivier Marre; Melissa Desrosiers; Deniz Dalkara; José-Alain Sahel; Anne Douar; Didier Pruneau; Serge A Picaud
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 600. doi:

Optogenetic visual restoration using ChrimsonR: Biophysical properties study in HEK cells using patch clamp recordings OPEN ACCESS
Corentin Joffrois; Gregory Gauvain; Melissa Desrosiers; Joël Chavas; José-Alain Sahel; Didier Pruneau; Deniz Dalkara; Serge A Picaud
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 601. doi:

Azobenzene-based DENAQ photoswitch confers light sensitivity to degenerated but not to healthy canine retina OPEN ACCESS

Sergei Nikonov; Natalia Dolgova; Ivan Tochitsky; Russell N Van Gelder; Richard Kramer; Gustavo D Aguirre; William A Beltran

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 602. doi:

Ex vivo characterization of photovoltaic subretinal implants using non-human blind primate retinas OPEN ACCESS

Paul-Henri PREVOT; Sami Dalouz; Kevin Blaize; Elisabeth Dubus; Georges A Goetz; Daniel V Palanker; Martin Deterre; Guillaume Buc; José Sahel; Serge A Picaud

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 603. doi:

Analyses Of Retinal Circuits After Rod Rescue In A Mouse Model Of Human Blindness OPEN ACCESS

Johan Pahlberg; Tian Wang; Jon Cafaro; Greg Dorian Field; Alapakkam P Sampath; Jeannie Chen

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 604. doi:

BAX Oligomerization Kinetics in Retinal Ganglion Cells after Optic Nerve Injury are comparable to *in vitro* Oligomerization Kinetics OPEN ACCESS

Margaret Maes

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 605. doi:

Unilateral optic nerve crush induces potentiation of visual evoked response through the non-damaged eye in adult mice OPEN ACCESS

Elena G. Sergeeva; Claudia Espinosa-Garcia; Machelle T Pardue; Donald G. Stein

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 606. doi:

Retinal characterization of the Thy1-GCaMP3 mouse after optic nerve transection OPEN ACCESS

Stephanie N Blandford; Spring R Farrell; Michele L Hooper; Balwantray C Chauhan; William H Baldridge

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 607. doi:

Blue light decreases oxidative stress defenses in an *In vitro* model of AMD. OPEN ACCESS

Melanie MARIE; Coralie BARRAU; Pauline GONDOUIN; Thierry VILLETTE; Denis COHEN-TANNOUDJI; José-Alain Sahel; Serge A Picaud

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 608. doi:

TRKB Receptor Agonist 7,8-DHF Alters Effect of Hypoxic-Ischemic Encephalopathy (HIE) on Mouse ERG OPEN ACCESS

De-Ann M Pillers; Xingyu Liu; Eshwar Udo; Ulas Cikla; Peter Ferrazzano; Pelin Cengiz; Bikash R Pattnaik

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 609. doi:

Investigating Mechanisms of Visual Dysfunction in Mouse Models of ATR-X Syndrome OPEN ACCESS

Pamela S Lagali; Brandon Y H Zhao; Keqin Yan; Adam N Baker; Stuart G Coupland; Catherine Tsilfidis; David J Picketts

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 610. doi:

Asymmetrical ON/OFF retinal dysfunction in the *mdx*^{Cv3} mouse model of Duchenne muscular dystrophy OPEN ACCESS

Tina I Tsac Mirella Telles Salgueiro Barboni; Balázs Vince Nagy; Michel J Roux; Alvaro Rendon; Jan J Kremers

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 611. doi:

Ocular Blood Flow Response Reduction and Electroretinogram Deficits during Hypercapnia in Diabetic Mice OPEN ACCESS

Rene C Renteria; Saurav Chandra; Nikolay Akimov; Eric Muir; Timothy Q. Duong; Divya Narayanan

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 612. doi:

Age-related changes in retinal structure and function in a mouse model of Alzheimer's disease OPEN ACCESS

Jeremiah K.H. Lim; Zheng He; Algis J Vingrys; Holly Rose Chinnery; Qiao-Xin Li; Bang V Bui; Christine Tram Oanh Nguyen

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 613. doi:

Amyloid beta (Aβ) immunoreactivity in the retina of Alzheimer's disease (AD) and non-AD dementias: A pilot study OPEN ACCESS

Joanne A Matsubara; Veronica Hirsch-Reinshagen; Ian R. Mackenzie; Robin Ging-Yuek Hsiung; Brennan Eadie; Sieun Lee; Kailun Jiang; Marinko Venci Sarunic; Mirza Faisal Beg; Jing Z Cui

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 614. doi:

Optical Coherence Tomography: a window to multiple sclerosis? OPEN ACCESS

Rita Pinto Proença; Joana Sofia Cardigos; Livio Costa; Andre Vicente; Arnaldo Santos; Duarte Amado; Joana Ferreira; João Paulo Cunha

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 615. doi:

Reliability of Quick Contrast Sensitivity Function Testing in Adults without Ocular Disease and Patients with Retinitis Pigmentosa OPEN ACCESS

Manonmani Murugappan; Jeslyn Vayalil; Annette Bade; Ava Katherine Bittner

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 616. doi:

Repeatability of contrast testing and the comparison of contrast sensitivity between normal and glaucomatous eyes OPEN ACCESS

Simrat K Sodhi; Saghar Bagheri; Yulia Wolfson; Pradeep Y Ramulu; Pujan Dave; Luis A Lesmes; Emma McDonnell; Rupert Wolfgang Strauss; David S Friedman; Hendrik P Scholl

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 617. doi:

Evaluation of contrast sensitivity function in individuals with Fabry disease OPEN ACCESS

Pinakin Gunvant Davey; Kaydee McCray

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 618. doi:

Two-color pupillometry in enhanced S-cone syndrome OPEN ACCESS

Frederick T Collison; Jason C Park; Gerald A. Fishman; J Jason McAnany

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 619. doi:

Altered Adaptation of the Pupillary Light Reflex and Sleep Irregularity in Photophobic Individuals with TBI OPEN ACCESS

Phillip Thomas Yuhas; Patrick Shorter; Catherine McDaniel; Michael Earley; Andrew Hartwick

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 620. doi:

Characterisation of Scotopic Vision in Patients with Choroideremia Utilising full-field

Stimulus threshold (FST) OPEN ACCESS

Jasleen Kaur Jolly; Charles L Cottriall; Markus Groppe; Robert E MacLaren

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 621. doi:

Longitudinal Ocular Photosensitivity Assessment of Healthy and Achromatopsic Subjects OPEN ACCESS

Mariela C Aguilar; Alex Gonzalez; Cornelis Rowaan; Carolina P De Freitas; Karam AlRahman Alawa; Heather Ann Durkee; Alejandro Arboleda; Florence Cabot; Potyra R Rosa; Byron L Lam; Jean-Marie A Parel

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 622. doi:

Color vision, dark adaptation and retinal structure in Aniridia OPEN ACCESS

Hilde Røgeberg Pedersen; Lene Aarvelta Hagen; Erlend Sommer Landsend; Jon V. B. Gjelle; Øygunn Aass Utheim; Stuart J. Gilson; Tor Paaske Utheim; Rigmor C Baraas

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 623. doi:

Longitudinal Assessment of Non-standard Vision Function in Early to Intermediate AMD: Baseline Update OPEN ACCESS

Lori A Lott; Marilyn E Schneck; Gunilla Haegerstrom-Portnoy; Susan Hewlett; Bonnie Gauer; John A Brabyn

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 624. doi:

Temporal, spatial and chromatic sensitivity losses associated with *OPA1* mutations OPEN ACCESS

Anna Majander; Patrick Yu-Wai-Man; Catarina João; Marcela Votruba; Anthony T Moore; Andrew Stockman

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 625. doi:

Vision function in individuals with diabetes and moderate to severe diabetic retinopathy with and without diabetic macular edema OPEN ACCESS

Marilyn E Schneck; Shirin Barez

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 626. doi:

Test-Retest Repeatability of Microperimetry at the Central and Border Regions of Remaining Retina in Choroideremia OPEN ACCESS

Ioannis Dimopoulos; Calvin Tseng; Ian M MacDonald

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 627. doi:

Right-Left Visual Field Asymmetry Indices for Detecting early POAG. OPEN ACCESS

Naqibah Ghazali; David Henson

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 628. doi:

Analysis of Retinal nerve fiber layer in Mild cognitive impairment and Alzheimer disease. OPEN ACCESS

Do Gyun Kim; Jin Young Kwon

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 629. doi:

Impact of Natural Blind Spot Location on Perimetry OPEN ACCESS

Mengyu Wang; Louis R Pasquale; Lucy Q Shen; Michael V Boland; Sarah Wellik; C Gustavo De Moraes; Jonathan S Myers; Peter Bex; Tobias Elze

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 630. doi:

A Comparison of the Medmont Dark Adapted Chromatic Perimeter (DAC) with the Full-Field Stimulus Threshold (FST) in Subjects with Retinitis Pigmentosa (RP) OPEN ACCESS

Martin Klein; Lea D Bennett; Kelly Kiser; Paulina Mejia; Kelly Reddin; David G Birch

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 631. doi:

Home-Based Self-Assessment of the Contrast Sensitivity Function in Age-Related Macular Degeneration OPEN ACCESS

Peter Bex; Michael Dorr; Kameran Lashkari; Luis A Lesmes; Zhong-Lin Lu; Emily K Wiecek

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 632. doi:

Factors Influencing Visual Acuity in Fuchs' Endothelial Corneal Dystrophy OPEN ACCESS

Hidenaga Kobashi; Kazutaka Kamiya; Akihito Igarashi; Kimiya Shimizu

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 633. doi:

Simulating Reduced Acuity in Low Vision: Validation of Two Models OPEN ACCESS

Quan Lei; Daniel Kersten; William Thompson; Gordon E Legge

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 634. doi:

Feasibility of a Self-administered, Computer Guided, Visual Perception Training Software for the Argus II Retinal Prosthesis. OPEN ACCESS

Alex Gonzalez; Carmen Torres; Mariela C Aguilar; Cornelis Rowaan; Byron L Lam; Ninel Gregori; Janet L Davis; Jean-Marie A Parel

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 635. doi:

Chromatic multifocal pupillometer for objective diagnosis of neurodegeneration in the eye and the brain. OPEN ACCESS

Ygal Rotenstreich; Daniel Ben Ner; Ron Chibel; Yakir Berchenko; Bernice Oberman; Ofra Kalter-Leibovici; Laurence Freedman; Michal Beeri; Ramit Ravona-Springer; Sagi Hamof; Ifat Sher-Rosenthal

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 636. doi:

Hypomorphic mutations in *RCBTB1* cause autosomal recessive isolated and syndromic inherited retinal dystrophy OPEN ACCESS

Frauke Coppieters; Giulia Ascari; Konstantinos Nikopoulos; Mingchu Xu; Thomas Langmann; Rui Chen; Carlo Rivolta; Christian P Hamel; Bart Peter Leroy; Elfride De Baere

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 637. doi:

Characterization of visual function loss in mice with retina-specific disruption of *Clock* or *Arntl* genes OPEN ACCESS

Li He; Polina Lyuboslavsky; Curran Sidhu; Jana T Sellers; P. Michael Iuvone

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 638. doi:

Loss of cone function without degeneration in a novel *Gnat2* knock-out mouse line OPEN ACCESS

Kaitryn Ronning; Gabriel Peinado; Mayank Goswami; Robert J Zawadzki; Edward N Pugh; Rolf Herrmann; Marie E Burns

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 639. doi:

PRCD Mutants Associated With Retinitis Pigmentosa Affects Protein Stability And Display Altered Subcellular Localization. OPEN ACCESS

Saravanan Kolandaivelu; Joseph Murphy

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 640. doi:

Pupillary responses in the C57BL/6J and congenic IRBP knockout mouse OPEN ACCESS
Kevin Joseph Donaldson; Shanu Markand; Jana T Sellers; Micah A Chrenek; Machelle T Pardue; P. Michael Iuvone; Jeffrey H Boatright; J M Nickerson
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 641. doi:

Standardization for mouse phenotype in various stain with optical coherent tomography (OCT) and electroretinography (ERG) OPEN ACCESS
Kyoungyul Seo; Sangchul Yoon; Soojung Han; Jahyun Song; Hong Kyung Kim; Ho Sung Jung
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 642. doi:

Re-expression of miR-183/96/182 in Photoreceptors Rescues Their Functional Defects in miR-183/96/182 Knockout Mice OPEN ACCESS
Pei Zhuang; Chithra Muraleedharan; Shunbin Xu
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 643. doi:

Identification of a potential new mouse model of chromatopsia through spontaneous occurrence of cone pathway function loss OPEN ACCESS
Mark Hassall; Alun R Barnard; Peter Charbel Issa; Robert MacLaren
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 644. doi:

G9a and Ezh2 are important for RGC cell fate determination during development OPEN ACCESS
Lucy Wong; Zhaoxin Jiang
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 645. doi:

Association analysis of functional variants in blood pressure regulation, blood clot formation and stress hormone binding genes with chronic central serous chorioretinopathy (cCSC) OPEN ACCESS
Roos Schellevis; Myrte Breukink; Elon H.C. Van Dijk; Sascha Fauser; Camiel J F Boon; Eiko de Jong; Anneke I Den Hollander
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 646. doi:

Retinopathy and optic atrophy: expanding phenotypic spectrum of *AARS2* gene mutations OPEN ACCESS
Jason H Peragallo; Stephanie Keller; Kristen Cornell; Marjo S van der Knaap; Bruno Soares; Suma P Shankar
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 647. doi:

The cysteine proteinase inhibitor cystatin C harbors a haplotype associated with increased risk of AMD and Alzheimer's disease and decreased plasma levels of its mature form OPEN ACCESS
Luminita I Paraoan; Joe Butler; Nirodhini Narendran; Yit C. Yang
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 649. doi:

NOD2 genetic variants and sarcoidosis-associated uveitis OPEN ACCESS
Cindy Ung; Samaneh Davoudi; Daniel Navarro-Gomez; Lishuang Shen; Aai Ren; Mindy Kwong; Maria Janessian; Xiaowu Gai; Ann-Marie Lobo; Lucia Sobrin; George Papaliodis
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 650. doi:

Genotypes-phenotype correlation in familial exudative vitreoretinopathy probands with KIF-11 mutation OPEN ACCESS
Jiao Lyu; Peiquan Zhao
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 651. doi:

Novel GJA8 mutation in transmembrane domain IV associated with hereditary cataract OPEN ACCESS
Debbie S Kuo; Jared Sokol; Anne M Slavotinek; Douglas B Gould
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 652. doi:

LOX and SPARC variations are associated with susceptibility to Keratoconus patients in Korean OPEN ACCESS
Jeewon Mok; HeeJung Ju; Choun-Ki Joo
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 653. doi:

The fundus phenotype associated with the p.Ala243Val *BEST1* mutation. OPEN ACCESS
Kamron N Khan; Graham E Holder; Andrew Webster; Anthony G Robson; Anthony T Moore; Michel Michaelides
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 654. doi:

