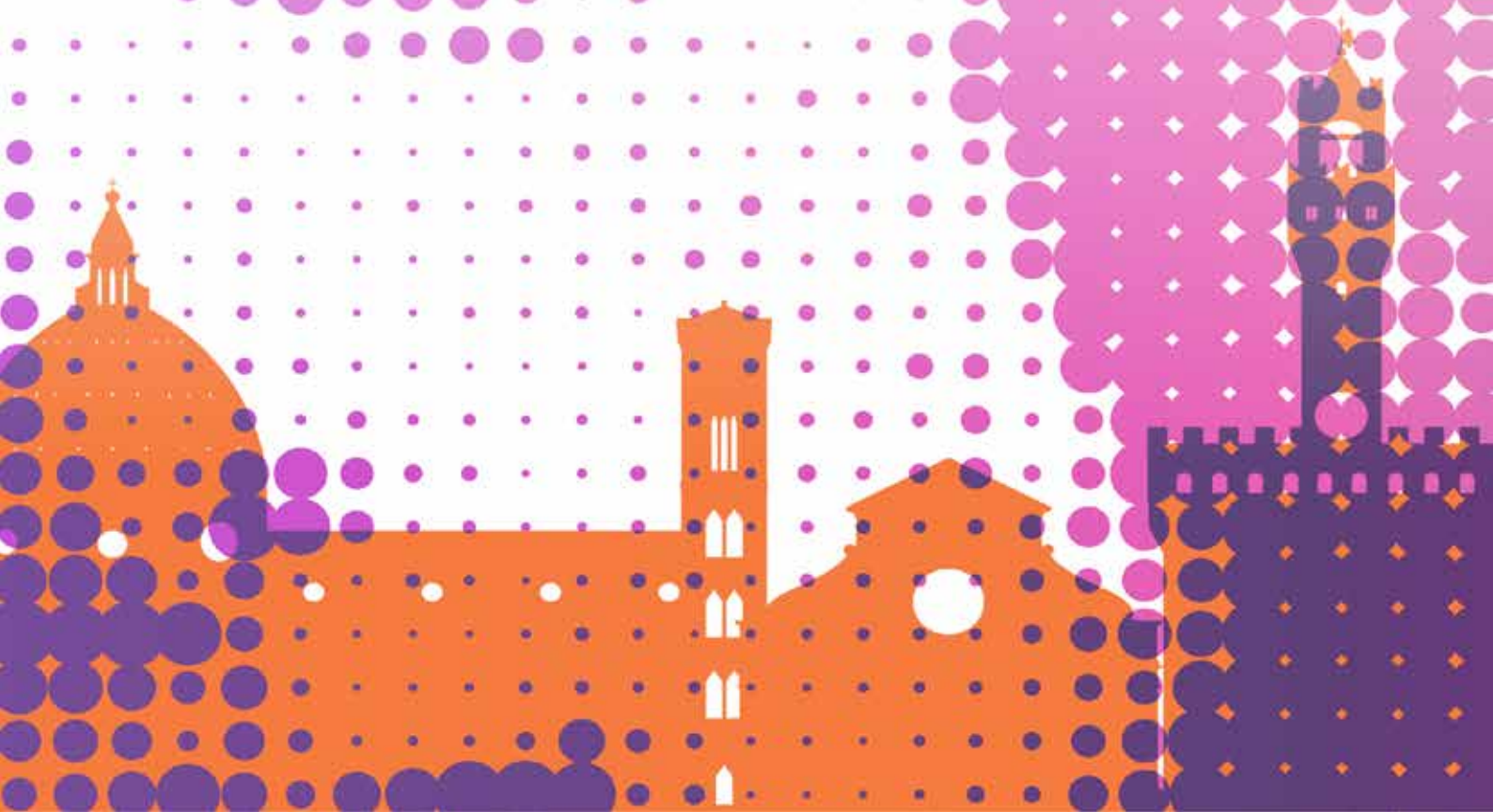


28th EVER CONGRESS

9-11 October 2025
Florence

PROGRAMME



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About the programme book

Sessions

 BM	Business Meeting	 POS	Poster Session
 CIS	Company Interested Symposium	 PS	Plenary Session
 C	Course	 RF	Rapid Fire Session
 JM	Joint Meeting	 SIS	Special Interest Symposium
 KN	Keynote Lecture	 FR	Free Paper Session
 YI	Young Investigators Session		

Symbol

rf = Rapid Fire presentation

Scientific sections

ACB	=	Anatomy / Cell Biology
COS	=	Cornea / Ocular Surface
EOVS	=	Electrophysiology, Physiological Optics, Vision Sciences
G	=	Glaucoma
IM	=	Immunology / Microbiology
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MBGE	=	Molecular Biology / Genetics / Epidemiology
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RV	=	Retina / Vitreous

WITH THE PATRONAGE OF



UNIVERSITÀ
DEGLI STUDI
FIRENZE

Dipartimento
di Fisica e
Astronomia

08:30-08:45 | Room 2

PS Opening Ceremony

08:45-09:30 | Room 2

KN Special Recognition EVER Keynote Lecture

Diseases of retinal blood vessels of such as diabetic retinopathy are prominent causes of vision loss worldwide. Drivers of disease include endothelial cell and pericyte degeneration leading to vascular leakage, retinal ischemia and in severe cases pathological preretinal neovascularization. Anti-VEGF therapies have revolutionized treatment, however they require regular intravitreal injections and are inefficient in a large subset of patients. In this lecture, I will discuss 2 experimental disease modifying approaches developed by our lab that are currently being investigated in clinical trials. Firstly, I will discuss how modulation of neuronal guidance cues such as semaphorins can promote functional vascular regeneration and alleviate retinal ischemia. Secondly, I will present how therapeutic elimination of senescent cells from diseased retinas can trigger vascular repair and lead to long lasting benefits in patients and present preclinical and clinical data to support these findings.

08:45 Introduction
Andrzej Grzybowski (Poland)08:50 Therapeutic vascular remodelling in diabetic retinal disease:
on semaphorins and cellular senescence
Przemyslaw Sapieha (Canada)

09:20 Discussion



09:30-10:45 | Room 2

C LC 87 - Biometry and intraocular lens power calculation

Starting with ultrasound measurement of the eye in the 70ties of the last century, many attempts have been made to improve ocular biometry. Optical biometry was one of the cornerstones in modern cataract surgery, which was a mandatory requirement for all premium lenses. Today, all distances of the eye and the curvature of the corneal front surface could be measured with a high precision, and some of the biometers also offer tomography to assess corneal back surface curvature. First lens power calculation formula was presented in 1967 by Fyodorov, but a systematic pre-cataract biometry with individual lens power calculation started 20 years later with empirical and vergence based formulae such as SRK(2), SRKT, Hoffer-Q, Holladay, and Haigis. Today, most of the modern lens power prediction concepts are undisclosed and available online or integrated in optical biometers. In this course we will give an overview on different biometry modalities and basic lens power calculation concepts and we will discuss the pros and cons critically.

Organizer: **Achim Langenbacher** (Germany)Co-organizer: **Oliver Stachs** (Germany)09:30 Ultrasound and optical biometry before cataract surgery
Oliver Stachs (Germany)09:41 Basics in lens power calculation – from the empirical concept to formula-based calculation and raytracing
Achim Langenbacher (Germany)09:52 Formula constants and optimizations
Achim Langenbacher (Germany)10:03 Calculation of toric lenses and clinical aspects of toric lens implantation
Timo Eppig (Germany)10:14 Lens power calculation after corneal refractive surgery
Jascha Wendelstein (Switzerland)10:25 Lens power calculation in long and short eyes – which formula is the best?
Jascha Wendelstein (Switzerland)

10:35 Discussion

THURSDAY
9 OCTOBER 2025

09:30-10:45 | Room B



NSPH 42 - Challenges in pediatric ophthalmology

This symposium combines anterior and posterior segment questions with respect to pediatric ophthalmology. Both conservative and surgical aspects will be addressed.

Organizer: **Thomas Fuchsluger** (Germany)

Co-organizer: **Patrick Yu-Wai-Man** (United Kingdom)

- 09:30 Molecular mechanisms and clinical factors influencing progression of aniridia-associated keratopathy
Nora Szentmary (Germany)
- 09:43 Keratoplasty in children - yes or no, when and how?
Thomas Fuchsluger (Germany)
- 09:56 Surgical treatment of ectopia lentis in children
Lyubomyr Lytvynchuk (Germany)
- 10:09 When it is not a simple myopia: what is this disease with an XL eye?
Vasily Smirnov (France)
- 10:22 Inherited optic neuropathies – an update
Patrick Yu-Wai-Man (United Kingdom)
- 10:35 Discussion

09:30-10:45 | Hall 3A



Rapid Fire 1 - ACB - IM - PO

Moderators: **Marialaura Amadio** (Italy), **Kalle Nummi** (Finland)

Evaluators: **Jan-Willem Beenakker** (The Netherlands), **Ester Carreño Salas** (Spain), **Jarmila Heissigerova** (Czech Republic), **Anu Kauppinen** (Finland), **Michele Madigan** (Australia), **Goran Petrovski** (Norway)

- | | | |
|-----|------|---|
| 530 | T002 | Environmental, sex-dependent, and inflammasome-mediated modulation of retinal ganglion cell survival following LPS-induced sepsis
Kristy T. Rodríguez-Ramírez, Ana Isabel Gómez, Pablo Pelegrín, Marta Agudo-Barriuso (Spain) |
| 465 | T004 | Ocular sarcoidosis - A case series in a tertiary uveitis clinic
Diogo Sousa Marques, Pedro Martins, Sofia Teixeira, Daniel Ferreira Cardoso, João Castro Cabanas, Catarina Ferreira, Sofia Fonseca (Portugal) |
| 492 | T005 | Objective quantification of anterior uveitis inflammation using artificial intelligence: a scoping review
Muneeb Ahmad Khan, Diya Baker (United Kingdom) |
| 591 | T007 | To assess inflammatory markers corresponding to gut dysbiosis and macrophage activation in plasma of Idiopathic Uveitis (IU) patients
Nabanita Halder, Gayatri Suresh, Madhu Nath, Rohan Chawla, Thirumurthy Velpandian (India) |
| 346 | T100 | Tear drops and Alzheimer's: unveiling early detection biomarkers - A systematic review
Inés López-Cuenca, Lidia Sánchez-Puebla, Lorena Elvira-Hurtado, Rubén Masa-Castro, Yael Hoz-Ruiz, Elena Salobrar-Garcia, José A. Matamoros, José A. Fernández-Albarral, Hector Leal-Lasalle, Juan Jose Salazar, Ana Isabel Ramirez, Jose Manuel Ramirez, Rosa De Hoz (Spain) |
| 430 | T103 | Circulating tumor DNA as a biomarker for surveillance of uveal melanoma
Vojtech Hanicinec, Eirunn Øvregaard, Morten Carstens Moe, Henrik Jespersen, Agate Noer (Norway) |
| 482 | T104 | Reconstruction of medium to large full-thickness lower eyelid defects by a novel single-stage procedure: update on the marginal approach for releasing the lid with closure handling (MARCH) technique
Anna March De Ribot¹, Santiago Ortiz-Pérez^{1,2}, Francesc March De Ribot¹ (¹ New Zealand, ² Spain) |
| 540 | T106 | RB1 screening for previously untested retinoblastoma survivors
Kalle Nummi, Tero Kivelä (Finland) |
| 589 | T107 | Role of CDKN1A, MDM2, MTHFR and MTR polymorphisms in retinoblastoma: a systemic study
Shobhit Gupta, Sushma Nandyala, Tapas Roy, Deepsekhar Das (India) |
| 635 | T108 | Transcriptomic atlas of uveal melanoma
Vojtech Hanicinec, Xavier Tekpli, Øystein Garred, Marie Fongaard, Sunniva Bøstrand, Michael Frisk, Thomas Bærland, Giang Nguyen, Jürgen Geisler, Morten Carstens Moe, Agate Noer, Henrik Jespersen (Norway) |

THURSDAY
9 OCTOBER 2025

09:30-10:45 | Hall 3.1

**Rapid Fire 2 - PBP**Moderators: **Johnny Di Pierdomenico** (Spain), **Christina Karakosta** (Greece)Evaluators: **Marcelino Avilés-Trigueros** (Spain), **Pedro De La Villa** (Spain)

- 193 S022 Comparative proteomic analysis of aqueous humour, anterior capsules and crystalline lenses in different human cataract subtypes versus healthy controls
Christina Karakosta^{1,2}, Martina Samiotaki¹, Anastasios Bisoukis², Nantieznta Kyriakidou¹, Konstantinos Moschou¹, Marilita Moschos¹ (¹Greece, ²United Kingdom)
- 286 S024 Protective effects and mechanism of modified Qiju Dihuang Formula in experimental choroidal neovascularisation rats
Leilei Wang, Xiaoling Fang, Xia Chen, Wenwen Xue, Jiannan Huang, Xiaowei Tong (China)
- 392 S029 An in-depth overview on retinal morpho-functional and molecular features of the 5xFAD murine model
Lorenzo Guidotti, Martina Lucchesi, Rosario Amato, Giuseppe Neri, Silvia Marracci, Claudia Gargini, Ugo Borello, Maurizio Cammalleri, Giovanni Casini, Massimo Dal Monte (Italy)
- 407 S031 Astrocyte-mediated protection of the hypoxic retina: involvement of beta3-adrenoceptors
Alessio Canovai, Lorenza Di Marsico, Massimo Dal Monte, Paola Bagnoli, Maurizio Cammalleri (Italy)
- 419 S033 Early retinal involvement in amyotrophic lateral sclerosis: functional and molecular characterization in SOD1G93A mice
Lorenza Di Marsico, Eleonora Daghini, Rosario Amato, Angela Cannavale, Alessio Canovai, Giuseppe Neri, Ugo Borello, Claudia Gargini, Maurizio Cammalleri, Massimo Dal Monte (Italy)
- 438 S035 Shear-stress dependent viscous properties of hyaluronic-based lubricants
Leopold Schmetterer, Gerhard Garhöfer (Austria)
- 454 S036 Toxicity of tranexamic acid in Müller cells: oxidative stress and inflammatory pathways
Dammak Azza, Nadine Gubernath, Wolf Armin (Germany)
- 566 S040 Safety and neuroprotective effects of intravitreal transplatation of bone-marrow-derived mononuclear cells exosomes to animal model of retinal degeneration
Johnny Di Pierdomenico, Ana Martínez Vacas, Andreea Delia Necula, David García Bernal, Maria Paz Villegas Perez, Diego García-Ayuso (Spain)
- 570 S041 Corneal endothelium protective effect of taurine-based ophthalmic surgical devices
Francesca Lazzara, Federica Conti, Grazia Maugeri, Erika Giuffrida, Giuseppe Lo Giudice, Matteo Cereda, Claudio Bucolo (Italy)

09:30-10:45 | Hall 3.2

**RV 30 - Central serous chorioretinopathy - update**

Central serous chorioretinopathy – up date is planned as a SIS. During the session highly recognized specialist on CSCR patomechanism, diagnostics and treatment will share their experience as well as results of their research regarding this clinical entity. As CSCR is a common disorder, but without strong recommendations for its management, the topic seem important for both clinical practice and clinical research. Among specific subjects associated with CSCR are mineralocorticoid pathway concept, modern diagnostic modalities, such as OCT angiography, validation of results of subthreshold micropulse treatment of CSCR and current opinion on utilization of photodynamic therapy in its treatment. Finally, practical algorithms for `CSCR management will be presented.

Organizer: **Maciej Gawęcki** (Poland)Co-organizer: **Andrzej Grzybowski** (Poland)

- 09:30 CSCR-patomechanism and etiology
Francine Behar-Cohen (France)
- 09:43 CSCR - multimodal diagnostics, recognition criteria. Classification
Stephen Schwartz (USA)
- 09:56 CSCR - treatment with classic and subthreshold lasers
Maciej Gawęcki (Poland)
- 10:09 CSCR - treatment with PDT. Strategies, eligibility
Maurizio Battaglia Parodi (Italy)
- 10:22 CSCR - algorithm for diagnostics and treatment
Kai Jin (China)
- 10:35 Discussion

THURSDAY
9 OCTOBER 2025

09:30-10:45 | Room 4**EOVS 70 - Basic principles of state-of-the-art ophthalmic instrumentation**

This course is aimed at providing an overview of the basic optical principles and machine learning applications of state-of-the-art retinal-imaging systems, with a special emphasis on optical coherence tomography (OCT). The course will include a discussion of additional contrast mechanisms, future trends and cutting-edge developments, along with how such imaging can even serve as a window into brain mechanisms. The goal is to illuminate for the clinician and scientist the underlying optical concepts of various devices and technological variations, even when not familiar with the particular technology employed within the instrument, and to demonstrate its potential with applications beyond those of retinal disease diagnosis and follow-up.

Organizer: **Kristina Irsch** (France)

Co-organizer: **Miguel Castelo-Branco** (Portugal)

- 09:30 Optical coherence tomography - Basic optical principles
Kristina Irsch (France)
- 09:48 Optical coherence tomography - Additional contrast mechanisms, future trends, and cutting-edge technological developments
Kristina Irsch (France)
- 10:06 Optical coherence tomography - Machine learning
Rui Bernardes (Portugal)
- 10:15 Retinal imaging - A window into brain mechanisms
Miguel Castelo-Branco (Portugal)
- 10:33 Discussion

10:45-11:15 | Coffee break**11:20-12:05 | Room 2****Past President Lecture**

The integration of artificial intelligence (AI) into ophthalmology has led to transformative advances in disease detection, prognosis, and population-level screening. While performance gains are evident in controlled settings, real-world deployment reveals persistent challenges. Some are well-recognized, including biases in training data, limited generalizability across populations, and lack of interpretability, representing the “known unknowns.” However, a growing concern lies in “unknown unknowns”: unpredictable failures that arise when AI systems encounter out-of-distribution inputs, rare pathologies, or subtle shifts in imaging protocols. This lecture explores the implications of these uncertainties for clinical safety, trust, and equity in ophthalmic AI. Addressing them requires not only technical innovation, such as uncertainty quantification and robust validation, but also a reframing of AI as a probabilistic and context-aware partner in clinical decision-making.

- 11:20 Introduction
Christina Zeitz (France)
- 11:25 AI in Ophthalmology: between known and unknown unknowns
Andrzej Grzybowski (Poland)
- 11:55 Discussion



12:05-13:20 | Room 2

**COS 83 - Update on instrument-assisted diagnosis for screening and diagnosis of ectatic corneal disorders**

Since the launch of the first Placido topographers in the early 90ties ophthalmologists are assisted with screening and diagnosis metrics for corneal ectatic diseases. Such instruments were restricted to detect early pathological changes at the corneal front surfaces. A decade later, first Scheimpflug tomographers showed-up which could detect and interpret early changes in the shape of both corneal surfaces together with the corneal thickness profile. Since 15 years high resolution anterior segment OCTs are on the market which have the potential to pathologies in the entire anterior eye segment. In this SIS we will show the fundamentals and development of instrument-based screening and diagnosis metrics for corneal ectatic diseases such as keratoconus, keratoglobus or pellucid marginal degeneration, and we will address quality terms such as precision, accuracy, specificity and sensitivity. New trends of instrument-assisted diagnosis such as indices from the Corvis biomechanic analysis and modern deep learning algorithms will be critically discussed and evaluated in terms of early diagnosis, staging, and monitoring of ectatic corneal disorders.

Organizer: **Achim Langenbacher** (Germany)

Co-organizer: **Michael Belin** (USA)

16:50 Corneal ectasia in a clinical setting

László Modis (Hungary)

17:03 Ectasia screening with the Placido topographer, Scheimpflug tomographer and anterior segment OCTs

Achim Langenbacher (Germany)

17:16 Instrument based screening vs. clinical diagnosis – How do modern tomographers assist the ophthalmologist

Michael Belin (USA)

17:29 New developments of keratoconus diagnosis with the Corvis biomechanical analysis

Elias Flockerzi (Germany)

17:42 AI and deep learning in early keratoconus – Think the unthinkable

Benjamin Fassbind (Switzerland)

17:55 Discussion

12:05-13:20 | Room B

**NSPH 84 - Protect, enhance, restore - novel strategies for the optic nerve rescue**

The optic nerve, a crucial component of the visual pathway, plays an essential role in transmitting visual information from the retina to the brain. Damage to the optic nerve can lead to irreversible vision loss and significantly impair quality of life. The need for optic nerve restoration has become increasingly critical as advancements in medical technology and neuroscience highlight the potential for regenerative therapies. Current treatment options are limited, often focusing on managing symptoms rather than addressing the underlying damage. Innovative approaches, including stem cell therapy, neuroprotective strategies, and biomaterial scaffolds, are being explored to promote nerve regeneration and functional recovery. Restoration of optic nerve function not only aims to recover lost vision but also has profound implications for enhancing cognitive processing and overall well-being. As the population ages and the prevalence of optic nerve injuries rises, prioritizing research and development in this field is vital for improving patient outcomes and fostering greater independence for those affected by vision loss.