Association of a BEST1 Mutation with Retinitis Pigmentosa OPEN ACCESS
Lauren A Dalvin; Jackson Abou Chehade; John (pei wen) Chiang; Josefine Fuchs; Raymond Iezzi; Alan D Marmorstein
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 655. doi:

Intronic screening of the *RS1* gene in an affected retinoschisis patient suggests a potential cryptic acceptor splice site variation OPEN ACCESS
Keith Wetherby; Catherine Cukras; Amy Turriff; Xinjing Wang
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 656. doi:

A 1 base-pair frameshift deletion in codon 893 of *SLC24A1* causes Retinitis Pigmentosa OPEN ACCESS
Conor Patrick Malone; Matthew Carrigan; Karen Collins; Hilary Dempsey; G Jane Farrar; Paul Kenna
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 657. doi:

Novel mutations in *SLC24A1* leading to congenital stationary night blindness (CSNB) OPEN ACCESS
Marion Neuille; Sivasankar Malaichamy; Maria Vadala; Ramya Sachidanandam; Thangopala Arokiasamy; Jose Sahel; Parveen Sen; Isabelle S Audo; Nagasamy Soumittra; Christina Zeitz
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 658. doi:

Phenotype-genotype correlation in a French cohort of Enhanced S-Cone syndrome OPEN ACCESS
Jean-Louis Bacquet; Christina Zeitz; Saddek Mohand-Said; Aline Antonio; Jose Sahel; Isabelle S Audo
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 659. doi:

MERTK mutations account for 2% of cases with inherited retinal dystrophy in a large French cohort OPEN ACCESS
Isabelle S Audo; Elise Boulanger-Scemama; Saddek Mohand-Said; Vanessa Démontant; Christel Condroyer; Aline Antonio; Fiona Boyard; Said El Shamieh; Jose Sahel; Christina Zeitz
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 660. doi:

A comprehensive molecular analysis of patients with the diagnosis of choroideremia
OPEN ACCESS
Christina Zeitz; Barbara Kloeckener-Gruissem; Marie-Elise Lancelot; Aurore Germain; Aline Antonio; Fiona Boyard; Mohaind-Said Saddek; Jose Sahel; Isabelle S Audo
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 661. doi:

Identification of *CHM* mutations in Chinese families with Choroideremia OPEN ACCESS
Xue-Bi Cai; Xiu-Feng Huang; Yi Tong; Jia Qu; Qin-Kang Lu; Zi-Bing Jin
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 662. doi:

CHM and *RPE65*: A diagnostic paradox resolved by Next Generation Sequencing
OPEN ACCESS
Paul Kenna; Matthew Carrigan; Conor Patrick Malone; Emma Duignan; G Jane Farrar
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 663. doi:

p.P347Q Rhodopsin Mutation Is a Recurrent Founder Allele in Brazilian Individuals with Autosomal Dominant Retinitis Pigmentosa OPEN ACCESS
Fernanda Belga Ottoni Porto; Evan M Jones; Isadora F G Sena; Shirley A M Sampaio; Milena C P S Souza; Zachry Soens; Yumei Li; Renata Simões; Rui Chen
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 664. doi:

Albinism in Israeli Jewish populations: causative mutations and phenotypes OPEN ACCESS
Anat Blumenfeld; Efrat Shemesh; Ada Rosenmann; Claudia Yahalom
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 665. doi:

Comprehensive Molecular Screening in a cohort of Chinese patients with Leber Congenital Amaurosis or Severe early childhood onset retinal dystrophy OPEN ACCESS
Yang Li; KE XU; Xiaohui Zhang; YUE XIE; FENG JIANG; LIUAN LIU
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 666. doi:

Functional characterization of novel deleterious *MFSD8* mutations found by whole exome sequencing in early-onset isolated maculopathy OPEN ACCESS
Miriam Bauwens; Nicole Weisschuh; Chantal Ceutenick-de Groote; Riet De Rycke; Susanne Kohl; Frauke Coppieters; Arnaud Vanlander; Rudy Van Coster; Bart Peter Leroy; Elfride De Baere
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 667. doi:

RARB mutations presenting with variable clinical features in patients with microphthalmia, anophthalmia, and/or coloboma (MAC): A Case Series. OPEN ACCESS
Prashanth Iyer; Nutsuchar Wangtiraumnuay; Sarina Kopinsky; Jenina Capasso; Bing Chiu; Venkatesh Brahma; Alex V Levin; Adele Schneider
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 668. doi:

A Set of Ophthalmologic Logical Observation Identifiers Names and Codes (LOINC®) for Standardizing Data Collection in eyeGENE® and in Other Ocular Clinical Studies
OPEN ACCESS
Santa J Tumminia; Swapna Abhyankar; Bryan Hendrickson; Robert Hufnagel; Daniel Hutter; Clement McDonald; Kerry Goetz
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 669. doi:

A Computational Analysis of Human Tyrosinase to Further Understanding of Oculocutaneous Albinism Type 1 OPEN ACCESS
Katie Farney; Monika B Dolinska; Yuri V Sergeev
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 670. doi:

Whole exome screening and identification of novel variants in a cohort of 28 Greek and Swedish families with cone-rod dystrophy. OPEN ACCESS
Nicola Bedoni; Konstantinos Nikopoulos; Pietro Farinelli; Beryl Royer-Bertrand; Sara Balzano; Sten Andreasson; Miltiadis K Tsilimbaris; Chrysanthi Tsika; Stella Blazaki; Carlo Rivolta
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 671. doi:

Whole exome sequencing in familial primary glaucoma from eastern India OPEN ACCESS
Aparna Rao; Kiran Narta; Debananda Padhy; Mamatha M. Reddy; arijit Mukhopadhyay
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 672. doi:

Whole Genome Sequencing identifies a structural variant in the *EYS* gene in retinitis pigmentosa patients. OPEN ACCESS
Katarina Cisarova; Nicola Bedoni; Rocio Sanchez-Alcudia; Beryl Royer-Bertrand; Almudena Avila-Fernandez; Marta Corton; Olga Zurita; Sara Balzano; Konstantinos Nikopoulos; Ayuso Carmen; Carlo Rivolta
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 673. doi:

New locus for autosomal dominant aniridia in a Chinese family OPEN ACCESS
Panfeng Wang; Xueshan Xiao; Shiqiang Li; Xiaoyun Jia; Xiangming Guo; Qingjiong Zhang
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 674. doi:

Identification of genome-wide copy number variations using SNP genotyping arrays in patients with retinitis pigmentosa OPEN ACCESS
Xiu-Feng Huang; Zi-Bing Jin
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 675. doi:

Transient Dry Eye Following the Fasanella-Servat Operation in the Early Postoperative Period OPEN ACCESS
Christopher Lo; Carisa Petris; Richard Lisman
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 676. doi:

Comparative Ocular Effects of Topical Epinephrine Versus Phenylephrine in Ptotic and Non-ptotic Subjects OPEN ACCESS
Philip Ngai; Jeremiah Tao
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 677. doi:

Tarsal switch to correct severe neurogenic or myogenic ptosis OPEN ACCESS
Roberta Lilian Fernandes de Sousa Meneghim; Lucieni Cristina Barbarini Ferraz; Alicia Galindo; Rajiv Khandekar; Silvana Artioli Schellini
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 678. doi:

Amyloidosis Masquerading as Unilateral Ptosis OPEN ACCESS
Maria M Choudhary; Rao Chundury; Priyanka Kumar; Julian Perry
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 679. doi:

Entropion and Ectropion Patient Characteristics and Outcomes: A Retrospective Chart Review OPEN ACCESS

Annie Wu; Connie Wu; Philip R Rizzuto
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 680. doi:

Quality of life assessment after entropion repair OPEN ACCESS
Yan Tong Koh; Philemon Keqin Huang; Eugenie Wei Ting Poh; Chee Chew Yip
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 681. doi:

Reversible Cicatricial-like Ectropion Related to Epidermal Growth Factor Receptor (EGFR) Inhibitors OPEN ACCESS
Stacy Scofield-Kaplan; Bryan Winn
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 682. doi:

Comparison between two surgical methods for eyelid ectropion: tarsal strip alone versus tarsal strip with punctoplasty (three snips with or without diamond-shaped resection). OPEN ACCESS
Alix EHRHARDT; Oualid Guechi; Mohamed Zaidi; Louis Lhuillier; Naila Hournad; Maxime SOT; adina agapie; piotr krawczyk; Huong Duong Nguyen Viet; Jean-Marc Perone; Nadia OUAMARA
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 683. doi:

SURGICAL OUTCOMES OF PORCINE ACELLULAR DERMIS GRAFT IN SOCKET AND EYELID RECONSTRUCTION: A COMPARISON WITH ORAL MUCOSAL GRAFT OPEN ACCESS
Livia Teo; Chang Yeom Kim; Dong Kyu Kim; Jin Sook Yoon
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 684. doi:

Geometry of the Blepharoplasty Incision OPEN ACCESS
Sagar Yatin Patel; Ronald Mancini
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 685. doi:

Immortalization of Human Lacrimal Epithelial Cells OPEN ACCESS
Marwan Ali; Dhara Shah; Zeeshan Pasha; Vinay Kumar Aakalu
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 686. doi:

Targeted Endoscopic Dacryocystorhinostomy for Acquired Nasolacrimal Duct Obstruction OPEN ACCESS
Paul Petrakos; Ashutosh Kacker; Joshua Ian Levinger; Gary Lelli
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 687. doi:

Effect of Nunchaku-Style Silicon Tube Intubation in Patients with Lacrimal Duct Obstruction Associated with S-1. OPEN ACCESS
Kazuyoshi Ohtomo
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 688. doi:

Lacrimal tubes in external dacryocystorhinostomy: a method for placement and removal and the incidence of prolapse OPEN ACCESS
Seanna R Grob; Michael Yoon
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 689. doi:

The success rate of simultaneous and asynchronous approach of bilateral external dacryocystorhinostomy OPEN ACCESS
Silvana Artioli Schellini; Alberto Galvez; Mohamed Dufaileej; Rajiv Khandekar; Alicia Galindo
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 690. doi:

Clinical presentation and bacteriology of eyebrow infections: the Massachusetts Eye and Ear experience (2008-2015) OPEN ACCESS
Anais Carniciu; Ilya Leskov; Jonathan Chou; Suzanne K. Freitag
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 691. doi:

Outcomes of revision conjunctivodacryocystorhinostomy with Jones tubes. OPEN ACCESS
Bryce Radmall; Eric Ahn; Eric Steele; Roger Dailey
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 692. doi:

Dacryocystectomy: indications and results at tertiary eye hospital of central Saudi Arabia. OPEN ACCESS
Laryssa Kataki de Oliveira Veloso; Alicia Galindo; Mohamed Dufaileej; Alberto Galvez; Rajiv Khandekar; Silvana Artioli Schellini
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 693. doi:

Modified canaliculotomy with suture-fixed stent for treatment of canaliculitis OPEN ACCESS
Tina H Chen; Milap Mehta
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 694. doi:

Critical exam findings and culture results that correlate with inpatient hospitalization in the setting of Acute Infectious Dacryoadenitis OPEN ACCESS
Matthew Zhang; Sarah Tanaka; Matthew Hollar; Viraj Mehta; Behin Barahimi
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 695. doi:

Long-term Efficacy of Aluminum Foil Draping Technique in Oculoplastic Surgical Procedures OPEN ACCESS
Lauren Cournoyer; Philip R Rizzuto
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 696. doi:

BI-INSTITUTIONAL RETROSPECTIVE REVIEW ON THE DEMOGRAPHICS AND BASIC CLINICAL PRESENTATION OF HIDROCYSTOMAS OPEN ACCESS
Michelle Milee Chang; Paul Petrakos; Mei Zhou; Benjamin Levine; Gary Lelli; Pete Setabutr
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 697. doi:

The Efficacy of Primary Pentagonal Wedge Resection in Achieving Negative Margins in Eyelid Basal Cell Carcinoma OPEN ACCESS
Christine Vu Nguyen; Giancarlo A Garcia; Marc Yonkers; Jeremiah Tao
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 698. doi:

Retrospective Chart Review of Vascular Tumors at a Single Academic Institution OPEN ACCESS
Anjulie Quick; Thomas Whittaker; Jason Sokol
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 699. doi:

Outcomes of two surgical techniques for major trichiasis OPEN ACCESS
Lucieni Cristina Barbarini Ferraz; Roberta Lilian Fernandes de Sousa Meneghim; Alicia Galindo; Ana Claudia Wanzeler; Michelli

Saruwatari; Larissa Satto; Carlos Roberto Padovani; Silvana Artioli Schellini

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 700. doi:

Clinical Features of Graves Orbitopathy Patients with Recurred Orbital Inflammation after Decompression OPEN ACCESS

Young Jun Woo; Do Wook Kim; Ji Won Kim; Jin Sook Yoon

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 701. doi:

Characterization of patients receiving evisceration in a major metropolitan hospital in Mexico City OPEN ACCESS

Miriam guadalupe arellano; Francisca Zuazo; Martin Gonzalez; ALBERTO ABDALA; Angel Nava; OSIRIS OLVERA-MORALES; JOSE LUIS TOVILLA CANALES

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 702. doi:

A new orbital implant model of high density porous polyethylene: First animal model using OMNIPOR. OPEN ACCESS

Francisco J Rodriguez; Mariana Cabrera; Marcela Longgi; Cristina Gabela; Maria Teresa Daza

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 703. doi:

Evisceration with autogenous scleral graft and implantation by posterior way with ceramic implants: a seventeen-year study of 134 case reports. OPEN ACCESS

Jeremy NADAL; Vincent Daien; Jacques jerome; Frederic MURA; Didier HOA; Max Villain

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 704. doi:

Retrospective Review of Indication of Evisceration, Enucleation or Exenteration at One Academic Institution OPEN ACCESS

Derek Horkey; Isabella Herrera; Jason Sokol

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 705. doi:

Characterization of the preservative effects of UW cold storage solution on mouse eyes harvested for whole eye transplants OPEN ACCESS

Robert W Nickells; Cassandra Schlamp; Heather M Schmitt; Bikash R Pattnaik

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 706. doi:

Total Human Eye Allotransplantation (THEA): Preclincal Cadaveric Studies OPEN ACCESS

Maxine R. Miller; Edward H Davidson; Eric W. Wang; Jenny Ying Yu; Juan C. Fernandez-Miranda; Dawn J. Wang; Joel S Schuman; Kia M. Washington

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 707. doi:

Characteristics of Graves' Orbitopathy Patients Requiring Strabismus Surgery After Orbital Decompression OPEN ACCESS

Michelle Boyce; Isabella Herrera; Thomas Whittaker; Jason Sokol

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 708. doi:

Orbital Decompression in Thyroid Eye Disease, A 5 year review in a reference center in Mexico City OPEN ACCESS

NAYELI ALCARAZ LARES; ALBERTO ABDALA; OSIRIS OLVERA-MORALES; JOSE LUIS TOVILLA CANALES

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 709. doi:

Early Experience with Medpor Nonporous Barrier Sheet In Orbital Fracture Repair OPEN ACCESS

Lillian Yang; Chris Compton; Manuel Ochoa; Babak Ziaie; Jason Sokol; Michelle Boyce