Organizer: **Adrian Smedowski** (Poland)

Co-organizer: **Patrick Yu-Wai-Man** (United Kingdom)

12:05 Optic nerve rescue 2025 update

Adrian Smedowski (Poland)

12:21 Pharmacological restoration of the optic nerve

Tasneem Khatib (United Kingdom)

12:37 Electrostimulation of the optic nerve

Marcela Vortuba (United Kingdom)

12:53 CNTF-based RGC rescue

Jeffrey Goldberg (USA)

13:09 Discussion

12:05-13:20 | Hall 3A



Rapid Fire 3 - EOVS

Moderator: **Alessandro Arrigo** (Italy), **Gordon Plant** (United Kingdom)Evaluators: **Rui Bernardes** (Portugal), **Rebekka Heitmar** (United Kingdom)

- 90 S002 Evaluation of a virtual reality headset at a tertiary care ophthalmology setting
Catherine Dang¹, Hong-An Nguyen¹, Soumya Podury¹, Matthew Quinn¹, Catherine Tsilfidis¹, Rustum Karanjia^{1,2} (¹Canada, ²USA)
- 91 S003 Defocus incorporated multiple segment spectacle lenses for myopia control: a retrospective study in a Turkish cohort
Nilay Akagun, Emrah Altiparmak (Türkiye)
- 170 S004 Association between building density and screening myopia in children and adolescents: a five-year longitudinal study from China
Jingjing Wang, Xiangui He (China)
- 173 S005 Visual activity enhances neuronal excitability in thalamic relay neurons
Aurore Aziz, Dumenieu Mael, Fronzaroli-Molinieres Laure, Naudin Lois, Bonnaure Cecile, Wakade Anushka, Zanin Emilie, Ankri Norbert, Incontro Salvatore, Denis Daniele, Marqueeze Beatrice, Brette Romain, Debanne Dominique, Russier Michael (France)
- 212 S007 Use of L-tyrosine supplementation to support retinal function in a mouse model of deprivation myopia
Bartosz Machna, Klaudia Mroz, Monika Katan, Anna Gasiorek, Anna Pacwa, Maciej Oseka, Mikołaj Górka, Joanna Lewin-Kowalik, Adrian Smedowski (Poland)
- 330 S009 Influence of head movement of fixation stability and eye angle changes during virtual reality perimetry
Hsin-yang Chen¹, Raphael Sznitman¹, Jan Darius Unterlauff², Martin Zinkernagel¹, Nathanael Urs Häner¹ (¹Switzerland, ²Germany)
- 359 S010 Assessing retinal function in an Alzheimer's disease mouse model APPNL-F/NL-F using electroretinography
Lidia Sánchez-Puebla¹, Santiago Milla Navarro¹, Inés López-Cuenca¹, José A. Matamoros¹, Elena Salobar-García¹, José A. Fernández-Albarral¹, Lorena Elvira-Hurtado¹, Ana I. Ramírez¹, Juan Jose Salazar¹, Takaomi C. Saido², Takashi Saito², Carmen Nieto-Vaquero¹, María Ángeles Moro¹, Rosa De Hoz¹, Pedro De La Villa¹, Jose Manuel Ramirez¹ (¹Spain, ²Japan)
- 581 S015 Retina-brain neurovascular coupling connection
Rui Bernardes¹, João Jordão¹, João Figueira¹, Miguel Morgado¹, Pedro Guimarães¹, Pedro Serranho¹, Delia DeBuc², Michel Paques³, Miguel Castelo-Branco¹ (¹Portugal, ²USA, ³France)
- 626 S016 The pulvinar's role in visual hierarchy communication and cortical integration
Christian Casanova, William Thomas, Nelson Cortes Hernandez (Canada)
- 639 S017 Comparative performance of six large language models in the self-assessment test of the American Academy of Ophthalmology
Andrea Taloni, Antonia Carmen Sangregorio, Filippo Lixi, Mario Troisi, Francesco Paolo Mancini, Valerio Calabresi, Feyza Çukurova, Raphael Kilian, Valentino De Ruvo, Luigi De Rosa, Giulia Coco, Massimo Busin, Giuseppe Giannaccare (Italy)
- 677 S018 Evidence for altered color adaptation in autism spectrum disorder
Miguel Castelo-Branco, João Castelhana, Francisca Matias (Portugal)

12:05-13:20 | Hall 3.1

FP Free Paper Session 1

Moderators: **Marialaura Amadio** (Italy), **Eleftherios Chatzimichail** (Switzerland)

- 149 In vitro studies of the effects of the retinal pigment epithelium-derived extracellular vesicles
Giorgia Bresciani, Federico Manai, Marialaura Amadio (Italy)
- 234 Neurovascular barrier dysfunction in age-related macular degeneration and Alzheimer's diseases: homocysteine-driven breakdown and emerging therapeutic strategies
Amany Tawfik¹, Hossameldin Abouhish¹, Lamiaa Shalaby¹, Nehal Elsherbiny², Omar Elzayat¹, Charlene Hsiung¹, Aya Almaoued¹ (¹United States, ²Saudi Arabia)
- 279 Human choroid Opsin3 expression, melanocytes and effects of blue light exposure
Michele Madigan¹, Chieh-Lin (Stanley) Wu², Ha Duong¹, V. Cioanca¹, Peter Mccluskey¹, Robert Conway¹ (¹Australia, ²Taiwan)
- 70 Limbal niche cells regulate immune responses and maintain protective mechanisms within the corneal epithelial stem cell niche
Yiqun Fan, Andreas Giehl, Matthias Zenkel, Nina Eisenhauer, Simon Voekl, Ursula Schlötzer-Schrehardt (Germany)
- 223 Efficacy and safety of descemet stripping only combined with ripasudil for treating fuchs dystrophy at a leading center in Spain
Javier Pérez Esquivá, Jose Lamarca, Anton Barraquer, Miriam Barbany, Ruben Delgado, Raquel Larena, Gemma Julio, Rafael Barraquer (Spain)
- 244 A synthetic injectable hydrogel with anti-inflammatory effect for treating full-thickness corneal perforations
Mostafa Zamani-Roudbaraki, Neethi Thathapudi, Michel Haagdorens, Marc Groleau, Malcolm Latorre, Solange Muhayimana, Mozghan Aghajanzadeh-Kiyaseh, Mona Moradi, Isabelle Brunette, Christos Boutopoulos, Marie-Claude Robert, May Griffith (Canada)

THURSDAY
9 OCTOBER 2025

12:05-13:20 | Hall 3.2

 LC 62 - Myopia controversies and challenges in 2025

High myopia is a major cause of visual impairment. In the last 60 years, there has been a marked increase in the prevalence of high myopia in developed countries in East and Southeast Asia, and there are signs of similar, but less dramatic increases, in North America and Europe. It is accepted that myopia results from excessive axial elongation of the eye, which appears to be environmentally driven. The session will present major controversies related with myopia pathogenesis and treatment, including progression of myopia in adults, treatment differences between Asian and non-Asians, and challenges, including Low-level Red Light Therapy, and Myopia Calculators.

Organizer: **Andrzej Grzybowski** (Poland)

Co-organizer: **Olavi Pärssinen** (Finland)

- 12:05 Historical overview of the studies about epidemiology of myopia
Olavi Pärssinen (Finland)
- 12:18 Incidence and progression of myopia in adulthood
Mohammad Hassan Emamian (Iran)
- 12:31 Treatment differences between Asian and non-Asians
Carla Rita Dos Santos Costa Lança (United Arab Emirates)
- 12:44 RLRL in myopia control - European experience
Andrzej Grzybowski (Poland)
- 12:57 Visual acuity and spherical equivalent calculator
- 13:10 Discussion

12:05-13:20 | Room 4

 EOVS 46 - Electrophysiology and the localisation of visual pathway dysfunction

Symptoms and signs associated with retinal and retinal ganglion cell pathology are often non-specific and pose a diagnostic challenge. Precise phenotyping may be confounded by the limitations of subjective tests, whereas electrodiagnostic recordings provide objective methods which can localise and characterise dysfunction within the retina. This SIS will provide an update on electrophysiological methods relevant to ophthalmic and neuro-ophthalmic practice, including complementary use of full-field electroretinography, used to assess photoreceptor and inner retinal function, pattern electroretinography, used to assess macular and macular retinal ganglion cell function, and electro-oculography, essential to assess generalised retinal pigment epithelium function. The use of recently published International (ISCEV) standard methods and extended ERG protocols will be highlighted, using case-based examples to illustrate how loci of dysfunction may be identified, aiding diagnosis and clinical management. Recent phenotyping data will be used to show the principles of interpretation, discrepancies between structure and function and the clinical value of electrophysiological testing.

Organizer: **Anthony G. Robson** (United Kingdom)

Co-organizer: **Omar Mahroo** (United Kingdom)

- 12:05 Generalised RPE dysfunction in adults and children
Dorothy Thompson (United Kingdom)
- 12:21 ERGs in photoreceptor disorders
Anthony G. Robson (United Kingdom)
- 12:37 ERGs in inner retinal disorders.
Omar Mahroo (United Kingdom)
- 12:53 Retinal ganglion cell dysfunction
Magella Neveu (United Kingdom)
- 13:09 Discussion

13:30-14:30 | Room 2

CIS **Industry Sponsored Lunch Symposium**
(see page 77)

13:30-14:30 | Room B

CIS **Industry Sponsored Lunch Symposium**
(see page 78)

13:30-14:30 | Room 4

CIS **Industry Sponsored Lunch Symposium**
(see page 79)

14:40-15:20 | Room 2

KN **De Laey EVER Keynote Lecture**

Accurate identification of vision- and life-threatening neuro-ophthalmic conditions can be difficult, especially in atypical situations, or when complex diagnostic procedures are not readily available. In order to mitigate such risks, artificial intelligence-based analysis of ophthalmic images has shown great potential to effectively detect optic nerve and related brain abnormalities, on standard, affordable retinal imaging modalities. We predict that novel algorithms, alone or in combination, will be implemented in the near future in everyday situations in order to assess the probability/risk of various serious neuro-ophthalmic conditions. But beyond neuro-ophthalmic conditions, the retinas appear to deliver AI-detectable signals that are not identifiable by human eyes, enabling algorithms to discriminate neurodegenerative diseases (such as Alzheimer's diseases), or even psychiatric conditions.

- 14:40 Introduction
Patrick Yu-Wai-Man (*United Kingdom*)
- 14:45 Can algorithms automatically detect brain diseases in the retinas?
Dan Milea (*France*)
- 15:15 Discussion

**15:20-15:50 | Coffee break****15:50-16:50 | Poster Area**

POS **Poster Session 1**
(see page 50)

16:50-18:05 | Room 2

 SIS LC 59 - Restoration of accommodation

The restoration of accommodation in the pseudophakic eye is still regarded one of the last remaining frontiers in ophthalmology. Decades of principal and applied research resulted in numerous concepts from lens regeneration and lens refilling to electro-optical solutions. Most concepts failed in clinical trials due to a lack of predictability of the refractive outcome or a lack of accommodation in the long term. Additional factors that prevented successful clinical application were lack of usability in terms of requirement for a large incision, bulky implant, and/or generally complicated implantation compared to standard IOLs. Factors preventing commercial success from the manufacturers point of view is a complex production resulting in non-competitive price. We give an overview on the principles and historic and current concepts of accommodative intraocular lenses and lens regeneration and discuss the challenges associated with accommodative IOLs from the regulatory and clinical perspective.

Organizer: **Timo Eppig** (Germany)

Co-organizer: **Justin Christopher D'Antin** (Spain)

16:50 History and principles of accommodative intraocular lenses
Timo Eppig (Germany)

17:03 Lens refilling and lens regeneration
Justin Christopher D'Antin (Spain)

17:16 Experience with the Phaco-Ersatz System
Rafael I. Barraquer (Spain)

17:29 Challenges associated with accommodative systems
Timo Eppig (Germany)

17:42 Experience with the lumina accommodative IOL
Jens Schrecker (Germany)

17:55 Discussion

16:50-18:05 | Room B

 NSPH 66 - Decoding the scientific headline in ocular neurobiology

In a world where scientific communication is crucial for the dissemination and impact of research, transforming complex findings into accessible messages without compromising accuracy is a challenge. Recognizing this need and building upon the success and excellent feedback of the 'Improve the impact of your eye research with storytelling' session at the last EVER meeting, this proposal outlines the next phase to strengthen our research communication. This hands-on course is designed for researchers in ocular neurobiology who seek to improve their ability to communicate discoveries clearly and effectively. Through interactive exercises, participants will analyze how the media presents science and learn to identify the key elements that ensure information shared with society is both useful and accurate, avoiding misinformation and misconceptions. The course will focus on specific examples from ocular neurobiology, from neural plasticity in the visual system to the effects of light on the retina, emphasizing the importance of precise yet accessible language in scientific outreach. By the end of the course, attendees will have gained tools to better communicate their research, minimizing distortions and fostering a more effective dialogue with the media and the general public.

Organizer: **Victor Meseguer** (Spain)

Co-organizer: **Ariadna Diaz-Tahoces** (Spain)

16:50 Understanding the media ecosystem for better scientific communication
Angeles Gallar (Spain)

17:11 Strategies for clear and accurate scientific communication
Victor Meseguer (Spain)

17:32 The challenge of communicating science in ocular neurobiology
Ariadna Diaz-Tahoces (Spain)

17:53 Discussion

16:50-18:05 | Hall 3A

**Rapid Fire 4 - MBGE**Moderators: **Michael Backlund** (Finland), **Rafaela Garrido-Mercado** (Spain)Evaluators: **Joni Turunen** (Finland), **Baptiste Wilmet** (France)

- 153 T013 Myopia in football player: influence of outdoors activities measured by conjunctival ultraviolet autofluorescence biomarker
Sergio Recalde, Alejandro Güemes, Maria Hernandez, María Fraga de la Viesca, Miriam De la Puente, Cristina Irigoyen, Jaione Bezunartea, Maite Moreno Orduña, Manuel Saenz de Viteri, Jesús Barrio, Valentina Bilbao, Jorge Gonzalez-Zamora, Alfredo García Layana (Spain)
- 160 T014 Deep learning-based morphometry of the human orbit using MRI data from the German NAKO study
Navid Farassat¹, Kevin Wornath¹, Moises Fuentes¹, Marco Reiser¹, Susanne Rospleszcz¹, Javier Rodriguez-Zabala², Daniel Böhringer¹, Christopher Schlett¹, Wolf Lagrèze¹ (¹Germany, ²Colombia)
- 401 T021 Identification of a novel gene defect, EGFLAM, underlying complete congenital stationary night blindness and high myopia
Sanja Boranijasevic¹, Julien Navarro¹, Christel Condroyer¹, Lonneke Hear-Wigman², Aline Antonio¹, Dhaenens Claire-Marie¹, Sahel José-Alain^{1,3}, Ingeborgh van den Born², Martha Tjon-Fo-Sang², Sabine Defoort¹, Vasily Smirnov¹, Isabelle Audo¹, Christina Zeitz¹ (¹France, ²The Netherlands, ³USA)
- 470 T027 Investigation of factors promoting corneal wound healing
Anna Pacwa, Bartosz Machna, Klaudia Mroz, Anna Gasiorek, Monika Katan, Maciej Oseka, Joanna Lewin-Kowalik, Adrian Smedowski (Poland)
- 511 T029 Knobloch syndrome presenting with polymicrogyria and shallow anterior chamber: a case report
João Castro Cabanas, Pedro Martins, Carolina Madeira (Portugal)
- 520 T030 Sphingolipids plasma profile in keratoconus patients
Uxía Regueiro, Maite López-López, Tania Alvite-Piñeiro, Alberto Ouro, Isabel Lema (Spain)
- 523 T031 Near-infrared light-responsive retinal implants regulate neurotrophic gene expression in primary hippocampal neurons
Şeyma Nur Yaman, Uğur Berkay Çalışkan, Humeysra Nur Kaleli, Tarık Safa Kaya, Murat Hasanreisioğlu, Sedat Nizamoğlu (Türkiye)
- 546 T032 The effects of long-term work in mesopic environments and lifestyle risk factors on the prevalence of myopia in adults
Rafaela Garrido-Mercado¹, Olavi Pärssinen², Jesús Carballo-Álvarez¹, Maria Garcia Montero¹, Maria Cinta Puell Marin¹ (¹Spain, ²Finland)
- 631 T035 Descriptive analysis of a Danish eye and vision cohort using the deep learning tool automorph for retinal vasculature assessment
Hande Coskun, Marcel Reimann, Jeppe Samuelsen, Miriam Kolko (Denmark)
- 644 T036 Transcriptional profiling of NLRP3 inflammasome- activated monocytes from keratitis fugax hereditaria
Sabita Kawan, Pau Costa, Michael Backlund, Annamari Immonen, Helena Kilpinen, Olli Pietiläinen, Tero Kivelä, Joni Turunen (Finland)

16:50-18:05 | Hall 3.1

**Rapid Fire 5 - NSPH**Evaluators: **Huban Atilla** (Türkiye), **Patrick Yu-Wai-Man** (United Kingdom)Moderator: **Thomas Klopstock** (Germany), **Chiara La Morgia** (Italy)

- 127 T047 The role of astigmatism in myopia, its progression and management: a scoping review
Stephanie Kearney¹, **Rakhee Shah^{2,3}** (¹United Kingdom, ²The Netherlands)
- 189 T053 Efficacy of lenadogene nolparvovec gene therapy versus idebenone: a matched adjusted indirect comparison
Valérie Biousse¹, **Patrick Yu-Wai-Man²**, **Nancy Newman¹**, **Valerio Carelli³**, **Adeline Pierache⁴**, **François Montestruc⁴**, **Magali Taiel⁴**, **José-Alain Sahel¹** (¹USA, ²United Kingdom, ³Italy, ⁴France)
- 201 T054 Atropine and spectacle lens combination treatment (ASPECT): 24-month interim results of a randomised controlled trial for myopia control
Noemi Guemes Villahoz¹, **Paula Talavera-Gonzalez¹**, **Paloma Porras-Angel¹**, **Rafael Bella-Gala¹**, **Alicia Ruiz-Pomeda¹**, **Beatriz Martín García¹**, **Elena Hernandez-Garcia¹**, **C Nunila Gomez-De-Liano¹**, **Rakhee Shah²**, **Julian Garcia Feijoo¹**, **Rosario Gomez-De-Liano¹** (¹Spain, ²The Netherlands, / United Kingdom)
- 208 T056 Choroidal thickness changes in myopic children using combination treatment of atropine eyedrops and defocus incorporated multiple segments (DIMS) spectacle lenses
Noemi Guemes Villahoz¹, **Paula Talavera-Gonzalez¹**, **Paloma Porras-Angel¹**, **Alicia Ruiz-Pomeda¹**, **Rafael Bella-Gala¹**, **Elena Hernandez-Garcia¹**, **Beatriz Martín García¹**, **C Nunila Gomez-De-Liano¹**, **Rakhee Shah²**, **Julian Garcia Feijoo¹**, **Rosario Gomez-De-Liano¹** (¹Spain, ²The Netherlands, / United Kingdom)
- 226 T058 Characterising spontaneous retinal venous pulsations in patients with idiopathic intracranial hypertension
Mojtaba Golzan¹, **Solmaz Bastani¹**, **Ashish Agar¹**, **Mitchell Lawlor¹**, **Sheng Chiong Hong²**, **Renoh Chalakkal²**, **Clare Fraser¹** (¹Australia, ²New Zealand)
- 271 T062 Lenadogene nolparvovec gene therapy for leber hereditary optic neuropathy in the real-life setting
Chiara La Morgia¹, **Catherine Vignal-Clermont²**, **Valerio Carelli¹**, **Patrick Yu-Wai-Man³**, **Mark Moster⁴**, **Robert Sergott⁴**, **Sarah Thornton⁴**, **Sean Donahue⁴**, **Hélène Dollfus²**, **Thomas Klopstock⁵**, **Vasily Smirnov²**, **Catherine Cochard²**, **Marie-Benedicte Rougier²**, **Pierre Lebranchu²**, **Caroline Froment²**, **Frederic Pollet-Villard²**, **Claudia Prospero-Ponce⁴**, **Francis Munier⁶**, **Magali Taiel²**, **José-Alain Sahel⁴** (¹Italy, ²France, ³United Kingdom, ⁴Germany, ⁵Switzerland)
- 274 T063 The onset of photophobia: impact of acute bright light exposure on cellular and molecular changes from the retina to the brain
Jiayi Zhang, **Jian Huang**, **Reboussin Elodie**, **Laurence Bourgeois**, **Stéphane Mélik Parsadaniantz**, **Réaux-Le Goazigo Annabelle** (France)
- 275 T064 Indirect comparison of lenadogene nolparvovec gene therapy versus natural history in patients with m.11778G>A MT-ND4 leber hereditary optic neuropathy
Patrick Yu-Wai-Man¹, **Nancy Newman²**, **Mark Moster²**, **Valerio Carelli³**, **Valérie Biousse²**, **Prem Subramanian²**, **Catherine Vignal-Clermont⁴**, **An-Guor Wang⁵**, **Sean Donahue²**, **Bart Leroy⁶**, **Robert Sergott²**, **Thomas Klopstock⁷**, **Alfredo Sadun²**, **Gema Rebolledo Fernandez⁸**, **Bart Chwalisz²**, **Rudrani Banik²**, **Magali Taiel⁴**, **José-Alain Sahel²** (¹United Kingdom, ²USA, ³Italy, ⁴France, ⁵Taiwan, ⁶Belgium, ⁷Germany, ⁸Spain)
- 342 T067 Machine learning analysis of visual field progression for dominant optic atrophy-OPA1
Catarina Coutinho, **Ferdinando Zanchetta**, **Michele Carbonelli**, **Marco Battista**, **Alice Galzignato**, **Chiara La Morgia**, **Giulia Amore**, **Martina Romagnoli**, **Luigi Brotto**, **Paolo Nucci**, **Leonardo Caporali**, **Francesco Bandello**, **Valerio Carelli**, **Maria Lucia Cascavilla**, **Rita Fioresi**, **Piero Barboni** (Italy)