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 710. doi:

Distinguishing orbital and preseptal cellulitis: how useful are clinical history and physical exam? OPEN ACCESS

Alexander Port; Benjamin Levine

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 711. doi:

Biopsy proven idiopathic orbital inflammatory disease - clinical features, management and treatment outcomes OPEN ACCESS

Eric Spink; Darren Ting; Lucy Clarke

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 712. doi:

Clinical and radiographic characteristics of biopsy-proven adult orbital lesions at an urban academic center OPEN ACCESS

Hans Barron Heymann; Michael Mbagwu; Paul Bryar

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 713. doi:

Environmental Risk Factors for the Development of Concurrent Involutional Lower Lid Entropion and Upper Lid Ptosis OPEN ACCESS

Kendra Clemons; Michael E Migliori

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 714. doi:

Preoperative levator function is a significant factor in postoperative results of Muller's muscle-conjunctival resection OPEN ACCESS

Dan Yoon; Rakesh Patel; Vinay Kumar Aakalu; Pete Setabutr

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 715. doi:

Comparative Analysis of Eyelid Contour Changes in Müller's Muscle Conjunctival Resection and External Levator Resection Ptosis Surgery OPEN ACCESS

Daniel Rootman; Jennifer Danesh; Robert Goldberg

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 716. doi:

Material breakage as an early complication of expanded Polytetrafluoroethylene (ePTFE) usage in frontalis suspension surgery for poor levator function blepharoptosis. OPEN ACCESS

John Charles Zeyer; Hassan Shah

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 717. doi:

Significance of Early Postoperative Eyelid Position on Late Postoperative Result in Müller's Muscle Conjunctival Resection Surgery OPEN ACCESS

Jennifer Danesh; Shoaib Ugradar; Robert Goldberg; Naresh Joshi; Daniel Rootman

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 718. doi:

Bilateral ptosis due to mitochondrial cytopathy secondary to antiretroviral treatment toxicity. OPEN ACCESS

Nitin Ranavay; Pascal Lafrate; Tanya Stoilova; Anthony Behinc; Emmanuelle Salort-Campana; Bahram Bodaghi; Phuc Lehoang;

Valérie Touitou
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 719. doi:

Preferred methods of pediatric ophthalmologists for ptosis repair in the pediatric population OPEN ACCESS
Jennifer Murdock; Radha Ram; Evelyn A. Paysse; Michael T. Yen; Douglas P. Marx
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 720. doi:

Referral Patterns and Outcome Trends of Temporal Artery Biopsies OPEN ACCESS
Marie Somogyi; David Yoo; Yasmin Shayesteh
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 721. doi:

Proptosis and retrobulbar anesthesia: a technique to evaluate for subclinical retrobulbar hemorrhage. OPEN ACCESS
Justin Spaulding; Therese Sassalos; Nitin Kumar; Aldo Fantin
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 722. doi:

Acylation of αB-Crystallin in Human Lens and Retina OPEN ACCESS
Rooban B Nahomi; Ram H Nagaraj
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 723. doi:

α-Crystallin binding and associations with putative substrates OPEN ACCESS
Paul David Hamilton; Brittney McGlasson; Usha P Andley
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 724. doi:

Modeling αB-Crystallin-related chaperonopathies in zebrafish OPEN ACCESS
Sanjay Mishra; Shu-Yu Wu; Poonam Rathore; Hassane S Mchaourab
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 725. doi:

Deamidation delays expression of βB2-crystallin in the zebrafish lens OPEN ACCESS
Kirsten J Lampi; Larry L. David; Darva Umeziene
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 726. doi:

Properties of Alpha Crystallin under High Hydrostatic Pressure OPEN ACCESS
Joseph Horwitz
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 727. doi:

LOSS OF FUNCTION IN αA-CRYSTALLIN MUTANT G98R IS RESCUED BY A COMPENSATORY MUTATION IN THE N-TERMINAL OF THE PROTEIN. OPEN ACCESS
Ashutosh Phadte; Puttur Santhoshkumar; K Krishna Sharma
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 728. doi:

Molecular Mechanism of Development of Congenital Nuclear Cataract in βA3 Conditional Knockout Mice OPEN ACCESS
Shylaja Hegde; Om P Srivastava
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 729. doi:

αB-Crystallin expression in Alzheimer's Disease brain in neuritic and diffuse plaques OPEN ACCESS
Juliet A Moncaster; Rajendra K Gangalum; Olga Minaeva; John C Voss; Dean Hartley; Suraj P Bhat; Carmela Abraham; Bertrand R Huber; Patric K Stanton; Lee E Goldstein
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 730. doi:

Concentration- and temperature-dependent chemical shift perturbations in solutions of bovine GammaB-crystallin OPEN ACCESS
George M Thurston; Jeffrey L. Mills; Kaylee L. Mathews; John Zanet; Angel Payan; Lea V. Michel; Keith Van Nostrand; Christopher W. Wahle; John F. Hamilton; David S. Ross
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 731. doi:

Mini-chaperone peptide binding sites in mutant αA-G98R protein and its efficacy to stabilize mutant protein in HLE-B3 cells OPEN ACCESS
Murugesan Raju; Puttur Santhoshkumar; Ashutosh Phadte; K Krishna Sharma
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 732. doi:

IDENTIFICATION OF CRITICAL CYSTEINE RESIDUES INVOLVED IN CRYSTALLIN AGGREGATION IN AGING AND CATARACT FORMATION OPEN ACCESS
Ramkumar Srinivasagan; Xingjun Fan; Vincent M Monnier
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 733. doi:

Detection of Alzheimer's Disease-Linked Changes in the Ocular Lens by Quasi-Elastic Light Scattering Ophthalmoscopy in Young Subjects with Down Syndrome OPEN ACCESS
Lee E Goldstein; Olga Minaeva; Srikant Sarangi; Danielle M. Ledoux; Juliet A Moncaster; Caitlin A. Rook; John I Clark; David G Hunter
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 734. doi:

In Vivo Assessment of Molecular Aging by Quasi-Elastic Light Scattering in the Human Lens OPEN ACCESS
Olga Minaeva; Srikant Sarangi; Danielle M. Ledoux; Juliet A Moncaster; Caitlin A. Rook; Maria Ericsson; Yorghos Tripodis; John I Clark; Rudolph E. Tanzi; David G Hunter; Lee E Goldstein
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 735. doi:

The role of PA28αβ in cataract OPEN ACCESS
Julia Adeloef
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 736. doi:

Protection from blast-induced vision loss by the N-acetylserotonin derivative HIOC through a BDNF/TrkB receptor mechanism OPEN ACCESS
P. Michael Iuvone; Polina Lyuboslavsky; Curran Sidhu; Li He; Jeffrey H Boatright; Eldon E Geisert
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 737. doi:

Effects of blast overpressure on the retina in a rat model of primary blast injury OPEN ACCESS
Steven J Fliesler; Bruce A. Pfeffer; Megan Prunty; Machelle T Pardue
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 738. doi:

Activation of the immune system following blast injury to the eye OPEN ACCESS
Ying Li; Rebecca King; Felix L Struebing; P. Michael Iuvone; Eldon E Geisert

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 739. doi:

Acute ocular edema in survivable primary blast induced ocular injury in rabbits OPEN ACCESS
J. David Rios; Jae-Hyek Choi; Jennifer McDaniel; Brian Lund
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 740. doi:

Optic nerve changes after repeated closed-head traumatic brain injury in wild type and htau mice OPEN ACCESS
Radouil T Tzekov; Benoit Mouzon; Cillian Lynch; Fiona Crawford
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 741. doi:

Arginase 2 deletion limits neuroglial injury following optic nerve trauma OPEN ACCESS
Zhimin Xu; S.Priya Narayanan; Chintan Patel; Esraa Shosha; R. William Caldwell; Ruth B Caldwell
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 742. doi:

Screening FDA-approved drugs in a zebrafish model of ocular trauma identifies novel cytoprotectants OPEN ACCESS
Arife Eroglu; Jeffrey Jeff Nelson; Aurel Malapani-Scala; Jeff S Mumm
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 743. doi:

Caspase-2 mediates retinal ganglion cell apoptosis in traumatic optic neuropathy caused by blunt ocular trauma. OPEN ACCESS
Chloe Naomi Thomas; Ann Logan; Zubair Ahmed; Richard J Blanch
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 744. doi:

Adipose-derived stem cells alleviate visual deficits in mild traumatic brain injury model OPEN ACCESS
Roshni Christo; Ramesh Periasamy; Natalie Guley; Damian Kaminski; Nobel Del Mar; Anton Reiner; Rajashekhar Gangaraju
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 745. doi:

Neurovascular Injury after Retinal Ischemia Reperfusion Insult: Contrasting Roles of Arginase Enzyme Isoforms OPEN ACCESS
Esraa Shosha; Zhimin Xu; Harumasa Yokota; Ji Xing; R. William Caldwell; Alan Saul; S.Priya Narayanan; Ruth B Caldwell
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 746. doi:

Establishment of retinal ganglion cell-specific gene recombination murine models using tet system OPEN ACCESS
Yusaku Katada; Maki Miyauchi; Yukihiro Miwa; Xiaoyan Jiang; Kiwako Mori; Hidemasa Torii; Kenji F Tanaka; Kazuo Tsubota; Toshihide Kurihara
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 747. doi:

Optimization of pig and mouse retinal cell and explant models to study the cellular mechanisms of deleterious ROCK signaling in neuronal survival and axonal outgrowth OPEN ACCESS
Evy Lefevere; Inge Van Hove; Jurgen Sergeys; Tom Buyens; Lieve K M Moons
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 748. doi:

A temporal correlation between axonal regeneration and dendrite remodeling in adult zebrafish? OPEN ACCESS
An Beckers; Ilse Bollaerts; Jessie Van houcke; Kim Lemmens; Lieve K M Moons
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 749. doi:

IGFBPL1 regulates axon growth through IGF-binding domain OPEN ACCESS
Yingqian Li; Kin-Sang Cho; Chenying Guo; Tor Paaske Utheim; Dong Feng Chen
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 750. doi:

Retinal Iron Overload during Diabetic Retinopathy Accelerates Ganglion Cell Death OPEN ACCESS
Jaya P Gnana-Prakasam; Kapil Chaudhary; Wanwisa Promsote; Sylvia B Smith; Vadivel Ganapathy; Pamela M Martin; Alan Saul
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 751. doi:

The role of telomere-associated proteins in retinal ganglion cell apoptosis after axotomy OPEN ACCESS
Meghan Deanna Lysko; Philippe M D'Onofrio; Paulo D Koeberle
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 752. doi:

Relative susceptibility of individual neuron classes to different insults in rat retinal cultures OPEN ACCESS
John P M Wood; Glyn Chidlow; Robert James Casson
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 753. doi:

Rescue of a mutant T8993G ATP6 mouse model of NARP and MILS with Mito-Targeted AAV9 Containing Normal ATP6 OPEN ACCESS
Huijun Yuan; Hong Yu; John Guy
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 754. doi:

Retina-wide AAV-transduction in mice: A novel method combining vitrectomy and intravitreal injection OPEN ACCESS
John Neidhardt; Carsten Roeger; Jasmin Segelken; Romain Da Costa
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 755. doi:

Sterilization of Intraocular Lenses loaded with Moxifloxacin OPEN ACCESS
Helena Prior Filipe; Andreia Sofia Oliveira; Guilhermina Moutinho; Dimitriya Bozukova; Benilde Saramago; Ana Paula Serro
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 756. doi:

Effective delivery of recombinant protein into retinal cells by cationic lipid OPEN ACCESS
Qin Liu; Holly Rees; Maria Sousa; Mihoko Leon; John Zuris; David Liu; Eric A Pierce
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 757. doi:

An AAV2 vector encoding prolactin reverses blood retinal barrier pathology when administered intravitreally to diabetic rats OPEN ACCESS
Nundehui Diaz-Lezama; Zhijian Wu; Elva Adan-Castro; Bibiana Moreno-Carranza; Gonzalo Martinez de la Escalera; Carmen Clapp
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 758. doi:

Potency Assay for AAV Vector Encoding Retinal Pigment Epithelial 65 Protein OPEN ACCESS
Linda B Couto; George Buchlis; Rafal Farjo; Katherine High

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 759. doi:

A technique for the diffusion coefficient and permeability measurements through the biological assembly of "iris-hyaloid membrane-vitreous humor" OPEN ACCESS

Anita Nikolova Penkova; Komsan Rattanakijsuntorn; Satwindar Singh Sadhal

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 760. doi:

Distribution and Clearance of Particles and Molecules after Microneedle Injection into the Suprachoroidal Space OPEN ACCESS

Bryce Chiang; Mark R Prausnitz

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 761. doi:

Long-term safety evaluation of suprachoroidal space following multiple suprachoroidal injection of triamcinolone acetonide (TA) OPEN ACCESS

Mei Chen; Shiyu Zhou; Ping Lu; Qingkai Ma; Akram Belghith; Lingyun Cheng

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 762. doi:

Repurposing known drugs to identify potential therapeutics for Leber's hereditary Optic Neuropathy: screening in cells and testing in a mouse model of LHON. OPEN ACCESS

Gino Cortopassi; Alfred K Yu; Sandipan Datta; Lanying Song

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 763. doi:

Development of a semi-permanent, controlled release antibiotic eye drop OPEN ACCESS

Morgan V Fedorchak; Regis P Kowalski; Eric G Romanowski; Joel S Schuman; Steven R Little

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 764. doi:

Novel Methodology for Creating Primate Retina with Sortable Cell Populations OPEN ACCESS

Shreyasi Choudhury; Christianne E Strang; Sanford L. Boye; Julie Lynch Hill; Douglas C Witherspoon; Daniel T Kasuga; Paul D Gamlin; Shannon Elizabeth Boye

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 766. doi:

Hyaluronic acid based legumain responsive nano-carrier for the targeted delivery of doxorubicin OPEN ACCESS

Kaihui Nan; Tong Li; Peiling Xie; Yihong Tang; Sen Lin

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 767. doi:

Unpreserved ophtalmic formula : PYCLEAR® Protection fully controlled risk of contamination with common 3 parts eye dropper OPEN ACCESS

loic marchin; Catherine Feuillolay; Christine Roques

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 768. doi:

Semaphorin3A Traps for Treatment of Retinal and Choroidal Vasculopathies OPEN ACCESS

Francois Binet; Normand Beaulieu; Karine Beauchemin; Patricia Laplante; John G Clement; Przemyslaw (Mike) Sapieha

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 769. doi:

Sustained Retinal Concentrations of OHR3031 Achieved with Intravitreal Injection of a Biodegradable Microparticle Formulation to Rabbits OPEN ACCESS

Marlene Woodruff Modi; Barbara M Wirostko; Robert Jennings; Laxma Reddy; Nikita Malavia; Alisha Simonian; Istvan Szinai; Glenn Stoller

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 770. doi:

Characterization of the limitations to gene transfer and associated inflammation following intravitreal AAV injection in nonhuman primates OPEN ACCESS

Jason Comander; Livia S Carvalho; Ru Xiao; Aliete Langsdorf; Sarah Wassmer; Brian Hafler; David M Wu; Dean Eliott; Leo A Kim; Luk H Vandenberghe