16:50-18:05 | Hall 3.1

**Rapid Fire 5 - NSPH (cont.)**

- 609 T084 Disease severity at baseline in Leber hereditary optic neuropathy patients from the Case Record Survey-2 with simultaneous versus sequential bilateral vision loss
Thomas Klopstock¹, Bart Leroy², Patrick Yu-Wai-Man³, Judith van Everdingen⁴, Maciej Krawczynski⁵, Valerio Carelli⁶, Xavier Llòria⁶ (¹Germany, ²Belgium, ³United Kingdom, ⁴The Netherlands, ⁵Poland, ⁶Italy)
- 645 T090 Impact of prematurity on ocular biometry and refractive development during the first years of life
Merve Mutlu, Burcin Cakir (Türkiye)

16:50-18:05 | Hall 3.2

**RV 53 - Management of geographic atrophy between AI-assisted multimodal imaging and function**

This course provides a comprehensive approach to managing geographic atrophy (GA) secondary to age-related macular degeneration (AMD) by integrating advanced imaging, artificial intelligence (AI), and functional assessment. Participants will first explore the latest multimodal imaging techniques to enhance detection and monitoring of GA progression. The focus then shifts to the role of AI in quantifying lesion characteristics, tracking changes over time, and predicting disease trajectory. By leveraging AI-driven analysis, clinicians can gain deeper insights into GA evolution and refine monitoring strategies. Finally, the course examines how structural biomarkers correlate with functional vision loss including microperimetry, addressing the impact on patient quality of life and visual performance. Understanding these connections will allow for improved clinical decision-making, patient counseling, and future therapeutic strategies. This program equips clinicians with essential tools to optimize GA management.

Organizer: **Gregor Reiter** (Austria)

Co-organizer: **Enrico Borrelli** (Italy)

- 16:50 Multimodal Imaging assessment of GA
Enrico Borrelli (Italy)
- 17:06 Beyond the macula: the role of UWF imaging in geographic atrophy
Daniela Bacherini (Italy)
- 17:22 Artificial intelligence to assess GA lesions and progression
Ambresin Aude (Switzerland)
- 17:38 Linking structure to function in GA
Gregor Reiter (Austria)
- 17:54 Discussion

16:50-18:05 | Room 4

 EOVS 54 - Vision beyond just visual acuity

With the identification of novel targets, the number of interventional clinical trials in ophthalmology has increased. Visual acuity has for a long time been considered the gold standard endpoint for clinical trials, but in the recent years it became evident that other endpoints are required for many indications including geographic atrophy and inherited retinal diseases. Numerous potential surrogate endpoints have been proposed, but their validation remains a complex challenge, requiring robust scientific evidence. In this symposium, we provide an overview of promising clinical endpoints in ophthalmology, with a particular focus on retinal diseases. We explore functional and structural biomarkers, as well as quality of life measures, and critically assess their potential as endpoints in pivotal trials. This highly interdisciplinary symposium brings together leading experts from ophthalmology (Scholl), engineering (Ghezzi), and neuroscience (Herzog). It features clinical findings from large-scale studies in age-related macular degeneration (AMD) and inherited retinal diseases (Scholl), advancements in neuroprostheses (Ghezzi), and extensive visual testing and statistical analysis in both patients and healthy controls (Herzog).

Organizer: **Michael Herzog** (Switzerland)

Co-organizer: **Hendrik Scholl** (Austria)

16:50 Beyond classic visual testing
Michael Herzog (Switzerland)

17:11 Outcome measures to prove functional benefit of changes in retinal imaging
Hendrik Scholl (Austria)

17:32 Testing behavioral end-points in naturalistic mazes using virtual and augmented reality
Diego Ghezzi (Switzerland)

17:53 Discussion

18:05-18:50 | Welcome Reception

08:30-09:15 | Room 2

KN Soubrane EVER Keynote Lecture

The retinal pigment epithelium (RPE) supports photoreceptors through key functions like outer segment phagocytosis and visual pigment replenishment. Regional differences in RPE sensitivity are implicated in diseases such as age-related macular degeneration (AMD) and choroideremia. However, most in vitro and animal models lack proper macular regions, limiting their disease modeling accuracy. This study aims to generate iPSC-derived macular and mid-peripheral RPE to better model regional RPE degeneration. Using AI-based software (RESHAPE), we identified five RPE subpopulations, with P1 representing macular RPE and P3 representing mid-peripheral RPE. We screened 115 developmental pathway-targeting compounds to generate macular and mid-peripheral RPE from iPSCs. The RPE subtypes were assessed through morphology, barrier function, RNA sequencing, metabolism, and complement-induced stress assays. Macular iPSC-RPE displayed sheet-like apical processes, supported cones, relied on glycolysis, and showed higher AMD-like sensitivity. Mid-peripheral iPSC-RPE exhibited finger-like apical processes, supported rods, used oxidative phosphorylation, and were more resilient to stress. This model provides a more physiologically relevant platform for studying retinal diseases, drug screening, and targeted cell replacement therapies.

08:30 Introduction
Lyubomyr Lytvynchuk (Germany)

08:35 Macular iPSC derived RPE reproduces regional sensitivity to AMD
Kapil Bharti (USA)

09:05 Discussion



09:20-10:35 | Room 2

YI Young Investigators Session 1

Moderator: **Andrzej Grzybowski** (Poland), **Christina Zeitz** (France)

- 99 T001 Comparative study of the ciliary body in mice and humans: new structural and vascular insights
Patricia Jaramillo, Ana Carretero, David Ramos González, Jesús Ruberte (Spain)
- 569 F049 Contribution of voltage-gated sodium and calcium channels to the excitability of menthol-sensitive corneal nerve terminals in mice
Fernando Aleixandre-Carrera, Almudena Iñigo-Portugués, M Carmen Acosta, Juana Gallar, Victor Meseguer (Spain)
- 587 F054 Comparative evaluation of corneal and epithelial thickness measurements using spectral-domain and swept-source anterior segment optical coherence tomography in eyes with keratoconus
Mirza Karamovic, Marika Wahlberg Ramsay, Branka Samolov, Abinaya Venkataraman, Alberto Dominguez-Vicent (Sweden)
- 268 S008 The relationship between the cellular retinal structure measured with adaptive optics scanning laser ophthalmoscope and retinal function measured with multifocal electroretinogram in late-onset retinal degeneration
Stephanie Quinn, Penny Lawton, Andrew Browning, Laura Young (United Kingdom)
- 564 F095 Short-term high-dose nicotinamide treatment across glaucoma subtypes reveals increased mitochondrial DNA content and minimal metabolomic changes in blood
Simon Gustavsson¹, Antoni Vallbona Garcia², James Tribble¹, Pete Williams¹, Gauti Johannesson¹, Theo Gorgels², Birke Benedikter², Hubert Smeets², Patrick Lindsey², Carroll Webers² (¹Sweden, ²The Netherlands)
- 633 F100 Regional disparities in glaucoma diagnosis and surgery in Denmark: urgent need for increased resources
Jeppe Samuelson, Christina Eckmann-Hansen, Kim Holmgaard, Hadi Kjaerbo, Miriam Kolko (Denmark)
- 191 T003 Optical coherence tomography biomarkers in Vogt-Koyanagi-Harada disease: a longitudinal analysis of choroidal vascularity index and choroid thickness
Vasco Lobo, Afonso Lima-Cabrita, Rafael Whitfield, Filomena Pinto, Sofia Mano, Ines Leal (Portugal)
- 348 F116 Quantitative cataract grading based on blue-light autofluorescence confocal imaging
Alessandro Arrigo, Emanuela Aragona, Francesco Bandello (Italy)



09:20-10:35 | Room B



NSPH 50 - Optic neuropathies - from mechanisms to therapies

Optic neuropathies encompass a diverse group of disorders affecting the retinal ganglion cells and the optic nerve, often leading to irreversible vision loss. Recent advances in genetics, molecular biology, and neuroprotection are transforming our understanding of these conditions and paving the way for novel therapeutic approaches. This symposium will bring together leading experts to explore the latest breakthroughs, from disease mechanisms to innovative interventions. The session will begin with an overview of the expanding genetic landscape of inherited optic neuropathies, highlighting newly identified mutations and their implications for diagnosis and treatment. Next, we will examine how retinal ganglion cells serve as early biomarkers of metabolic and mitochondrial dysfunction in LRRK2 Parkinsonian models, offering insights into neurodegenerative disease intersections. We will then present an update on OPA1 rescue by trans-splicing, a promising strategy to restore mitochondrial function in dominant optic atrophy. Finally, we will introduce the mitoVISION-IQ, a novel tool designed to measure quality of life in clinical trials for inherited optic neuropathies, ensuring that patient-centered outcomes remain at the forefront of therapeutic development. This session will provide a comprehensive view of cutting-edge research in optic neuropathies, bridging fundamental mechanisms with translational and clinical advances.

Organizer: **Neringa Jurkute** (*United Kingdom*)

Co-organizer: **Raoul Kanav Khanna**

09:20 The expanding genetic landscape of inherited optic neuropathies
Claudio Fiorini (*Italy*)

09:36 Use of retinal ganglion cells for early detection of metabolic and mitochondrial dysfunction in LRRK2 Parkinsonian models
Gloria Cimaglia (*United Kingdom*)

09:52 OPA1 rescue by trans-splicing – an update
Aymane Bouzidi (*France*)

10:08 Developing the mitoVISION-IQ for measuring quality of life in clinical trials of inherited optic neuropathies
Benson Chen (*United Kingdom*)

10:24 Discussion

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09:20-10:35 | Hall 3A



Rapid Fire 6 - LC

Moderators: **Mohamed Geneid** (Finland), **Wiktor Stopyra** (Poland)

Evaluators: **Rafael I. Barraquer** (Spain), **Justin Christopher D'Antin** (Spain)

- | | | |
|-----|------|---|
| 77 | F108 | Refractive errors after cataract surgery
Rym Maamouri, Molka Ferchichi, Riahi Souhir, Aouni Jaafer, Monia Cheour (Tunisia) |
| 79 | F109 | Comparison of corneal power assessment methods for true corneal power after myopic small-incision lenticule extraction
Xiaoling Fang, Jiannan Huang, Leilei Wang, Wenwen Xue, Xia Chen (China) |
| 93 | F110 | Accuracy of twenty intraocular lens power calculation formulas in long eyes
Wiktor Stopyra¹, Oleksiy Voytsekhivskyy², Andrzej Grzybowski¹ (¹ Poland, ² Ukraine) |
| 105 | F112 | Ophthalmological manifestations and visual outcomes of electrical and lightning trauma: a systematic review
Maria Piedrahita, Felipe Pineda, Felipe Moreno, Maria Estevez, Nicolas España, Viviana Infante, Germán Mejía-Salgado, Carlos Cifuentes, Diana Rey, Laura Rodriguez-Camelo, Alejandra de-la-Torre (Colombia) |
| 256 | F114 | Influence of axial length on target refraction after intraocular lens implantation in children under 2 years of age
Alejandro Alcaide Costa, Eva Calpe, Gemma Julio, Rafael Barraquer, Javier Perez (Spain) |
| 301 | F115 | Systemic medications associate with cataract surgery in patients over 50 years
Sirpa Loukovaara, Antti Riikonen, Tuomas Lilius, Jari Haukka (Finland) |
| 494 | F117 | Historical overview of the studies about epidemiology of myopia
Olavi Pärssinen (Finland) |
| 516 | F119 | Impact of cataract surgery on scotopic and photopic mydriasis
Inês Mendo, Mariana Vaz, João Vaz, Filipe Moraes, Inês Machado, Tomas Loureiro, Nuno Campos (Portugal) |

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09:20-10:35 | Hall 3.1

RF **Rapid Fire 7 - G**

Moderators: **Noemi Guemes Villahoz** (Spain), **Bernardo Monteiro** (Portugal)

Evaluator: **Barbara Cvenkel** (Slovenia), **Miriam Kolko** (Denmark)

- 164 F069 Galectin-3 is associated with Müller cells in glaucoma
Anne Rombaut, Alan Nicol, Rune Brautaset, Pete Williams, James Tribble (Sweden)
- 182 F070 Evaluation of synthetically generated optical coherence tomography images
Damon Wong¹, Ashish Jith¹, Jacqueline Chua¹, Leopold Schmetterer^{1,2} (¹Singapore, ²Austria)
- 207 F071 Proteomics analyses of ocular small extracellular vesicles in glaucoma
Ana Guzman Aranguez, Raquel Rejas-Gonzalez, Ana Montero-Calle, Rodrigo Bardenas, Natalia Pastora Salvador, Maria José Crespo Carballes, Juan Snachez-Naves (Spain)
- 238 F073 Impact of preserved and preservative-free latanoprost eye drops on calcium regulation in conjunctival goblet cells
Umalbann Alnoor¹, Jeffrey A. Bair², Steffen Heegaard¹, Miriam Kolko¹ (¹Denmark, ²USA)
- 270 F075 Tolerability of preservative-free latanoprost/timolol fixed combination versus preserved bimatoprost/timolol in patients with open-angle glaucoma or ocular hypertension - The AdEQUATE study
Julian Garcia Feijoo¹, Leopold Schmetterer^{2,3}, Noemi Guemes¹ (¹Spain, ²Singapore, ³Austria)
- 325 F076 A clinical evaluation of a virtual reality headset-based visual field test compared to standard automated perimetry in healthy volunteers and glaucoma patients
Maribel Espinosa-Cabrera (United Kingdom)
- 351 F080 How short is too short? Evaluating postoperative survival after glaucoma surgery in a real-world cohort
Bernardo Monteiro, Rafael Whitfield, Vasco Lobo, Emanuel Fernandes, Dina Costa, Nuno Amaro, Miguel Santos, André Diogo Barata, Rafael Correia Barão, Luis Abegão Pinto (Portugal)
- 431 F082 Exploring the associations of self-reported glaucoma and physical activity: findings from a danish eye and vision cohort - Project FOREVER
Thao Tran, Jens Rovelt Andreasen, Josefine Freiberg, Christina Eckmann-Hansen, Miriam Kolko (Denmark)
- 450 F083 Sigma-1 receptor activation represents a novel therapeutic strategy for ocular hypertension
Judit Hodrea¹, Timea Medveczki¹, Tamas Lakat¹, Minh Tran¹, Akos Toth¹, Anna Takacs-Nagy¹, Gyorgy Torok¹, Szabo Attila¹, Illes Kovacs^{1,1}, Dr. Fekete Andrea^{1,2} (¹Hungary, ²USA)
- 455 F086 Challenges in glaucoma diagnosis: agreement in clinical diagnosis and deep learning glaucoma screening
Joana Pargana¹, Afonso Lima-Cabrera¹, Rafael Whitfield¹, Vasco Lobo¹, Bernardo Monteiro¹, Sanna Leinonen², Ana Miguel³, Marta Pazos⁴, Panayiota Founti⁵, Rafael Correia Barão¹, Ingeborg Stalmans⁶, Luis Abegão Pinto¹ (¹Portugal, ²Finland, ³France, ⁴Spain, ⁵United Kingdom, ⁶Belgium)
- 642 F101 Ensuring reliable glaucoma detection with deep learning: the critical role of calibration and evaluation practices
Marcel Reimann, Peter Tejlgaard Kampen, Josefine Vilsbøll Sundgaard, Miriam Kolko Anders Bjorholm Dahl (Denmark)

09:20-10:35 | Hall 3.2

**RV 58 - Retinal fibrosis: molecular mechanisms and emerging therapeutic strategies**

Retinal fibrosis is a major clinical challenge that contributes to vision loss in several retinal diseases, including diabetic retinopathy, age-related macular degeneration (AMD), retinopathy of prematurity, and proliferative vitreoretinopathy. Current therapeutic approaches remain largely ineffective, likely due to a limited understanding of the molecular and cellular mechanisms underlying fibrosis in the retina. This symposium will foster innovative discussion through bringing together experts in retinal cell biology, fibrosis, and translational research to discuss recent advances in understanding the pathophysiology of retinal fibrosis and explore innovative therapeutic strategies. Symposium Objectives: to discuss the molecular and cellular mechanisms of retinal fibrosis; to discuss emerging therapeutic strategies for preventing or treating fibrosis; to foster collaboration between researchers, and clinicians in the field of retinal diseases.

Organizer: **Mohamed AL-Shabrawey** (USA)Co-organizer: **Manuela Bartoli** (USA)

- 09:20 Bone morphogenetic protein signalling and retinal fibrosis
Mohamed AL-Shabrawey (USA)
- 09:3 MicroRNA-21 (miR-21) as a new player in retinal fibrosis
Manuela Bartoli (USA)
- 09:46 A novel approach to target EMT and MMT in retinal fibrosis
Mei Chen (Ireland)
- 09:59 Cellular and molecular tracing of myofibroblast origins in the choroidal neovascularization model of age-related macular degeneration
Katia Corano Scheri (USA)
- 10:12 Role of inflammation in subretinal fibrosis secondary to nAMD
Heping Xu (China)
- 10:25 Discussion

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09:20-12:05 | Room 4



EVER-CORONIS Foundation - Ocular surface innervation disorders

In the past, the role of sensory nerves in ocular surface disorders received little attention in ophthalmology. However, growing awareness of eye discomfort and pain, especially in common ocular surface conditions and following modern anterior segment surgeries, has shifted this view over the last few decades. An important function of corneal nerves is the trophic maintenance of ocular tissues, which is particularly impaired in diabetes. There is now growing evidence highlighting the essential interaction between peripheral sensory nerves and ocular tissues, along with a dynamic relationship between the nervous and immune systems, which can become dysregulated in disease. The 2025 Coronis Ocular Surface Biennial Symposium will begin with a plenary lecture and the presentation of the Endre A. Balazs Medal to Professor Reza Dana, in recognition of his significant contributions to our understanding of the influence of corneal nerves on immune, epithelial, and endothelial function. The program will continue with expert presentations on advances in ocular surface regeneration, the diagnosis and treatment of neuropathic ocular pain, and the role of corneal nerves in dry eye disease and viral keratitis.

Chairman: **Jesús Merayo Lloves** (Spain)

- 09:20 Introductory remarks
Jesús Merayo Lloves (Spain)
- 09:25 Presentation of the Endre A. Balazs Medal 2025 to Professor Reza Dana
Wolfgang Müller-Lierheim (President of the CORONIS Foundation)
- 09:30 Endre A. Balazs Prize Lecture
Corneal nerves and the regulation of immunity, epithelial, and endothelial function
Reza Dana (USA)
- 10:10 Regeneration of the ocular surface with plasma rich in growth factors
Jesús Merayo Lloves (Spain)
- 10:35 Coffee break
- 11:05 Diagnosis and management of neuropathic ocular pain
Pedram Hamrah (USA)
- 11:20 Corneal nerve involvement in dry eye disease
Victor Perez Quinones (USA)
- 11:35 Corneal nerve involvement in viral keratitis
Paolo Rama (Italy)
- 11:50 Closing remarks
Jesús Merayo Lloves (Spain)

10:35-11:05 | Coffee break

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11:05-12:05 | Poster Area

POS **Poster Session 2**
(see page 59)

12:10-12:55 | Room 2

KN **European Ophthalmic Heritage Lecture**

The eye and the brain are considered to display “immune privilege” (IP), a term that was introduced to explain why corneal allografts were accepted but skin allografts were rejected. Similar allografts to the brain and to the anterior chamber of the eye had previously been shown not to be rejected. Over time, the concept was extended to consider the CNS as a privileged site to all foreign antigens but the evidence that the CNS provides a privileged environment for infectious agents has been less strong. The tissue environment plays a role in determining the outcome of the host-microbe interaction. The CNS (the brain parenchyma and the retina) has a tightly regulated immune response, mediated mainly through parenchymal microglia and perivascular macrophages. In contrast, the CNS border tissues (leptomeninges, uveal tract) both house a sizeable complement of resident immune cells which maintain homeostasis and act as “guardians” of immunity in CNS. The AIDS epidemic revealed how defective immunity led to the emergence of opportunistic CNS infections in immunodeficient individuals, suggesting that in immunocompetent individuals these organisms persist as latent infections. A relationship between latent CNS infection and CNS immunity (IP) may exist and possible mechanisms are discussed.