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 771. doi:

Anti-VEGF Drugs can Modify Gene Expression in Retinal Müller Cells *in Vitro* OPEN ACCESS

Javier Cáceres-del-Carpio; Shari R Atilano; Jon Lucas Norman; M. Tarek Moustafa; Rodrigo Costa; Abdul Sami Memon; Mohamed Abdelhamid Mohamed; G. Astrid Limb; Cristina M Kenney; Baruch D Kuppermann

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 772. doi:

Sulforaphane ameliorates photoreceptor degeneration in *Pde6*^{rd10} mice OPEN ACCESS

Minzhong Yu; Kai Kang

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 773. doi:

Development of topically administered retinal angiogenesis inhibitors with improved ocular permeability and therapeutic exposure in rabbit eyes OPEN ACCESS

Jennifer Batson; Hamish Toop; Jonathan Rowlinson; Claire Louise Allen; Gibbons Brian; Jonathan Morris; David O Bates

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 774. doi:

CD36 receptor modulator as potential drug candidates for the treatment of age-related macular degeneration OPEN ACCESS

Samy Omri; Houda Tahiri; Katia Mellal; william lubell; huy ong; Sylvain Chemtob

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 775. doi:

Directed evolution identifies novel AAV capsid variants for targeting the canine outer retina following intravitreal delivery OPEN ACCESS

Leah C Byrne; Meike Visel; Valerie Dufour; Felipe Pompeo Marinho; Gustavo D Aguirre; William A Beltran; David Schaffer; John Gerard Flannery

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 776. doi:

Efficacy and safety of glycosidic enzymes for improved gene delivery to the retina following intravitreal injection OPEN ACCESS

Jasmina Cehajic Kapetanovic; Nina Milosavljevic; Robert Bedford; Robert J Lucas; Paul N Bishop

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 777. doi:

Humoral immune response to subretinal AAV8 in non-human primates OPEN ACCESS

Felix Friedrich Reichel; Tobias Peters; Regine Muehlfriedel; Martin Biel; Francois Paquet-Durand; Marius Ueffing; Bernd Wissinger; Karl Ulrich Bartz-Schmidt; M. Dominik Fischer; Stylianos Michalakis

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 778. doi:

Quantitative Outer Retinal Light Damage in Stargardt-AMD Mouse Model OPEN ACCESS

Jason M Myers; Mark Christian Butler; Jack M Sullivan

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 779. doi:

In Silico reconstructed ancestral adeno-associated viruses transduce mouse anterior segment OPEN ACCESS

Ru Xiao; li wang; Livia S Carvalho; Sarah Wassmer; Luk H Vandenberghe

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 780. doi:

Temporal Expression of Cone-specific Recombinant Adeno-associated Viruses in Multiple Species Exhibiting Various Cone Levels as Potential Models to Treat Cone-Associated Disorders OPEN ACCESS

Alex Bauer; Steven Tobia; Kathryn W Woodburn; Ming Ni

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 781. doi:

In vivo assessment of the impact of neutralizing antibodies on intravitreal AAV2.7m8 administration OPEN ACCESS

Annahita Keravala; Kathryn W Woodburn; Sharmila Vijay; Carmelo Romano; Stanley J Wiegand; Andrew Murphy; Thomas Walter Chalberg; Mehdi Gasmi

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 782. doi:

Mouse models of Leber Hereditary Optic Neuropathy OPEN ACCESS

Hong Yu; Gabriel Gaidosh; John Guy

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 783. doi:

Study into the role of Müller cells in nanoparticle-based retinal gene therapy after intravitreal injection OPEN ACCESS

Karen Peynshaert; Stefaan De Smedt; Kevin Braeckmans; Katrien Remaut

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 784. doi:

Two AAV2/5-mediated *RPGR* gene augmentation constructs driven by the GRK1 promoter rescue photoreceptor structure and function in a canine model of *RPGR* X-linked retinitis pigmentosa OPEN ACCESS

William A Beltran; Artur V Cideciyan; Simone Iwabe; Valerie Dufour; Felipe Pompeo Marinho; Guo-jie Ye; Mark Shearman; Jeffrey D Chulay; William Hauswirth; Samuel G Jacobson; Gustavo D Aguirre

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 785. doi:

Evaluation of AAV Variants for Transgene Expression and Distribution in Rabbits and Non-Human Primate Eyes Following Intravitreal Delivery OPEN ACCESS

Bibiana Veronica Iglesias; Kathryn W Woodburn; Jingtai Cao; Stanley J Wiegand; Annahita Keravala; Carmelo Romano; Mehdi Gasmi

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 786. doi:

Investigating Scaffold RNA Support of a Lead Hammerhead Ribozyme Therapeutic for *RHO* adRP OPEN ACCESS

Zahra Fayazi; Scott W Ketcham; Mohammed Zuber; Mark Christian Butler; Jack M Sullivan

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 787. doi:

Genome-wide association study comparing patients with exfoliation syndrome and exfoliation glaucoma. OPEN ACCESS

Mineo Ozaki; Francesca Pasutto; Takanori Mizoguchi; Michael A Hauser; Fotis Topouzis; Michael Dubina; Deepak P Edward; Ningli Wang; Tin Aung; Chiea Chuen Khor

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 788. doi:

LOXL1 intronic variants influence LOXL1 expression through differential transcription factor binding in pseudoexfoliation syndrome/glaucoma OPEN ACCESS

Ursula Schlötzer-Schrehardt; Matthias Zenkel; Ursula Hoja; Mineo Ozaki; Tin Aung; Chiea-Chuen Khor; Friedrich E Kruse; Andre Reis; Francesca Pasutto

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 789. doi:

A lncRNA in the *LOXL1* locus modulates expression of genes relevant to exfoliation glaucoma pathobiology OPEN ACCESS

Inas F Aboobakar; Xue Qin; W Daniel Stamer; R Rand Allingham; Michael A Hauser

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 790. doi:

Cacna2d1: a novel therapeutic target for lowering IOP OPEN ACCESS

Sumana R Chintalapudi; Doaa Maria; XiangDi Wang; Janey L Wiggs; Robert W Williams; Monica M Jablonski

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 792. doi:

AAV-mediated MMP3 expression from corneal endothelium as a targeted gene therapy approach for glaucoma OPEN ACCESS

Jeffrey O'Callaghan; Darragh Crosbie; Paul Cassidy; Marian M Humphries; Anna-Sophia Kiang; Joseph M. Sherwood; Darryl R. Overby; W Daniel Stamer; Lawrence Tam; Peter Humphries

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 793. doi:

miRNA-Seq in four different normal human ocular tissues OPEN ACCESS

Michelle Dianne Drewry; Inas Helwa; R. Rand Allingham; Michael A Hauser; Yutao Liu

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 794. doi:

Whole exome sequencing identifies new candidate genes for Pigment Dispersion Syndrome OPEN ACCESS

Tim Footz; Ordan J Lehmann; Michael A Walter

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 795. doi:

A Method to Evaluate the Roles of FOXC1 and PITX2 in the Regulation of Micro RNAs OPEN ACCESS

Lance Patrick Doucette; Tim Footz; Michael A Walter

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 796. doi:

Novel Forkhead Box C1 Gene Mutation with Significant Postnatal Iris Growth and Modulation in a Child with Anterior Segment Dysgenesis OPEN ACCESS

Menna Thomas; Behrad Y Milani; Irene H Maumenee; Javaneh Abbasian

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 797. doi:

Characterization of FOXC1 mutations in patients with Axenfeld-Rieger syndrome OPEN ACCESS

Morteza Seifi; Tim Footz; Michael A Walter

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 798. doi:

Mutations in a new gene cause glaucoma with variable onset OPEN ACCESS

Stuart W. J. Tompson; Tomokazu Souma; Owen M. Siggs; Sebastian Maurer-Stroh; Kristina N. Whisenhunt; Janey L Wiggs; Francesca Pasutto; Jamie E Craig; Susan E. Quaggin; Terri L Young

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 799. doi:

Loss of function variants in a new gene increase risk for primary congenital glaucoma with variable expressivity OPEN ACCESS

Terri L Young; Stuart W. J. Tompson; Benjamin R. Thomson; Owen M. Siggs; Vachiranee Limviphuvadh; Kristina N. Whisenhunt; Janey L Wiggs; Jamie E Craig; Susan E. Quaggin; Francesca Pasutto

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 800. doi:

FBN1 mutations implicated in PCG in a South African family OPEN ACCESS

Susan E I Williams; Nadia Carstens; Saadiah Goolam; Scott Hazelhurst; Trevor R Carmichael; Michele Ramsay

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 801. doi:

HSPG2 mutations identified in black South African children with Primary Congenital Glaucoma OPEN ACCESS

Nadia Carstens; Saadiah Goolam; Susan E I Williams; Trevor R Carmichael; Scott Hazelhurst; Michele Ramsay

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 802. doi:

The Transcription Factors *PBX1* and *GATA1* are Regulated by the Mutation Profiles of *CYP1B1* in Primary Congenital Glaucoma OPEN ACCESS

Subhabrata Chakrabarti; Meha Kabra; Anil K Mandal; Sirisha Senthil; Inderjeet Kaur

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 803. doi:

DNA methylation in Human SC Cells with Glaucoma OPEN ACCESS

Jingwen Cai; Michelle Dianne Drewry; Kristin Perkumas; Michael Dismuke; Iris Navarro; Michael A Hauser; W Daniel Stamer; Yutao Liu

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 804. doi:

Lack of association between primary angle-closure glaucoma susceptibility loci and the phenotypes axial length to lens thickness ratio and lens thickness to axial length factor OPEN ACCESS

Rene Hoehn; Aslihan Gerhold-Ay; Stefan Nickels; Thomas Muenzel; Karl J Lackner; Manfred Beutel; Tanja Zeller; Philipp S Wild; Norbert Pfeiffer; Harald Binder

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 805. doi:

Genome wide linkage scan of primary angle-closure glaucoma and its endophenotypes OPEN ACCESS

Sancy Low; Pia Ostergaard; Naushin Waseem; Jonathan Ruddle; Mingguang He; Heather Cordell; Shomi Bhattacharya; David F Garway-Heath; Peng Tee Khaw; Paul J Foster

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 806. doi:

Investigation of PACG associated genetic variants in persons with early stages of angle closure disease OPEN ACCESS

Eranga Nishanthie Vithana; Monisha Esther Nongpiur; Baskaran Mani; Chiea-Chuen Khor; Ching-Yu Cheng; John Allen; Tien Yin Wong; Tin Aung

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 807. doi:

Identification of two Single Nucleotide Polymorphisms in SRBD1 Gene Associated to Glaucoma in several Dog Breeds. OPEN ACCESS

Pierre François Isard; Kissaou Tchapou Tchedre; Valerie Tsobnang; Marielle Mentek; Thomas Dulaurent; Pascale Quignon; Tetsushi Omori; Mouad Lamrani

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 808. doi:

Mice homozygous for a deletion in the glaucoma susceptibility locus INK4 show increased vulnerability of retinal ganglion cells to elevated intraocular pressure OPEN ACCESS

Shan Gao; Tatjana C Jakobs

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 809. doi:

The glaucoma-causative gene *adamts10* is required for normal retinal ganglion cell development in zebrafish OPEN ACCESS

John Kuchtey; Shu-Yu Wu; Frances K. Clark; Hassane S Mchaourab; Rachel W Kuchtey

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 810. doi:

SQSTM1 GENE, AUTOPHAGY, AND GLAUCOMA OPEN ACCESS

John H Fingert; Benjamin R Roos; Frances Solivan-Timpe; Alan L Robin; Edwin M Stone; Young H Kwon; Wallace L M Alward; Todd E Scheetz

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 811. doi:

Genetics In Glaucoma patients of African descent study (GIGA): Known genetic risk factors for Primary Open Angle Glaucoma in a South African population OPEN ACCESS

Pieter W.M. Bonnemaijer; Alberta A.H.J. Thiadens; Najaf Amin; Hans G Lemij; Colin Cook; Christopher J Hammond; Cornelia van Duijn; Caroline C W Klaver

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 812. doi:

Investigation of African Americans' Opinions and Understanding of Glaucoma Genetics Research OPEN ACCESS

Amanda Lehman; Rupin Parikh; Makayla Mccoskey; Rebecca Salowe; Laura O'Keefe; Victoria Marie Addis; PRITHVI SANKAR; Eydie G Miller-Ellis; Jeffrey D Henderer; Windell Murphy; Joan M O'Brien

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 813. doi:

Recruitment Methods for the Primary Open-Angle African American Glaucoma Genetics Study OPEN ACCESS

Jeffrey D Henderer; PRITHVI SANKAR; Eydie G Miller-Ellis; Amanda Lehman; Victoria Marie Addis; Windell Murphy; Laura O'Keefe; Rebecca Salowe; Joan M O'Brien

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 814. doi:

Testosterone pathway polymorphisms in relation to primary open angle glaucoma: an analysis stratified by sex OPEN ACCESS

Louis R Pasquale; Jessica Cooke Bailey; Jae H Kang; Hugo Aschard; Michael A Hauser; R Rand Allingham; David A Sullivan; Jonathan L Haines; Janey L Wiggs

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 815. doi:

Genetic Association and Linkage at Putative Risk Loci for Primary Open-angle Glaucoma OPEN ACCESS

Robert P Igo; Jessica Cooke Bailey; William Scott; Rebecca J Sardell; Margaret A Pericak-Vance; Louis R Pasquale; Michael A Hauser; Terry Gaasterland; Janey L Wiggs; Jonathan Haines

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 816. doi:

Genome-Wide Pathway Approach to Dissecting Primary Open-Angle Glaucoma OPEN ACCESS

Jessica Cooke Bailey; Mariusz Butkiewicz; Louis R Pasquale; Jae H Kang; Michael A Hauser; Rand R Allingham; Janey L Wiggs;

Jonathan L Haines

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 817. doi:

Whole exome sequencing in advanced POAG cases of GWAS associated candidate genes identifies significant enrichment of rare variants in *CARD10*. OPEN ACCESS

Jamie E Craig; Tiger Zhou; Kathryn P Burdon; Alex W Hewitt; David A Mackey; Matt A Brown; Paul Leo; Paul R Healey; Stuart L Graham; Ttuart Macgregor

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 818. doi:

Whole exome sequencing identifies key biological pathways in primary open-angle glaucoma OPEN ACCESS

Tiger Zhou; David Lynn; Emmanuelle Souzeau; Bronwyn Ridge; Jonathan Ellis; Paul Leo; Matt A Brown; Shiwani Sharma; Kathryn P Burdon; Jamie E Craig

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 819. doi:

Frequent mutations of genes involved in OXPHOS and optic neuropathy detected by whole exome sequencing of 257 Glaucoma Patients OPEN ACCESS

Xiaobo Huang; Xueshan Xiao; Xiaoyun Jia; Shiqiang Li; Panfeng Wang; Yimin Zhong; Xiangming Guo; Xing Liu; Qingjiong Zhang

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 820. doi:

Association of missense mutations in the mitochondrial *MT-CO1* gene with Primary Open-Angle Glaucoma (POAG) in African-Americans. OPEN ACCESS