12:10 Introduction
Jarmila Heissigerova (Czech Republic)

12:15 Infection control in the CNS
John Forrester (United Kingdom)

12:45 Discussion



13:05-14:05 | Room B

CIS **Industry Sponsored Lunch Symposium**
(see page 80)

13:05-14:05 | Room 4

CIS **Industry Sponsored Lunch Symposium**
(see page 81)

Moderator: **Andrzej Grzybowski** (Poland), **Christina Zeitz** (France)

- 309 T017 Identification and functional validation of a novel disease-causing variant in the non-coding region of NYX
Filip Spanic, Michiels Christelle, Julien Navarro, Aline Antonio, Christel Condroyer, Sylvie Berthémy-Pellet, Isabelle Audo, Christina Zeitz (France)
- 499 T076 Late-onset Leber hereditary neuropathy: study in a large Italian cohort
Marco Battista, Michele Carbonelli, Luigi Brotto, Giulia Amore, Catarina Coutinho, Martina Romagnoli, Alice Galzignato, Paolo Nucci, Leonardo Caporali, Maria Lucia Cascavilla, Claudio Fiorini, Chiara La Morgia, Valerio Carelli, Piero Barboni (Italy)
- 684 T095 Evaluation of vascular index by optical coherence tomography angiography in patients with ischemia-related paralytic strabismus
Seren Kaplan Gungordu, Burcin Cakir, Nilgun Ozkan Aksoy, Meryem Dilara Kilic (Türkiye)
- 510 S038 Extracellular vesicle therapy for sepsis-induced neurodegeneration: influence of host sex and transplant compatibility
Jhoana Abigail Guarnizo-Campoverde, Kristy Tatiana Rodríguez Ramírez, David García Bernal, Fernando Lucas-Ruiz, Jesus Isais Gil Chinchilla, Caridad Galindo-Romero, Maria José Ruiz-Pastor, Marta Agudo-Barriuso (Spain)
- 350 T102 Evaluation of tarsorrhaphy in patients undergoing parotidectomy for oncological disease: a multidisciplinary assessment
Tomaz Oliveira, Ricardo Nogueira (Portugal)
- 315 S069 Innovative automated imaging approach for quantitative analysis of retinal glial cells
Lidia Sánchez-Puebla, Miguel A. Sánchez-Puebla, Ana Granados, Valentín Moreno, Ana Isabel Ramírez, Jose Manuel Ramirez, Juan Llorens, Inés López-Cuenca (Spain)
- 447 S090 Evaluating the consequences of appointment delays on AMD progression at the Western Eye Hospital during the COVID-19 lockdown
Inés López-Cuenca¹, Lorenzo Fabozzi², Saad Younis², Ahmad Ali², Francesca Cordeiro² (¹Spain, ²United Kingdom)

14:15-15:30 | Room B

**NSPH 89 - Genetic factors and clinical manifestations in developmental eye disorders: the current state and future directions**

Over the past 25 years, we have collected a cohort of over 1,000 genetically unexplained families affected with pediatric ocular disorders including early-onset cataract or glaucoma, aniridia/iris hypoplasia, corneal opacities, Axenfeld-Rieger anomaly, complex microphthalmia, and other developmental phenotypes. Through targeted gene sequencing, copy number variation analysis, and exome/genome sequencing in families affected with these disorders, we successfully identified a genetic etiology for ~50% of these families, with varying success rate for specific phenotypes. These studies identified multiple novel genes previously not associated with human disease as well as uncovered novel disease mechanisms or phenotypic extensions for known factors. However, our knowledge regarding the genetic factors involved in developmental ocular phenotypes remains incomplete and we are diligently working to identify new causes, through cutting-edge analyses of sequencing data, functional studies in zebrafish, human cell culture, and iPSC-derived disease models. This presentation will include discussion of novel approaches and exciting new candidates to explain additional families with a broad range of developmental ocular phenotypes with different clinical manifestations.

Organizer: **Elena Semina** (USA)Co-organizer: **Huban Atilla** (Türkiye)

- 14:15 Genetic factors in developmental eye disorders
Elena Semina (USA)
- 14:36 Developmental eye disorders as rare diseases
Dominique Bremond-Gignac (France)
- 14:57 Clinical manifestation of developmental eye disorders
Huban Atilla (Türkiye)
- 15:18 Discussion

FRIDAY
10 OCTOBER 2025



14:15-15:30 | Hall 3A

RF Rapid Fire 8 - COS

Moderators: **Adrian Smedowski** (Poland), **Michele Madigan** (Australia)

Evaluators: **Giulio Ferrari** (Italy), **Zisis Gkatzoufas** (Switzerland)

- 562 F046 Preoperative ocular surface inflammation in corneal transplant candidates: role of HLA-DR expression
Silvia Odorici, Carmen Ciavarella, Michele Potenza, Daniela Pollutri, Antonio Moramarco, Luigi Fontana, Piera Versura (Italy)
- 146 F009 Effects of DFL24498 on proinflammatory innate and adaptive immune cell responses in vitro and in a translational murine model of atopic keratoconjunctivitis
Marta Sacchetti, Anna Sirico, Maria De Lucia, Rafael Cypriano Dutra, Rubina Novelli, Giuseppina Vicaretti, Anna Lucia Valeri, Maria Concetta Dragani, Tiziana Romeo, Andrea Aramini, Marcello Allegretti (Italy)
- 225 F017 Injectable bioengineered hydrogel for the delivery of cells and extracellular vesicles to the conjunctiva
Laura García-Posadas¹, Ismael Romero-Castillo¹, Antonio López-García¹, Mark Ahearne², Yolanda Diebold¹ (¹Spain, ²Ireland)
- 312 F024 Novel artificial intelligence approaches for redness hyperemia analysis
Nico Curti, Tommaso Giacometti, Luigi Fontana, Gastone Castellani, Piera Versura (Italy)
- 535 F042 Outcomes of posterior approach ptosis repair: 5-year retrospective study at a tertiary referral center
Tiago das Neves, Joana Ferreira, Ricardo Costa-Gertrudes, Pedro Lopes, Ana Magriço (Portugal)
- 556 F045 Diesel exhaust particles exposure disrupts lipid metabolism in immortalised meibomian gland epithelial cells
Ha Duong, V Cioanca, Minh Phan, Michele Madigan, Blanka Golebiowski (Australia)
- 578 F052 Evaluation of cross-linking of donor corneas following therapeutic keratoplasty in cases of infectious keratitis
Sushma Nandyala, Aafreen Bari, Himanshu Khandelwal, Namrata Sharma (India)
- 607 F056 Clinical proteomics characterized age- and tear secretion-associated molecular changes in dry eye syndrome
Natarajan Perumal, Hao Lin, Anna Lindner, Adina Glasmacher, Bettina Multani, Caroline Manicam (Germany)
- 613 F058 Extracellular vesicles and exosomes in corneal graft integration
Grace Lin, Neethi Thathapudi, Mostafa Zamani-Roudbaraki, Marie-Claude Robert, May Griffith (Canada)
- 623 F059 Examination of the potential influence of baseline corneal fluorescein staining score on dry eye symptom improvement in patients treated with ciclosporin 0.1% cationic emulsion: analysis of data from the PERSPECTIVE study
Anita Reynolds¹, Elisabeth M. Messmer², Ines Lanzl² (¹United Kingdom, ²Germany)

FRIDAY
10 OCTOBER 2025

14:15-15:30 | Hall 3.1

**Rapid Fire 9 - RV**Moderators: **Mohamed AL-Shabrawey** (USA), **Ivan Borjan** (Croatia)Evaluators: **Maciej Gawęcki** (Poland), **Lyubomyr Lytvynchuk** (Germany)

- 124 S050 Bone morphogenetic protein signaling and retinal fibrosis
Mohamed AL-Shabrawey¹, **Sonali Sharma**¹, **Ikbāl Karkoukli**¹, **Alee Asaaf**¹, **Muhammad Haque**¹, **Gieth Alahdab**¹, **Mohamed Tarek**^{1,2}, **Yuji Mishina**¹ (¹USA, ²Egypt)
- 157 S051 Biodegradable ultrathin nanofibrous carrier for retinal tissue engineering: optical, mechanical and degradation properties
Hana Studenovska, **Mourad Souibgui**, **Jitka Nováčková**, **Vladimír Proks**, **Jiří Hodan**, **Věra Cimrová** (Czech Republic)
- 171 S052 Diabetes and diabetic retinopathy in Finland during 2000-2017 based on nationwide survey and register data
Petri Purola, **Seppo Koskinen**, **Hannu Uusitalo** (Finland)
- 206 S057 *Escherichia coli* Nissle 1917 as an adjuvant therapy reduces inflammation severity in experimental autoimmune uveitis
Klara Dusova, **Petra Prochazkova**, **Aneta Klimová**, **Monika Rova**, **Nikolina Canova**, **Jarmila Heissigerova**, **Miloslav Kverka**, **Radka Roubalova**, **Janet Jezkova**, **Michaela Brichova**, **Petra Svozilkova** (Czech Republic)
- 217 S060 Retinal vascular changes in mild cognitive impairment using SD-OCT angiography: pilot study
Lorena Elvira-Hurtado, **Inés López-Cuenca**, **Lidia Sánchez-Puebla**, **José A. Matamoros**, **José A. Fernández-Albarral**, **Mario Salas-Carrillo**, **Pedro Gil**, **Ana Isabel Ramirez**, **Juan Jose Salazar**, **Rosa De Hoz**, **Jose Manuel Ramirez**, **Elena Salobar-García** (Spain)
- 221 S061 Detecting retinal alterations in vascular dementia using OCT and OCTA
Lorena Elvira-Hurtado, **Inés López-Cuenca**, **Lidia Sánchez-Puebla**, **José Antonio Matamoros**, **José A. Fernández-Albarral**, **Mario Salas-Carrillo**, **Pedro Gil**, **Ana I. Ramirez**, **Juan Jose Salazar**, **Rosa De Hoz**, **Jose Manuel Ramirez**, **Julian Garcia Feijoo**, **Elena Salobar-García** (Spain)
- 222 S062 Evaluation of two novel riboflavin-based dyes for safe and effective vitreoretinal staining
Mario Troisi, **Ciro Caruso**, **Carmine Ostacolo**, **Ciro Costagliola** (Italy)
- 311 S068 Long-term outcomes of bilateral injection of lenadogene nolparvovec gene therapy for leber hereditary optic neuropathy
Nancy Newman¹, **Patrick Yu-Wai-Man**², **Prem Subramanian**¹, **Sarah Thornton**¹, **An-Guor Wang**³, **Sean Donahue**¹, **Bart Leroy**⁴, **Valerio Carelli**⁵, **Valérie Biousse**¹, **Catherine Vignal-Clermont**⁶, **Alfredo Sadun**¹, **Robert Sergott**¹, **Gema Rebollada Fernández**⁷, **Bart Chwalisz**¹, **Rudrani Banik**¹, **Magali Taiel**⁶, **José-Alain Sahel**¹ (¹USA, ²United Kingdom, ³Taiwan, ⁴Belgium, ⁵Italy, ⁶France, ⁷Spain)
- 364 S076 Structural, morphology and evolution study of AMD drusenoid deposits with OCT and morphology-structural software
Corinne Gonzalez (France)
- 369 S079 Randomized, controlled study to investigate the efficacy and safety of resveratrol vitamin supplements in patients with non-proliferative diabetic retinopathy without macular edema (REVOLUTION study)
Chrysa Agapitou, **Alexia Risi-Koziona**, **Eleni Dimitriou**, **Stamatios Lampsas**, **Panagiotis Theodossiadis**, **Irini Chatziralli** (Greece)
- 442 S089 Impact of ectopic internal retinal layers in postoperative outcomes of idiopathic epiretinal membrane
João Castro Cabanas, **Daniel Ferreira Cardoso**, **Pedro Martins**, **Catarina Ferreira**, **Filipe Sousa Neves**, **Miguel Bilhoto**, **Paula Sepúlveda** (Portugal)