David W Collins; Harini V Gudiseva; Venkata R M Chavali; Benjamin T Trachtman; Meera Ramakrishnan; William Merritt; Maxwell Pistilli; Amanda Lehman; Eydie G Miller-Ellis; PRITHVI SANKAR; Joan M O'Brien

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 821. doi:

Identification of SIX6 gene variants in Indian Primary Open Angle Glaucoma patients OPEN ACCESS

Periasamy Sundaresan; Mohd. Hussain Shah; Krishnadas subbiah Ramasamy; Manju Pillai

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 823. doi:

Genotype analysis of three SNPs in *SIX6* associated with primary open angle glaucoma in Chinese population OPEN ACCESS

jinghong sang

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 824. doi:

Association between *SATB1* genetic variant and phenotypic features of primary open-angle glaucoma OPEN ACCESS

Fumihiko Mabuchi; Yoichi Sakurada; Seigo Yoneyama; Kenji Kashiwagi; Zentaro Yamagata; Hiroyuki Iijima

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 825. doi:

Clinical and genetic associations of Singaporean Chinese primary open angle glaucoma patients with severity of glaucoma at presentation OPEN ACCESS

Sameer Trikha; Ching-Yu Cheng; Seyed-Ehsan Saffari; Monisha Esther Nongpiur; Baskaran Mani; John Allen; Shamira Perera; Chiea-Chuen Khor; Tin Aung; Eranga Nishanthie Vithana

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 826. doi:

En-face Imaging of Swept-Source Optical Coherence Tomography of Segmental Optic Nerve Hypoplasia. OPEN ACCESS

Ryu Iikawa; Satoshi Ueki; Tetsuhisa Hatase; Tetsuya Togano; Daiki Miyamoto; Takeo Fukuchi

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 827. doi:

Quantitative evaluation of optical properties of optic nerve head tissues by multi-contrast optical coherence tomography OPEN ACCESS

Aaron C Chan; Young-Joo Hong; Satoshi Sugiyama; Shuichi Makita; Deepa Kasaragod; Yasushi Ikuno; Masahiro Miura; Yoshiaki Yasuno

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 828. doi:

Changes in the structure of lamina pores within the lamina cribrosa using wide bandwidth, femtosecond mode-locked laser optical coherence tomography; Effect of glaucoma OPEN ACCESS

Takuhei Shoji; Hiroto Kuroda; Masayuki Suzuki; Hisashi Ibuki; Itaru Kimura; Makoto Araie; Shin Yoneya

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 829. doi:

Lamina cribrosa depth variation in four glaucomatous optic disc phenotypes measured by spectral domain optical coherence tomography OPEN ACCESS

Yu Sawada; Makoto Ishikawa; Takeshi Yoshitomi

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 830. doi:

Comparison of Depth and Curvature of the Lamania Cribrosa as a Biomarker for Optic Nerve Head Strain OPEN ACCESS

SEUNG HYEN LEE; Tae-Woo Kim; Eun Ji Lee; Kyoung Min Lee

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 831. doi:

Lamina cribrosa thinning in glaucoma and associated factors OPEN ACCESS

Kazuko Omodaka; Seri Takahashi; Akiko Matsumoto; Shigeto Maekawa; Shiori Suzuki; Yukihiro Shiga; Tsutomu Kikawa; Kazuichi Maruyama; Masahiro Akiba; Toru Nakazawa

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 832. doi:

Circumpapillary Retinal Nerve Fiber Layer Thickness, Anterior Lamina Cribrosa Depth, and Lamina Cribrosa Thickness in Neovascular Glaucoma Secondary to Diabetic Retinopathy OPEN ACCESS

Satoshi Yokota; Yuji Takihara; Yoshihiro Takamura; Masaru Inatani

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 833. doi:

Intra- and interobserver reproducibility of Bruch's membrane opening minimum rim width and retinal nerve fiber layer thickness in healthy individuals with spectral domain optical coherenc... OPEN ACCESS

Alexandre Soares Castro Reis; Camila Zangalli; Ricardo Yuji Abe; André Leite da Silva; Jayme R Vianna; Jose Paulo C Vasconcellos; Vital P Costa

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 834. doi:

Computational analysis of longitudinal changes to optic nerve head structure in normal and glaucoma individuals OPEN ACCESS

Mark Christopher; Ben Faga; Nicholas Eglaine; John H Fingert; Todd E Scheetz; Michael David Abramoff

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 835. doi:

Comparison of optic nerve head analysis in patients with glaucomatous optic neuropathy between the simultaneous stereoscopic photography retinal camera (Kowa nonmyd

WX3D) and the confocal... OPEN ACCESS

Siegfried Mariacher; Stephanie Hipp; Robert Whirtky; Gunnar Blumenstock; Karl Ulrich Bartz-Schmidt; Focke Ziemssen; Ulrich Schiefer; Bogomil Voykov; Kai Januschowski

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 836. doi:

Diagnostic Innovation in Glaucoma Study (DIGS): Investigation of Floor Effects for Optical Coherence Tomography Structural Measurements in Advanced Glaucoma OPEN ACCESS

Christopher Bowd; Akram Belghith; Felipe A Medeiros; Robert N Weinreb; Linda M Zangwill

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 837. doi:

Detecting Structural Change in Advanced Glaucoma Eyes OPEN ACCESS

Linda M Zangwill; Felipe A Medeiros; Christopher Bowd; Christopher A Girkin; Jeffrey M Liebmann; Robert N Weinreb; Akram Belghith

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 838. doi:

Racial differences in the minimum rim width of the optic nerve OPEN ACCESS

Christopher A Girkin; Lindsay Anne Rhodes; Mark E Clark; Carrie E Huisingh; Massimo Antonio Fazio; Cynthia Owsley

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 839. doi:

Bruch's membrane opening minimum rim width in healthy Brazilian subjects OPEN ACCESS

Camila Zangalli; Alexandre Soares Castro Reis; Jamil Neto; Jose Paulo C Vasconcellos; Balwantray C Chauhan; Claude F Burgoyne; Vital P Costa

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 841. doi:

Bruch's membrane opening can be assessed using both Spectralis Radial and Cube Scan Patterns OPEN ACCESS

Sami W. Kabbara; Linda M Zangwill; Rusdeep S Mundae; Christopher Bowd; Felipe A Medeiros; Robert N Weinreb; Akram Belghith

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 842. doi:

A comparison of circumpapillary retinal nerve fiber layer (cpRNFL) thickness and minimum rim width at Bruch's membrane opening (BMO-MRW) analyses in patients with mild glaucomatous damage OPEN ACCESS

Seung Lee; Ravivarn Jarukasetphon; Nicole De Cuir; Abinaya Thenappan; C Gustavo De Moraes; Diane Wang; Xian Zhang; Hassan Muhammad; Robert Ritch; Donald Charles Hood

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 843. doi:

Parapapillary autofluorescence predicts primary open-angle glaucoma progression OPEN ACCESS

Alexandre Plouznikoff; Paul Harasymowycz

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 844. doi:

Local glaucoma progression detected by adaptive optics-scanning light ophthalmoscopy OPEN ACCESS

Dongwon Lee; Toco Yuen Ping Chui; Ravivarn Jarukasetphon; Richard B Rosen; Robert Ritch; Alfredo Dubra; Donald Charles Hood

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 845. doi:

Assessment of glaucoma progression by Cirrus optical coherence tomography-guided progression analysis OPEN ACCESS

Martha Kim; Choul Yong Park

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 846. doi:

Inter-eye Asymmetry in Retinal Nerve Fiber Layer Thinning for Subtypes of Open Angle Glaucoma OPEN ACCESS

Neda Baniasadi; Mahdi Haghzadeh; Tobias Elze; Mufeed Mahd; Teresa C Chen

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 847. doi:

Optical coherence tomography and glaucoma progression: A region of interest approach is better than average retinal nerve fiber layer thickness OPEN ACCESS

Abinaya Thenappan; C Gustavo De Moraes; Diane Wang; Daiyan Xin; Ravivarn Jarukasetphon; Robert Ritch; Donald Charles Hood

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 848. doi:

Patterns of ganglion cell loss, influence of scan area and OCT segmentation strategies in detection of glaucoma OPEN ACCESS

Stuart L Graham; Luke Bennett; David Wechsler

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 849. doi:

Individualized normal limits of retinal nerve fiber layer measurement reduce false positive test results in healthy subject OPEN ACCESS

Clemens Vass; Ivania Pereira; Georg Fischer; Hemma Resch; Florian Schwarzhans; Stephan Holzer

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 850. doi:

Evaluation of diagnostic accuracy of portable OCT iVue for the detection of glaucoma. OPEN ACCESS

Antonio Morilla-Grasa; Marta Bermudez; Virginia Garcia; MARCOS MUÑOZ; Olivia Pujol; Katia Sotelo; Indira Aristeguieta; Alfonso Anton-Lopez

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 851. doi:

Comparison of Cup-to-Disc Ratio by Clinical Examination and Stereoscopic Disc Photography in the Tema Eye Survey OPEN ACCESS

Elizabeth Mathenge; Jean-Claude Mwanza; Davinder Grover; Donald L Budenz

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 852. doi:

Telepresence in the diagnosis and management of Glaucoma OPEN ACCESS

Nicole Mendez; Bernard C Szirth; Albert S Khouri

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 853. doi:

Efficacy of Automated Computer-Aided Diagnosis of Retinal Nerve Fiber Layer Defects in Healthcare Screening OPEN ACCESS

Changwon Kee; Jeong-Min Hwang; Sang Beom Han; Hee Kyung Yang; Ji Eun Oh; Kwang Gi Kim

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 854. doi:

Spectral-domain optical coherence tomography in glaucoma: its additive role in structural diagnosis OPEN ACCESS

SeokHwan Kim; Ko Eun Kim; Sohee Oh; Jin Wook Jeoung; Min Hee Suh; Martha Kim; Ki Ho Park; Dong Myung Kim

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 855. doi:

REPEATABILITY AND REPRODUCIBILITY OF OPTIC NERVE HEAD AND RETINAL NERVE FIBER LAYER PARAMETER MEASUREMENTS WITH THE HEIDELBERG SPECTRALIS OCT OPEN ACCESS

Christian Y Mardin; Wolfgang Schrems; Laura-Maria Schrems-Hösl; Robert Laemmer

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 856. doi:

Asymmetry of Peak Thicknesses between the Superior and Inferior Retinal Nerve Fiber Layers Measured by Spectral Domain Optical Coherence Tomography for Early Glaucoma Detection in Patient... OPEN ACCESS

Hyoung Won Bae; Eun Min Kang; Si Hyung Lee; Gyu Ah Kim; Gong Je Seong; Chan Yun Kim

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 857. doi:

Factors associated with failure of parapapillary retinal nerve fiber layer segmentation in spectral-domain optical coherence tomography images. OPEN ACCESS

Atsuya Miki; Shinichi Usui; Takao Endo; Rumi Kawashima; Takeshi Morimoto; Kenji Matsushita; Takashi Fujikado; Kohji Nishida

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 858. doi:

Effect of Circumpapillary Retinal Nerve Fiber Layer Segmentation Error Correction on Glaucoma Diagnostic Capability in Moderate to High Myopes OPEN ACCESS

Yanin Suwan; Sung Chul Park; keith Effert; Robert Ritch

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 859. doi:

Peripapillary Retinoschisis in Glaucomatous and Suspect Eyes OPEN ACCESS

Kelly Ma; Shaban Demirel; Stuart Keith Gardiner; Brad Fortune; Steven L Mansberger

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 860. doi:

High myopia and glaucoma: The nature of paravascular defects (PD) and macular epiretinal membranes (ERMs) as seen on en-face slab OCT images. OPEN ACCESS

Daiyan Xin; Nicole De Cuir; Maria Anna Mavrommatis; Juan Reynaud; Ravivarn Jarukasetphon; C Gustavo De Moraes; Brad Fortune; Robert Ritch; Donald Charles Hood

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 861. doi:

Paravascular defects and epiretinal membranes are seen on en-face slab OCT images in eyes with early glaucoma OPEN ACCESS

Nicole De Cuir; Maria Anna Mavrommatis; Juan Reynaud; C Gustavo De Moraes; Daiyan Xin; Rashmi Rajshekhar; Jeffrey M Liebmann; Robert Ritch; Brad Fortune; Donald Charles Hood

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 862. doi:

A method for measuring changes over time in paravascular defects OPEN ACCESS

Maria Anna Mavrommatis; Nicole De Cuir; Juan Reynaud; C Gustavo De Moraes; Daiyan Xin; Robert Ritch; Brad Fortune; Donald Charles Hood

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 863. doi:

Slab Parameters for En Face imaging of the Retinal Nerve Fiber Layer (RNFL): Impact of Putative Glial Reflectance OPEN ACCESS

William H Swanson; Brett King; Bright S. Ashimetey

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 864. doi:

Long Axial Length Normative Database in Optic Coherence Tomography for Glaucoma Diagnosis in Eyes with High Myopia OPEN ACCESS

Yu-fan Chang; Catherine Jui-Ling Liu; Yu-Chieh Ko; Chih-Chien Hsu; Mei-ju Chen

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 865. doi:

Assessment of Reproducibility and Correlation of two SPECTRALIS ® SD OCT Modules for RNFL Thickness measurements and diagnostic Reliability of ONH measurements with SD OCT Glaucoma Module... OPEN ACCESS

Marita Awe; Pascal Buley; Carsten Framme; Shaghayegh Khalili Amiri; Katenna Hufendiek

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 866. doi:

Superior-Inferior Asymmetry in Ganglion Cell-Inner Plexiform Layer Thickness Assessed by Spectrum Domain Optic Coherent Tomography in Glaucoma OPEN ACCESS

Catherine Liu; Yu-fan Chang; Yu-Chieh Ko; Mei-ju Chen; Chih-Chien Hsu; Nah-Wen Fan

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 868. doi:

Prediction of Retinal Ganglion Cell (RGC) Density from SD-OCT Thickness Measures and Correlation of RGC with Inner Plexiform Layer Thickness in Glaucoma OPEN ACCESS

Pablo Romero; Navid Amini; Arezoo Miraftabi; Ben Braun; Esteban Morales; Sharon Henry; Anne L Coleman; Joseph Caprioli; Kouros Nouri-Mahdavi

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 869. doi:

Optimizing Macular Layer Grids in Spectral-Domain Optical Coherence Tomography for Glaucoma Diagnosis OPEN ACCESS

Jason L Chien; Mark P Ghassibi; Celso Tello; Jeffrey M Liebmann; Robert Ritch; Travis Porco; Robert L Stamper; Sung Chul (Sean) Park

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 870. doi:

The relationship between GCIPL thickness and RGC content for experimental glaucoma in non-human primates OPEN ACCESS

Kwame Antwi-Boasiako; Louvenia Carter-Dawson; Ronald S Harwerth; Nimesh Bhikhu Patel

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 871. doi:

Diagnostic Ability of Macular Ganglion Cell–Inner Plexiform Layer Thickness in Chinese Glaucoma Suspects OPEN ACCESS

Xing Liu; Xinxing Guo; XIAOYU XU

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 872. doi:

Enhanced repeatability by B-scan averaging in measurement of macular ganglion cell complex with spectral-domain optical coherence tomography in glaucomatous eye. OPEN ACCESS

Sayaka Adachi; Daisuke Shiba; Eri Hirano; Takeshi Ono; Kenya Yuki; Kazuo Tsubota

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 873. doi:

Ocular structural differences between eyes with parapapillary atrophy β and γ in non-glaucoma subjects OPEN ACCESS

Koichiro Hayashi; Kojiro Imai; Kazuhiko Mori; Yoko Ikeda; Mario Ueno; Yuko Maruyama; Yuji Yamamoto; Shigeru Kinoshita

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 874. doi:

Changes in choroidal thickness and optic nerve head morphology after filtering surgery:

non penetrating deep sclerectomy versus trabeculectomy OPEN ACCESS
Aymeric Bouillot; Alexandra Pierru Morin; Esther Blumen-Ohana; Emmanuelle Brasnu; Christophe Baudouin; Antoine Labbe
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 875. doi:

A Longitudinal Analysis of Choroidal Thinning in Healthy and Glaucoma Subjects
OPEN ACCESS
Rusdeep S Mundae; Linda M Zangwill; Sami W. Kabbara; Naama Hammel; Christopher Bowd; Christopher A Girkin; Jeffrey M Liebmann; Felipe A Medeiros; Robert N Weinreb; Akram Belghith
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 876. doi:

An OCT variable for glaucoma follow-up: Pigment epithelium central limit - Inner limit of the retina, Minimal Distance, PIMD OPEN ACCESS
Camilla Sandberg Melin; Filip Malmberg; Per G Soderberg
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 877. doi:

Signal alteration in the optic nerve head on 3D T2 magnetic resonance imaging: A potential new radiologic imaging sign of glaucomatous optic neuropathy OPEN ACCESS
Jong Yeon Lee; Su Jin Park; Hyo Jeong Kwon; Yong Yeon Kim; Eung Yeop Kim
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 878. doi:

Does Axonal F-actin Contribute to Retinal Nerve Fiber Layer Reflectance? OPEN ACCESS
Xiang-Run Huang; Ye Spector; Jianzhong Qiao
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 879. doi:

Measuring Primary and Secondary Degeneration of Retinal Ganglion Cells in the Rodent Partial Optic Nerve Transection Model OPEN ACCESS
Ben Davis; Li Guo; Jonathan Brenton; Lawrence Langley; Eduardo Maria Normando; M Francesca Cordeiro
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 880. doi:

Differentiation of Corneal Endothelial Cells from Human Pluripotent Stem Cells in Culture
OPEN ACCESS
Jiagang Zhao; Christine Sutu; Joanne W Ho; Natalie A Afshari
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 881. doi:

Characterizing Human Fetal Corneal Epithelial Stem Cells for Ocular Surface Reconstruction OPEN ACCESS
Nick Di Girolamo; Yas Eghtedari; Alexander Richardson; Kelly Mai; Benjamin Heng; Gilles Guillemin; Denis Wakefield
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 882. doi:

Evaluation of the Algerbrush II rotating burr as a tool for inducing limbal stem cell deficiency OPEN ACCESS
Damien Gerard Harkin; Fiona J Li; Elham Nili; Cora Lau; Nigel L Barnett; Neil Richardson; Jennifer Walshe; Brendan Cronin; Traian Chirla; Ivan R Schwab
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 883. doi:

Corneal surface regeneration using human conjunctiva epithelial cells-cultured biodegradable membrane scaffold OPEN ACCESS
Eun-Soon Kim; Soyoung Hong; Changmo Hwang; Jae Yong Kim; Hungwon Tchah
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 884. doi:

Directing human adult periodontal ligament stem cells to corneal stromal keratocytes
OPEN ACCESS
Gary Hin-Fai Yam; Ericia PW Teo; Matthew J Lovatt; Bee-Tin Goh; Jodhbir S Mehta
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 886. doi:

Emulating the corneal stroma in vitro: Seeding a novel collagen scaffold with keratocytes
OPEN ACCESS
Dipika Patel; Aran Sisley; Jie Zhang; Charles NJ McGhee
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 888. doi:

Long term outcomes of ocular surface reconstruction with cultivated oral mucosal epithelial cell sheet transplantation compared to allogenic limbal transplantation
OPEN ACCESS
Yoshinori Oie; Takeshi Soma; Hayato Mitamura; Hiroshi Takayanagi; Motokazu Tsujikawa; Satoshi Kawasaki; Naoyuki Maeda; Ayumi Shintani; Kohji Nishida
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 889. doi:

Ex vivo porcine corneal storage using an innovative bioreactor OPEN ACCESS
Damien Guindolet; Zhiguo HE; Aurélien BERNARD; Damien RAGEADE; Simone PISELLI; Chantal PERRACHE; Fabien FOREST; Michel PEOCH; Philippe GAIN; Eric Gabison; Gilles Thuret
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 890. doi:

Outcomes of penetrating keratoplasty following ex *vivo* expanded autologous limbal stem cell transplantation (ALSCT) OPEN ACCESS
Francisco C Figueiredo; Oliver Baylis; Borja Salvador-Culla; Majlinda Lako; Gustavo S Figueiredo
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 891. doi:

Human Corneal Limbal Stromal Cells provide a source of Mesenchymal Stem Cells
OPEN ACCESS
Ilham Putra; Gaurav Agnihotri; Samaneh Ghassemi; Judy Hamouie; Asha Tadepalli; Xiang Shen; Peiman Hematti; Medi Eslani; Ali R Djalilian
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 892. doi:

Understanding ocular surface inflammation in tears before and after ex *vivo* expanded autologous limbal stem cell transplantation (ALSCT) OPEN ACCESS
Gustavo S Figueiredo; Jeffry Hogg; Arthur Okonkwo; Deborah Stocken; Simi Ali; Majlinda Lako; Francisco C Figueiredo
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 893. doi:

In vivo ovine model pre-clinical trial of a tissue engineered corneal endothelium.
OPEN ACCESS
Karl David Brown; Mark Daniell; Jean-Pierre Scheerlinck; Hong Zhang
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 894. doi:

Barrier function of cultured autologous oral mucosal epithelial cell sheets OPEN ACCESS
Fawzia Bardag-Gorce; Joan Oliva; Andrew Makalinao; Imara Meepe; Julio Garcia; Amanda M. Laporte; Robert Niihara; Hyo Jung Ha; Richard H. Hoft; Alan L. Felsenfeld; Yutaka Niihara
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 895. doi:

Expansion of limbal epithelial stem cells on cryopreserved fresh and decellularized human amniotic membrane OPEN ACCESS

Majlinda Lako; Sanja Bojic; Paul Rooney; Stacey Wilshaw; Hardeep Mudhar; Adam Meeney; Francisco C Figueiredo; Gustavo Figueiredo

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 896. doi:

Graphene oxide membranes for ocular tissue engineering. OPEN ACCESS

Alvaro Meana; Iriana Zambrano; Manuel Chacon; Natalia Vazquez; Juan Jose Fernandez; Adolfo Fernandez; Pablo Fanjul; Clara Blanco; Zoraida Gonzalez; Rosa Menendez; Jesus Merayo-Lloves

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 897. doi:

Profiles of cytokines in the aqueous humor and serum of bullous keratopathy patients OPEN ACCESS

Monio Ueno; Munetoyo Toda; Asako Hiraga; Koichi Wakimasu; Noriko Koizumi; Naoki Okumura; Kazuko Asada; Chie Sotozono; Junji Hamuro; Shigeru Kinoshita

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 898. doi:

Noncontact depth-resolved quantification of riboflavin/UV-A and rose-bengal/green light cross-linking of rabbit cornea by optical coherence elastography OPEN ACCESS

Kirill Larin; Manmohan Singh; Jiasong Li; Zhaolong Han; Chih-Hao Liu; Chen Wu; Raksha Raghunathan; Salavat Aglyamov; Srilatha Vantipalli; Michael D Twa

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 899. doi:

Identifying the Palisades of Vogt in Human Ex-vivo Tissue OPEN ACCESS

Kira L Lathrop; Jessica F. Steele; Scott P. Drexler; Ian A Sigal

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 900. doi:

Phototherapeutic keratectomy vs Phototherapeutic keratectomy with simultaneous application of the matrix ReGeneraTingAgent (RGTA, polycarboxymethyl glucose sulfate) as a new therapeutic... OPEN ACCESS

Ewa Mrukwa-Kominek; Joanna Wasiak; Monika Sanat-Kucharczyk; Piotr Kucharzewski

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 901. doi:

Expanded allogeneic limbal stem cell transplantation for diverse severe limbal stem cell deficiency, investigation of ABCB5 and deltaNp63-alpha markers. OPEN ACCESS

Juan Carlos Serna-Ojeda; Enrique O Graue-Hernandez; Alejandro Navas; Mariana Garcia-Mejia; Arturo J Ramirez-Miranda; Victor L Perez; Yonathan Garfias

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 902. doi:

Electrospun nanofiber matrices for corneal tissue engineering: Comparison of the introduced linker groups in Polycaprolactone fibers blended with chitosan and Poly(glycerol sebacate) OPEN ACCESS

Thomas Armin Fuchsluger; Florian Kung; Daniel Thieme; Marta Czugala; Dirk Wolfgang Schubert; Friedrich E Kruse; Piotr Stafiej

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 903. doi:

Total Ocular Surface Coverage with Amniotic Membrane Transplantation in Acute Pediatric Toxic Epidermal Necrolysis: A Retrospective Comparison with Topical Treatments. OPEN ACCESS

Karel D Capek; Stefan D Trocmé; David Marsh; Sean C Stout; Kevin H Merkley; Clark R Andersen; Ted T Huang; Charles D Voigt; Josh S Carson; David N Herndon

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 904. doi:

Controlling the Regenerative Potential of Corneal Stromal Stem Cells OPEN ACCESS

Martha L Funderburgh; Golnar Shojaati; Mary Mann; Yiqin Du; James L Funderburgh

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 905. doi:

Morphological and functional characteristics of regenerating corneal nerves in mice following photorefractive surgery OPEN ACCESS

Omar Gonzalez Gonzalez; Federico Bech; Ignacio Alcalde; Almudena Íñigo-Portugués; Jesus Merayo-Lloves; Carlos Belmonte

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 906. doi:

The human tissue-engineered cornea as a model to study the impact of altering the PI3K/Akt signal transduction pathway on corneal wound healing OPEN ACCESS

Camille Couture; Pascale Desjardins; Karine Zaniolo; Lucie Germain; Sylvain Guérin

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 907. doi:

Role of external electric field application in stromal wound healing of the cornea OPEN ACCESS

Anselm G.M. Juenemann; Bhavani S. Kowtharapu; Josefin Ziebart; Anika Jonitz-Heincke; Rainer Bader; Oliver Stachs

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 908. doi:

Effect of CACICOL® on corneal epithelial healing after cross-linking in patients with keratoconus OPEN ACCESS

Gerhard Garhofer; Leopold Schmetterer; Katarzyna Witkowska; Piotr Wozniak; Ahmed Bata; Klemens Fondi; Gerald Schmidinger; Niklas Pircher; Doreen Schmidl; Rene Marcel Werkmeister

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 909. doi:

Safety and efficacy of a novel cross-linked hyaluronic acid polymer (CMHA-S), JDE-003, for increasing the healing rate in corneal ulcers OPEN ACCESS

David Leonard Williams; Brenda Mann; barbara W wirostko

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 910. doi:

Cornea-mimetic lamellar microstructure and mechanical integrity of bioinspired collagen vitrigel implants OPEN ACCESS

Shoumyo Majumdar; Sven Sommerfeld; Xiaokun Wang; Anirudha Singh; Qiongyu Guo; Oliver Schein; Jennifer Elisseeff

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 911. doi:

Evaluation of the IOLMaster 700 OPEN ACCESS

Mark A Bullimore; Derek Le; Gabriel Leche; Paul Stanley; Paul Yoo; Todd Otani

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 912. doi:

Evaluation of a new noncontact biometer IOLMaster 700 ® compared to Lenstar® OPEN ACCESS

Hussam El Chehab; Emilie Agard; apolline mairot; Amélie lefevre; Aurélie Russo; Corinne Dot

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 913. doi:

Comparison of predictive accuracy and tendency of 4 intraocular lens calculation formulas using a new optical biometer (IOL Master 700) depends on 3 common

Intraocular lens and biometric ... OPEN ACCESS
Takeshi Teshigawara; Akira Meguro; Takuto Sakono; Nobuhisa Mizuki
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 914. doi:

The Magic Cube: Comparison of Three Third Generation Formulas on Three Intraocular Lens Calculators, IOL Master, DGH 6000 and UniversIOL OPEN ACCESS
Ahmad Al-Heeti; Stephan Leibbrandt; Samir I Sayegh
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 915. doi:

Relative Impact of Biometric Variables on Intra-Ocular Lens Calculations in the Setting of Newer Generation Formulae OPEN ACCESS
Alexander Armanthus Foster; Jason Kam; Hoon Jung
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 916. doi:

The end of preoperative biometry? Calculating intraocular lens power 'on the table' with two new intraoperative Hartmann-Shack aberrometry derived formulae OPEN ACCESS
Jan O Huelle; Vasyl Druchkiv; Nabil Habib; Gisbert Richard; Toam Katz; Stephan Linke
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 917. doi:

Accuracy of intraocular lens power calculation formulas for highly myopic eyes
OPEN ACCESS
Yichi Zhang; Xiao Ying Liang; Shu Liu; Jacky W. Y. Lee; Srinivasan Bhaskar; Dennis S.C Lam
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 918. doi:

Comparison of six IOL power calculation formulas in eyes with axial length ≤22 mm
OPEN ACCESS
Li Wang; Sabite Gokce; John Zeiter; Mitchell P Weikert; Warren Hill; Douglas D Koch
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 919. doi:

Comparison of Preoperative Intraocular Lens Power Selection Methods to Intraoperative Aberrometry in Eyes with Axial Myopia OPEN ACCESS
Christopher Scott Hill; Darren Hill; Shruti Sudhakar; Ingrid U Scott; Brett Ernst; Seth Pantanelli
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 920. doi:

Comparison of Preoperative Intraocular Lens Power Selection Methods to Intraoperative Aberrometry in Short Eyes OPEN ACCESS
Shruti Sudhakar; Darren Hill; Christopher Hill; Ingrid U Scott; Brett Ernst; Seth Pantanelli
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 921. doi:

Effect of Applanation Tonometry on Keratometry Measurements Obtained with IOLMaster and Galilei Dual-Scheimpflug Analyzer OPEN ACCESS
Deepak Sambhara; Christopher Hill; Lisa Hart; Jufu Chen; Ingrid U Scott; Seth Pantanelli
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 922. doi:

Biometric factors associated with effective lens position in capsular bag after cataract surgery OPEN ACCESS
Julien PLAT; Arnaud Payerols; Max Villain; Didier Hoa; Vincent Daien
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 923. doi:

After the Deed is Done: Viability and Applications of Anterior Chamber Depth Measurements in Pseudophakes OPEN ACCESS
Elizabeth Cotton; Ahmad Al-Heeti; Samir I Sayegh
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 924. doi:

Toric IOL Calculations for Refractive Cataract Surgery: The Good, The Bad, and The Distorted OPEN ACCESS
Samir I Sayegh
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 925. doi:

Stability and Variability of Calculators for FDA approved Toric Intraocular Lenses (tIOLs)
OPEN ACCESS
Fatma Dihowm; Samir I Sayegh
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 926. doi:

Cross Cylinder Calculation Agreement Amongst toric IOL Calculators and UniversIOL
OPEN ACCESS
Zhangying Chen; Samir I Sayegh
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 927. doi:

Preliminary Analysis of an FDA-approved Variable Toricity Ratio Toric IOL Calculator
OPEN ACCESS
Lauren Gabra; Samir I Sayegh
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 928. doi:

Astigmatism Correction in Laser Cataract Surgery. Comparison of IOL Master and Corneal Topography measurements, how Accurately do these Devices Account for the Role of Posterior Corneal A... OPEN ACCESS
Mario Joseph Rojas; Debora Garcia-Zalisnak; Peyton Neatrour
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 929. doi:

Validity of prediction models used to determine post-operative corneal shape following cataract surgery. OPEN ACCESS
Phillip J Buckhurst; Catriona Hamer; Hetal Buckhurst; Christine Purslow; Nabil Habib
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 930. doi:

Cataract lens model and measurement of the lens fragmentation quality OPEN ACCESS
Alexander Vankov; Phillip Gooding; Georg Schuele
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 931. doi:

Depth of focus measurements of ophthalmic surgical microscopes OPEN ACCESS
Jim Schwiegerling; Ramon Carsola Dimalanta
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 932. doi:

Validation of the Rabbit Intracameral Inflammatory Assay as a Lot Release Test for Ophthalmic Viscosurgical Devices OPEN ACCESS
Lisa Walker; Rebecca Rice; Wendy Martin; Keven Williams; Chris Steele; Suzette Craig; Sally Buck
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 933. doi:

A NEW SURGICAL TECHNIQUE IN CONGENITAL CATARACT WITH FEMTOSECOND LASER
OPEN ACCESS
PAOLO BORDIN; GABRIELE VIZZARI
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 934. doi:

Tissue Plasminogen Activator for the Treatment of Fibrin After Lensectomy with Intraocular Lens Insertion in a Juvenile Rabbit Model OPEN ACCESS
Joseph Bogaard; Jonathon Young; Iris S Kassem
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 935. doi:

Pupillary dynamics of patients on tamsulosin exhibiting intraoperative floppy iris syndrome (IFIS) during cataract surgery. OPEN ACCESS
Poonam Misra; Bella Wolf; Chetra Yean; Anurag Shrivastava
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 936. doi:

Cataract Surgery Training Curricula and Timing of Resident Participation in Phacoemulsification Cataract Surgery OPEN ACCESS
Ramunas Rolius; Seth Pantanelli; Ingrid U Scott
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 937. doi:

Implementation of a Model Eye (Kitaro) Based Cataract Surgery Training Curriculum
OPEN ACCESS
Carrie Wright; Ingrid U Scott; Christine Callahan; George C Papachristou; Yousuf Khalifa; Seth Pantanelli
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 938. doi:

Surgical outcomes following complicated phacoemulsification cataract surgery performed by beginner resident surgeons OPEN ACCESS
Kevin Miller; Raouf Sherief; Kevin Kaplowitz; Timothy Chou; Azin Abazari
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 939. doi:

Effectiveness of Ophthalmic Surgical Simulation Training vs. Paper Based Manual Training on physiologic tremor and speed in dominant and non-dominant hands
OPEN ACCESS
Yonwook Justin Kim; Abhishek R Payal; Luis A Gonzalez; Mary K Daly
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 940. doi:

Pop and Chop vs. Divide and Conquer: Zero and Low Energy Nucleus Disassembly Technique for Teaching Beginner Surgeons OPEN ACCESS
Debora Garcia-Zalisnak; Fredric Gross
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 941. doi:

Visual and anatomic outcomes after intraoperative complications in resident-performed phacoemulsification surgery OPEN ACCESS
Marianeli Rodriguez; Ninel Gregori; Karli Sapir; Anna K Junk; Anat Galor; Sarah Wellik; Raquel Goldhardt; Jesse Pelletier; Wei Shi
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 942. doi:

Comparison of cumulative dissipated energy utilized in phaco chop versus divide and conquer during phacoemulsification as performed by a resident surgeon OPEN ACCESS
Katie M Keck; Michael Patterson; Bethany Markowitz
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 943. doi:

Resident Surgeon Efficiency in Femtosecond Laser Assisted Cataract Surgery
OPEN ACCESS
Brian R Sullivan
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 944. doi:

Comparison of surgical and visual outcomes of phacoemulsification performed by ophthalmology residents with 3 different machines OPEN ACCESS
Karla Olivia VanDick-Sanchez; Pablo Jose Guzman-Salas; Karla Yolanda Ruiz-Alvarez; Eduardo Chavez-Mondragon
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 945. doi:

Resident-performed Neodymium: YAG laser posterior capsulotomy for posterior capsule opacification OPEN ACCESS
Emily Marie Zepeda; Jason P Kam; Joanne C Wen; Leona Ding
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 946. doi:

Preoperative Spectral-Domain OCT for the diagnosis and prognosis of macula-On retinal detachment.
OPEN ACCESS
Valerie Mane; Mathieu Lehmann; Pierre-Raphael Rothschild; Ramin Tadayoni
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1020. doi:

Intraoperative optical coherence tomography findings in eyes with fovea-off rhegmatogenous retinal detachment OPEN ACCESS
Eimei Ra; Takeshi Iwase; Tetsu Asami; Kentaro Yamamoto; Hiroki Kaneko; Hiroko Terasaki
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1021. doi:

Changes in Choroidal Thickness After Scleral Buckle Surgery in Patients with Rhegmatogenous Retinal Detachment OPEN ACCESS
Jiawen Fan
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1022. doi:

CORRELATION BETWEEN ELLIPSOID-LINE RESTORATION SPEED AND VISUAL OUTCOME AFTER MACULA-OFF PRIMARY RHEGMATOGENOUS RETINAL DETACHMENT OPEN ACCESS
Daniel Velazquez Villoria; Anna Boixadera Espax; Vicente Martinez Castillo; Miguel A Zapata; Jose Garcia-Arumi
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1023. doi:

Correlation between outer retinal foveal morphology and visual outcome following repair of rhegmatogenous retinal detachment with proliferative vitreoretinopathy OPEN ACCESS
Edward Joshua Casswell; Philip Banerjee; Mandeep S Singh; Philip Alexander; David G Charteris
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1024. doi:

The Role of Infrared and Autofluorescence Imaging in the Evaluation of Peripheral Degenerative Retinoschisis and Retinal Detachments. OPEN ACCESS
Jessica Gomez; Paul Drayna; Dara Koozekanani; Erik J Van Kuijk; Sandra Rocio Montezuma

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1025. doi:

Wide-Field Fluorescein Angiography During and After Silicone Oil Tamponade for Retinal Detachment OPEN ACCESS
Vesna Jurisic Friberg; Goran Bencic; Mia Zoric-Geber; Zoran Vatavuk; Thomas R Friberg
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1026. doi:

Unexplained visual loss in association with silicone oil endotampoande in patients with macula-on rhegmatogenous retinal detachments OPEN ACCESS
Marvin Marti; Richard Walton; Sandrine Anne Zweifel; Christian Boeni; Daniel Barthelmes
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1027. doi:

Vitreous concentrations of VEGF family indicate visual prognosis after vitrectomy in patients with rhegmatogenous retinal detachment OPEN ACCESS
Masahiko Shimura; Ryosuke Motohashi; Kanako Yasuda; Hidetaka Noma
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1028. doi:

Time course of changes in metamorphopsia and retinal microstructure after successful rhegmatogenous retinal detachment surgery OPEN ACCESS
Tomoya Murakami; Fumiki Okamoto; Yoshimi Sugiura; Yoshifumi Okamoto; Takahiro Hiraoka; Tetsuro Oshika
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1029. doi:

The use of a 'flashes and floaters' triage template to reduce the frequency of non-urgent overnight ophthalmology consultation OPEN ACCESS
Saba Alniemi; Andrew Barkmeier
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1030. doi:

The influence of interruptions of bed rest with positioning on the progression of macula-on retinal detachment OPEN ACCESS
Jan H. de Jong; Tiarah C. Simon; Juan Pedro Vigueras-Guillén; Reinier Timman; Koenraad Arndt Vermeer; Jan C Van Meurs
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1031. doi:

The effect of segmental scleral buckling on corneal astigmatism and axial length of the eye: A biomechanical model OPEN ACCESS
Raed Aldhafeeri; Patrick Smolinski; Thomas R Friberg
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1032. doi:

Refractive changes after scleral buckling for rhegmatogenous retinal detachment OPEN ACCESS
Shohei Morikawa; Yoshifumi Okamoto; Fumiki Okamoto; Takahiro Hiraoka; Tetsuro Oshika
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1033. doi:

Surgical outcomes of small gauge pars plana vitrectomy for repair of primary rhegmatogenous retinal detachment performed by vitreoretinal fellows under attending supervision OPEN ACCESS
Jay Wang; Rashi Joshi; Anne Marie Lane; Demetrios Vavvas
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1034. doi:

Surgical outcome of rhegmatogenous retinal detachment repair: results from Vienna Retinal Detachment Database OPEN ACCESS
Katharina Eibenberger; Sandra Rezar; Guenther Weigert; Stefan Sacu; Ursula Schmidt-Erfurth; Michael Georgopoulos
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1035. doi:

Suprachoroidal hydrogel buckling as a surgical treatment of retinal detachment - biocompatibility and first experiences OPEN ACCESS
Kai Januschowski; Karl Boden; Peter Szurman
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1036. doi:

Risk factors for proliferative vitreoretinopathy in small gauge vitreoretinal surgery OPEN ACCESS
Daniel Learned; Eric Nudleman; Bradley Anderson; Ashkan Abbey; George A. Williams
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1037. doi:

Primary rhegmatogenous retinal detachment with inferior retinal breaks: 1 day vs 7 days postoperative prone positioning results. OPEN ACCESS
Radwan Ajlan; Jordan Isenberg; Ghassan Cordahi; Renaud Duval; Sébastien Olivier; Flavio Rezende
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1038. doi:

Patient Travel Distance and Rhegmatogenous Retinal Detachment Outcomes in Rural North Dakota OPEN ACCESS
Robert Gokey; James R. Beal; Keri Sipma; Danielle Nelson; Kimberly Leonard; David Jacobs
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1039. doi:

Outcome of Management of Retinal Detachment in Eyes with Chorioretinal Coloboma: The Results of the KKESH International Collaborative Retina Study Group OPEN ACCESS
Sulaiman Mohammad Alsulaiman; Marwan Abouammoh; Vishali S Gupta; Afnan Younis; Jay Chabalani; Antonio M B Casella; alay S banker; J Fernando Arevalo
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1040. doi:

Inverted internal limiting membrane flap technique for macular hole retinal detachment. OPEN ACCESS
Ryo Baba; Yoshihiro Wakabayashi; Kazuhiko Umazume; Daisuke Muramatsu; Hiroshi Goto
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1041. doi:

Evaluation of scleral buckling with chandelier illumination for rhegmatogenous retinal detachment OPEN ACCESS
Azusa Fujikawa; Takeshi Kumagami; Eiko Tsuiki; Takashi Kitaoka
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1042. doi:

Acute, postoperative, transient retinal detachment (APTRD) after intraocular surgery: a new clinical entity OPEN ACCESS
Heinrich Gerding
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1043. doi:

25-Gauge Pars Plana Vitrectomy and SF6 Gas for the Repair of Primary Rhegmatogenous Retinal Detachment with Multiple Breaks in Multiple Quadrants OPEN ACCESS
Yoreh Barak; Victor Flores; Michael Mimouni

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1044. doi:

The influence of seasonality, meteorology and clinical risk factors on the five-year incidence of rhegmatogenous retinal detachment in the central region of Portugal OPEN ACCESS

Miguel Raimundo; João Pedro Marques; Catarina Rodrigues; Mário Alfaiate; Joao Figueira

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1045. doi:

Surgical outcomes, epidemiology, clinical characteristics, risk factors of rhegmatogenous retinal detachment OPEN ACCESS

Feria ANZALDO Estephania; IRVING SANTANDER CARRAL

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1046. doi:

Functional and anatomical outcomes after successful macula-off retinal detachment surgery, a 12 month-follow-up. OPEN ACCESS

Clémence DESCHASSE; Yann Kauffmann; Mathilde Frerot; Alain M Bron; Catherine P Garcher

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1047. doi:

Characteristics and Outcomes of Simultaneous Bilateral Rhematogenous Retinal Detachments OPEN ACCESS

Avni Patel; Dean Eliott; Leo A Kim; Demetrios G. Vavvas; John B Miller

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1048. doi:

A 12-year survey on surgical outcomes of rhegmatogenous retinal detachments OPEN ACCESS

Samy FAURE; Cazet-Supervielle Agathe; Chloé De Beketch; Michèle Boissonnot; Nicolas Levéziel

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1049. doi:

Incidence of postoperative cystoid macular edema following vitreoretinal surgery for primary rhegmatogenous retinal detachment. OPEN ACCESS

Domenico Massaro; Micol Alkabes; Paolo Nucci

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1050. doi:

Long-term surgical outcomes of retinal detachment in patients with Stickler syndrome OPEN ACCESS

Devasis Reddy; Yoshihiro Yonekawa; Benjamin J Thomas; Eric Nudleman; George A. Williams

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1051. doi:

Gender and Macular Status in Rhegmatogenous Retinal Detachment Cases OPEN ACCESS

Rajit Banerjee; Okan Toygar; Brian Toussaint; Brad Genereux; Chris Riemann

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1052. doi:

Rates of Retinal Detachment following Retisert and Ozurdex Implants OPEN ACCESS

Stephen G Schwartz; Kamyar Vazin; Krishna S Kishor; Jorge Fortun; Harry W Flynn

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1053. doi:

Retinal Detachment in Down Syndrome: Characteristics and Surgical Outcomes OPEN ACCESS

BADR ALAHMADI; Sulaiman Alsulaiman; J. Fernando Arevalo

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1054. doi:

Management of Open Globe Injuries with and without Intraocular Foreign Bodies OPEN ACCESS

Tanuj Banker; Andrew Mcclellan; Fabiana Juan; Eric Weichel; Thomas Arno Albini; Harry W Flynn; Ajay E. Kuriyan

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1055. doi:

Concurrent Inner Limiting Membrane Peeling During Epiretinal Membrane Surgery: Effects on Outcomes and Recurrence OPEN ACCESS

Logan Christensen; Jeffrey Olson

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1056. doi:

With or without internal limiting membrane peeling during vitrectomy for epiretinal membrane: A systematic review of literature and meta-analysis OPEN ACCESS

Kunihiro Azuma; Shuichiro Eguchi; Takashi Ueta

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1057. doi:

Comparison between refractive changes in macular hole and epiretinal membrane after lens-sparing vitrectomy. OPEN ACCESS

Tetsuya Muto; Makoto Chikuda; Shigeki Machida

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1058. doi:

Internal Limiting Membrane peeling success for idiopathic macular hole closure OPEN ACCESS

Ignacio Olmedo; Matias Iglicki; Marcelo Zas

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1059. doi:

Correlations between Preoperative Retinal Pigment Epithelial Alterations and Postoperative Outcomes in Eyes with Idiopathic Macular Holes OPEN ACCESS

Takayuki Baba; Tomohiro Nizawa; Toshiyuki Oshitari; Shuichi Yamamoto

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1060. doi:

Topographic changes of macula after closure of idiopathic macular hole OPEN ACCESS

Kang Yeun Pak; Keun Heung Park; Sung Who Park; Ik Soo Byon; Ji Eun E Lee

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1061. doi:

Visual results of macular hole surgery from a registry-based study by the Australian and New Zealand Society of Retinal Specialists OPEN ACCESS

Rohan W Essex; Alex Paul Hunyor; Willie G Campbell; Ian McAllister; Paul P Connell; Zabrina Kingston; Margarita Moreno-Betancur; Bruce Shadbolt

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1062. doi:

Indications and outcomes of iris suture fixation for dislocated posterior chamber intraocular lenses OPEN ACCESS

Edmund Tsui; Nitish Mehta; Suruchi Bhardwaj; Joseph Tseng; Kenneth Wald

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1063. doi:

Asymmetric retinal thinning after epiretinal membrane peel OPEN ACCESS
Peter M Kelly; Tara A McCannel; Colin McCannel
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1064. doi:

Gas-foveal contact in macular hole surgery - a comparison of face-down and non-supine positioning OPEN ACCESS
Mark Alberti; Morten D De La Cour
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1065. doi:

Intact cone interdigitation zone associated with improvement of macular function after successful fovea-off rhegmatogenous retinal reattachment OPEN ACCESS
Shinji Ueno; Azusa Kominami; Taro Kominami; Ayami Nakanishi; Chang-Hua Piao; Eimei Ra; Shunsuke Yasuda; Tetsu Asami; Hiroko Terasaki
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1066. doi:

Evaluation of inverted internal limiting membrane flap technique in the treatment for macular hole-associated retinal detachment in high myopia OPEN ACCESS
Akira shiono; Hiroki Sasaki; Jiro Kogo; Hitoshi Takagi
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1067. doi:

Pneumatic retinopexy for primary rhegmatogenous retinal detachment in phakic eyes with single break: our experience.
OPEN ACCESS
Elena Gibin; andrea galli; nicholas righetti; michele clerici; ana cristina daniel; francesca gilardoni; massimo vignanelli
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1068. doi:

Comparison of the inverted inner limiting membrane flap technique and the inner limiting membrane peeling method for macular hole with retinal detachment OPEN ACCESS
Takehiro Matsumura; Takeshi Tomomatsu; Yoshihiro Takamura; Akira Kobori; Masaru Inatani
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1069. doi:

Macular Hole After Pars Plana Vitrectomy for Rhegmatogenous Retinal Detachment
OPEN ACCESS
Daniel Steven Churgin; Carlos Alonso Medina Mendez; Angelica Ortiz; William E Smiddy; Harry W Flynn
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1070. doi:

Breakthrough vitreous hemorrhage in neovascular age-related macular degeneration: Prognostic indicators and surgical outcomes OPEN ACCESS
Danny Mammo; Prethy Rao; Ashkan Abbey; Yoshihiro Yonekawa; Tarek S Hassan
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1071. doi:

Retinal thickness after internal limiting membrane peeling for idiopathic macular hole: Correlation with macular hole size OPEN ACCESS
Rieko Kato; Yutaka Imamura; Yoshikazu Ichikawa; Masahiro Ishida
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1072. doi:

The comparison of intermediate visual acuity in patients treated for epiretinal membrane by phaco-vitrectomy with bifocal LENTIS Comfort LS-313 MF15 lens (Oculentis®) and monofocal lens i... OPEN ACCESS
Karolina Ceglowska; Ivanka Dacheva; Geraldine Pinelli; Katarzyna Nowomiejska; Robert Rejdak; Michael Ihring; Florian Kretz; Gerd U. Auffarth; Michael Koss
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1073. doi:

Surgical outcomes of vitrectomy for lamellar macular hole. OPEN ACCESS
Won Seok Choi; Stanley Chang
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1074. doi:

Ellipsoid Analysis after Macular Hole Repair OPEN ACCESS
Benjamin Reiss; Rishi Singhal; Lindsay Smithen; Sam Edward Mansour
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1075. doi:

Simulated vitreoretinal surgery to prepare for real surgery OPEN ACCESS
Frank H J Koch; Clemens Wagner; Pankaj Singh; Michael Mueller; Rachid Benjilali; Markus Schill; Hanns Ackermann; Dimitra Bon; Benjamin Schoene; Michael Koss; Svenja Deuchler
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1076. doi:

Clinical outcomes of internal limiting membrane peel using indocyanine green (ICG) dissolved in 5% dextrose in water (D5W) during macular hole surgery. OPEN ACCESS
Alexander Grigalunas; Jonathan Minkowski; Kirk H Packo
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1077. doi:

Interaction between lens transparency loss and retinal reattachment surgery with preliminary silicone oil fill OPEN ACCESS
Svenja Deuchler; Pankaj Singh; Michael Mueller; Thomas Kohnen; Hanns Ackermann; Joerg Iwanczuk; Rachid Benjilali; Frank H J Koch
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1078. doi:

Broad internal limiting membrane peeling and no face-down positioning for the repair of chronic idiopathic macular holes. OPEN ACCESS
Jacek Kotowski; Ebrahim Elborgy; Malav Joshi; Jackson Abou Chehade; Raymond Iezzi
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1079. doi:

Surgical Outcomes of Vitrectomy for Myopic Foveoschisis OPEN ACCESS
Artemis Trochanis; David B Yorston
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1080. doi:

Investigations of Foveal Avascular Zone by Optical Coherence Tomography Angiography before and after Macular Hole Surgery OPEN ACCESS
masato kakisu; Takayuki Baba; Tomohiro Nizawa; Toshiyuki Oshitari; Shuichi Yamamoto
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1081. doi:

Postoperative Head Tracking: Repeatability of Measurements Using an Inertial Measurement Unit OPEN ACCESS
Philipp M Prahs; Nadezhda Cvetkova; Horst Helbig; David Maerker
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1082. doi:

Pre- and Post-Vitrectomy Choroidal Thickness in Eyes with Epiretinal Membrane and Macular Hole OPEN ACCESS
Brett M. Weinstock; Bryan Kun Hong; Abtin Shahlaee; Jayanth Sridhar; Jason Hsu
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1083. doi:

Change in refraction after lens-sparing vitrectomy for rhegmatogenous retinal detachment and epi-retinal membrane OPEN ACCESS
Yuji Mikoshiba; Takeshi Iwase; Kentaro Yamamoto; Kosei Yanagida; Misato Kobayasi; Eimei Ra; Hiroko Terasaki
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1084. doi:

Quantifying Vision Beyond Visual Acuity in Macular Holes OPEN ACCESS
Justin Nguyen; Kenneth M.P. Yee; Giancarlo A Garcia; Alfredo A Sadun; J Sebag
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1085. doi:

Time course of changes in aniseikonia following vitrectomy for macular hole OPEN ACCESS
Yuki Moriya; Fumiki Okamoto; Yoshimi Sugiura; Tomoya Murakami; Yoshifumi Okamoto; Tetsuro Oshika
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1086. doi:

Quantifying metamorphopsia using M-CHARTS in patients with idiopathic macular hole OPEN ACCESS
Iori Wada; Shigeo Yoshida; Yoshiyuki Kobayashi; Masato Akiyama; Yoshito Koyanagi; Takahito Nakama; Yuki Kubo; Keijiro Ishikawa; Shintaro Nakao; Tatsuro Ishibashi; Koh-Hei Sonoda
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1087. doi:

Persistent Outer Retinal Defects (Micro Holes) following Macular Hole Surgery. OPEN ACCESS
Mehrdad Malihi; Akshay S Thomas; Justin wilkinson; Steven T Bailey; Dongseok Choi
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1088. doi:

Lens capsular transplantation in the management of unclosed myopic macular hole OPEN ACCESS
Xiao Zhang; Fangtian Dong
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1089. doi:

Residual sub-Retinal fluid after idiopathic macular hole repair surgery is not visually significant and resolves within 6 months OPEN ACCESS
Nitish Mehta; Suruchi Bhardwaj; Edmund Tsui; Joseph Tseng; Kenneth Wald
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1090. doi:

Correlation of postoperative vision and fundus autofluorescence after vitrectomy for epiretinal membrane OPEN ACCESS
Ryo Tokizawa; Makoto Inoue; Yoshiyuki Kita; Yuji Itoh; Takashi Koto; Akito Hirakata
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1091. doi:

The gas conundrum; which tamponade after surgery for full thickness macular hole? OPEN ACCESS
Sandro Di Simplicio Cherubini; Philip Alexander; Richard Newsom
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1092. doi:

Influence of retinal microstructure and glaucoma on postoperative visual outcome of epiretinal membrane OPEN ACCESS
Tomomi Higashide; Tetsuhiko Okuda; Moe Takabatake; SHUNSUKE TSUCHIYA; Sachiko Udagawa; Kazuhisa Sugiyama
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1093. doi:

Changes in inner nasal macular thickness and retinal sensitivity after idiopathic epiretinal membrane removal OPEN ACCESS
Saujanya Vadoothker; Olga Shif; Phillip Scharper
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1094. doi:

Five-Year Functional Outcomes after Epiretinal Membrane Surgery: A Prospective, Controlled Study OPEN ACCESS
Gowtham Jonna; Ian A. Thompson; Stephen J Kim
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1095. doi:

The clinical utility of microperimetry in eyes undergoing vitrectomy surgery for epiretinal membrane. OPEN ACCESS
Shaun YP Ewe; Bobak Bahrami; Adil Syed; Thomas Hai Le Hong; Meidong Zhu; Andrew Alexander Chang
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1096. doi:

Twelve months evaluation of idiopathic macular hole surgery: outer retinal layers recomposition and visual recovery. OPEN ACCESS
Claudio Azzolini; Simona Maria Caprani; Simone Donati; Riccardo Vinciguerra; Claudia Bellina; Cesare Mariotti; Paolo Vinciguerra; Gianni Virgili; Bruno Lumbroso
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1097. doi:

External limiting membrane deformation as a prognostic factor in idiopathic macular hole surgery OPEN ACCESS
Caspar Geenen; Maria Teresa Sandinha; David Steel
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1098. doi:

Visual Outcomes Using Different Concentrations of Indocyanine Green Following Idiopathic Macular Hole Surgery OPEN ACCESS
Matthew Starr; Kapil G Kapoor; Sophie J Bakri; Raymond Iezzi; Andrew Barkmeier
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1099. doi:

COMPARISON OF INVERTED FLAP AND SUBRETINAL ASPIRATION TECHNIQUE IN FULL THICKNESS MACULAR HOLE SURGERY OPEN ACCESS
Enrico Peiretti; Giulia Caminiti; Riccardo Saldi; Giovanni M. Satta
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1100. doi:

Incidence of Retinal detachment after small gauge vitrectomy for epiretinal membrane. OPEN ACCESS
Jennifer MARIE-LOUISE; ADIL DARUGAR; Elise Philippakis; Ramin Tadayoni
Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1102. doi:

Read-through of LCA16 nonsense mutation therapy using iPS-RPE cells OPEN ACCESS

Pawan K Shahi; Dalton Hermans; Nathaniel York; Simran Brar; Katarzyna Borys; Elizabeth E Capowski; Ellen Welch; De-Ann M Pillers; David M Gamm; Bikash R Pattnaik

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1103. doi:

Comparing Ocular pharmacokinetics of etoposide and its nanoemulsion after subtenon administration in rabbits

OPEN ACCESS

Santosh Kumar Patnaik; Deepti Maithani; Bhavna Chawla; Vasantha Thavaraj; Nihar R Biswas; Thirumurthy Velpandian

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1104. doi:

Comparative analysis of small molecule drugs for nonsense suppression therapy in Choroideremia OPEN ACCESS

Mariya Moosajee; Dhani Tracey-White; Matthew Smart; Carmen Bertoni; Timor Baasov; Andrew Webster

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1105. doi:

Retinal effects of Intravitreal Neuroglobin (Ngb) Delivery study OPEN ACCESS

Anita Chan; Sai Bo Bo Tun

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1106. doi:

ITF2357 inhibits NF-kB signaling pathway to regulate barrier integrity in retinal pigment epithelial cells OPEN ACCESS

Shyam S Chaurasia; Rayne Ruiyi Lim; Milan N Mehta; Alison Tan; Walter Hunziker; Xinyi Su; Charanjit Kaur; Arkasubhra Ghosh; Veluchamy A Barathi

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1107. doi:

A novel inhibitor of soluble epoxide hydrolase synergizes with anti-VEGF therapy in suppressing choroidal neovascularization OPEN ACCESS

Rania Sulaiman Sulaiman; Bit Lee; Wei Sun; Khoa Trinh; Seung-Yong Seo; Timothy William Corson

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1108. doi:

Therapeutic potential of topical ROCK inhibitor Ripasudil (K-115) in choroidal neovascularization OPEN ACCESS

Muneo Yamaguchi; Shintaro Nakao; Yoshihiro Kaizu; Yoshiyuki Kobayashi; Takahito Nakama; Shigeo Yoshida; Yuji Oshima; Tatsuro Ishibashi; Koh-hei Sonoda; Yoshio Kaneko; Tomoyuki Isobe

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1109. doi:

Inhibition of choroidal neovascularization by local application of candesartan OPEN ACCESS

Yoshitaka Okuda; Masanori Fukumoto; Taeko Hone; Hidehiro Oku; Seita Morishita; Teruyo Kida; Tsunehiko Ikeda

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1110. doi:

Eplerenone in the treatment of active central serous chorioretinopathy. OPEN ACCESS

Oussama Boundaoui; Andrew Chon; Michael Davis

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1111. doi:

Leber's hereditary Optic Neuropathy: repurposing FDA-approved molecules to identify potential leads. OPEN ACCESS

Sandipan Datta; Gino Cortopassi

Investigative Ophthalmology & Visual Science September 2016, Vol.57, 1112. doi:

IOVS Investigative ophthalmology & visual science on ARVO journal

Follow @ARVOiovs

IOVS Home
Issues
Topics
For Authors
About
Editorial Board

Online ISSN: 1552-5783

ARVO JOURNALS

Investigative Ophthalmology & Visual Science
Journal of Vision
Translational Vision Science & Technology

JOURNALS HOME
TOPICS
ABOUT ARVO JOURNALS
Rights & Permissions
Privacy Statement
Advertising
Submit a Manuscript
Disclaimer
Contact Us
ARVO.org

ARVO The Association for Research in Vision and Ophthalmology
Powered by SILVERCHAIR INFORMATION SYSTEMS