14:15-15:30 | Hall 3.2

FP

Free Paper Session 2

Moderators: **Thibaud Garcin** (France), **Beatriz Vieira** (Portugal)

- 360 High-purity functional corneal endothelial cells from human induced pluripotent stem cells via a novel wash-out method
Kyu Sang Eah, Eun-Ah Ye, Changmin Kim, Ryun Hee Lee, Yeji Yoon, Jiyeon Park, Jae Yong Kim, Hun Lee (South Korea)
- 365 The soluble guanylate cyclase stimulator BAY 41-2272 attenuates transforming growth factor Beta 1-induced myofibroblast differentiation of human corneal keratocytes
Matilde Buzzi, Rita Mencucci, Mirko Manetti (Italy)
- 459 A meta-analysis of the efficacy of trehalose/hyaluronic acid eyedrops on dry eye signs and symptoms
Piera Versura¹, Antonio Mateo-Otobia², Alexandros Gryparis³, Foteini Zarokosta³, Chiambaretta Frédéric⁴ (¹Italy, ²Spain, ³Greece, ⁴France)
- 474 Theranostic-guided corneal cross-linking in progressive keratoconus: insights from the Siena experience
Elia Chiavetta, Mario Fruschelli, Rita Mencucci, Alberto Carnicci, Matilde Buzzi, Marco Lombardo (Italy)
- 490 Relationship between lifestyle habits and corneal biomechanics and segmental biometry in myopic eyes
Beatriz Vieira¹, Gabriel Santos¹, João Heitor Marques¹, Renato Ambrósio², Pedro Menéres¹, João Melo Beirão¹, Pedro Baptista¹ (¹Portugal, ²Brazil)
- 509 Light discomfort thresholds under different lighting conditions in healthy subjects and dry eye patients
Filippo Lixi¹, Giulia Coco¹, Claudia Corda¹, Edoardo Villani¹, Alessandra Curci¹, Carina Slidsborg², Giuseppe Giannaccare¹ (¹Italy, ²Denmark)

14:15-15:30 | Room 4

SIS

EOVS 73 - Vision requirements within demanding work environments

The content and topics of interest we put forward this year are new and reflect the continued importance and wide range of vision standards within visually demanding occupations. Visual performance can be affected by many different stimulus attributes. Vision standards set within each occupation must ensure that those applicants who pass can perform all suprathreshold, safety-critical tasks within that environment as well as normal trichromats (who have no visual / ocular disabilities). Safety cannot be compromised, but safety-critical tasks always employ suprathreshold stimuli that are well above the expected upper normal threshold limits. It is therefore also important to ensure that the standards we set do not discriminate against those applicants with mild deficiencies who are able to carry out visually demanding tasks as well as applicants with normal vision. The papers selected for presentation in this symposium focus on four key aspects of occupational vision that remain controversial.

Organizer: **John Barbur** (United Kingdom)

Co-organizer: **Marisa Rodriguez-Carmona** (United Kingdom)

- 14:15 The effects of long-term work in mesopic environments on different aspects of functional vision
Rafaela Garrido Mercado (Spain)
- 14:28 Improvements in colour vision assessment for train drivers
Marisa Rodriguez-Carmona (United Kingdom)
- 14:41 Changes in visual performance at lower light levels
John Barbur (United Kingdom)
- 14:54 Spatial vision following corneal refractive surgery - comparison with multifocal intraocular lenses
Ayşe Özpinar (Türkiye)
- 15:07 Refractive surgery in flying occupations
Frank Jakobs (Germany)
- 15:20 Discussion

15:35-16:15 | Room 2

KN Missoten EVER Keynote Lecture

As a Neurologist with an interest in visual disorders I have seen many patients affected by Occipital Lobe disorders. These range from visual loss (hemianopia and cortical blindness) through to positive symptoms and hallucinations. My career has spanned an era where advances in clinical assessment on the one hand and in basic science on the other have resulted in a vast mutually beneficial increase in knowledge. In my talk I hope to convince the EVER community of the continuing benefits to science and to patients of this approach.

- 15:35 Introduction
Marisa Rodriguez-Carmona (United Kingdom)
- 15:40 40 years with the occipital lobe
Gordon Plant (United Kingdom)
- 16:05 Discussion



16:15-16:45 | Coffee break

16:45-18:00 | Room 2

SIS LC 74 - New technologies and innovations in cataract surgery

Cataract surgery is one of the most common and successful surgical procedures performed in the world today. Although cataract surgery is already an extremely safe and effective treatment for visual restoration in patients with cataract, it is constantly evolving and improving with the aim to deliver the best possible clinical outcomes in terms of safety and visual results. In this special interest symposium, we will highlight significant advancements and innovations in cataract surgery, expanding from modern AI-assisted IOL power calculation to digital navigation-assisted implantation of toric IOLs, and from femtosecond laser-assisted cataract surgery to the latest IOL technology. The purpose of this symposium is to provide useful insights into current advancements in cataract surgery not only to novice surgeons, but also to seasoned experts, thereby improving their clinical and surgical practice.

Organizer: **Zisis Gkatzioufas** (Switzerland)
Co-organizer: **Andrzej Grzybowski** (Poland)

- 16:45 What AI can add to cataract surgery: update 2025
Andrzej Grzybowski (Poland)
- 16:58 Digital navigation-assisted implantation of toric IOLs
Zisis Gkatzioufas (Switzerland)
- 17:11 Arc stérile: a new surgical space for cataract surgery
Louis Arnould (France)
- 17:24 Evolution of IOL technologies
Mayank Nanavaty (United Kingdom)
- 17:37 Accommodating IOLs, evolution and future
Rafael I. Barraquer (Spain)
- 17:50 Discussion



16:45-18:00 | Room B



COS 27 - Neuroimmune crosstalk in the cornea: new insights into sensory and immune interactions

The concept of corneal "immune privilege" has been extensively studied since its initial conception. The cornea is endowed with a significant population of resident immune cells, whose function in ocular physiology extends beyond pathogen defence. Interactions between these immune cells and other corneal components, such as sensory nerves, appear to play a crucial role not only in inflammatory and pathological conditions but also in maintaining corneal homeostasis. In this symposium, we will discuss the latest advances in corneal neuroimmune interactions research and their potential implications for health and disease, presented by leading experts and promising early-career researchers in the field. To encourage the participation of young investigators, one presentation will be selected from the abstracts submitted by early-career researchers in the field.

Organizer: **M. Carmen Acosta** (*San Juan de Alicante*)

Co-organizer: **Laura Frutos-Rincón** (*Spain*)

- 16:45 Corneal neuropathy: cause or consequence
Reza Dana (*USA*)
- 17:01 Corneal neuroimmune interactions and pain: unraveling the complex connections
Annabelle Réaux-Le Goazigo (*France*)
- 17:17 Uncovering functional interactions between dendritic cells and sensory nerves in the healthy cornea
Laura Frutos-Rincón (*Spain*)
- 17:33 Neuroinflammation: connecting pain and inflammation
Giulio Ferrari (*Italy*)
- 17:49 Discussion

16:45-18:00 | Hall 3.A



EOVS 79 - Innovative early-age-related macular degeneration (AMD) phenotyping

The Symposium explores cutting-edge methods for early Age-Related Macular Degeneration (AMD) detection through imaging and computational analysis. The first session introduces the need for Early AMD biomarkers, emphasizing the challenges of applying traditional clinical grading schemes to Optical Coherence Tomography (OCT) images, and closing with clinical implications for early AMD screening and progression monitoring. Lisa Nivison-Smith presents RPE curvature analysis highlighting its correlation with drusen development and its potential for early AMD screening. The next talk by Thomas Peschel focuses on exact drusen masking as ground truth, comparing manual, semi-automated, and fully automated segmentation methods to enhance AMD classification and progression assessment. Marcus Wagner describes feature recognition by descriptomics as innovative early AMD phenotyping. He introduces stereology as a robust method for quantifying drusen volume, providing statistical advantages over binary segmentation. A panel discussion addresses the integration of AI and statistical models, standardization challenges, and clinical translation. The symposium fosters interdisciplinary collaboration to advance AMD phenotyping and precision medicine.

Organizer: **Franziska G. Rauscher** (*Germany*)

Co-organizer: **Marcus Wagner** (*Germany*)

- 16:45 Retinal pigment epithelium (RPE) curvature as an early AMD biomarker
Lisa Nivison-Smith (*Australia*)
- 17:03 Exact masking of drusen by desktop application for manual grading of Early-AMD lesions – Precision in AMD segmentation
Thomas Peschel (*Germany*)
- 17:21 Recognition of Early-AMD lesions in retinal OCT scans by descriptomics
Marcus Wagner (*Germany*)
- 17:39 Discussion

16:45-18:00 | Hall 3.1

**RV 77 - Saving the macula: novel aspects of pathology and treatment strategies in retinal diseases**

Macular preservation remains a critical challenge in the management of retinal diseases, where novel therapeutic strategies are rapidly evolving. This session, "Saving the Macula: Novel Aspects of Pathology and Treatment Strategies in Retinal Diseases," will explore groundbreaking approaches in gene and cell-based therapies, innovative drug delivery methods, and advancements in genetic testing for retinal disorders. Experts from leading institutions will discuss emerging treatments for age-related macular degeneration, stem cell transplantation, and vision restoration techniques. Attendees will gain insight into cutting-edge research and clinical applications, fostering a deeper understanding of how modern ophthalmology is reshaping the future of retinal disease management.

Organizer: **Lyubomyr Lytvynchuk** (Germany)

Co-organizer: **Stephen Schwartz** (USA)

- 16:45 The role for genetic testing in AMD care
Stephen Schwartz (USA)
- 16:58 Cell-based therapy of retinal disorders
Kapil Bharti (USA)
- 17:11 Developing a new delivery route for stem- and gene-based therapy of retinal diseases
Lyubomyr Lytvynchuk (Germany)
- 17:24 A model for de novo pigmentation of amelanotic retinal pigment epithelial cells for cell-based therapy
Goran Petrovski (Norway)
- 17:37 How to help patients who losing their vision: update on vision aid
Marc Levy (USA)
- 17:50 Discussion

16:45-18:00 | Hall 3.2

**MBGE 48 - Contribution of genetic and environmental factors to the development and protection of myopia**

Myopia, also called nearsightedness, is a condition in which objects in the distance are blurred. Both, genetic and environmental factors may cause this condition. Recent findings have shown that myopia is the most common ocular disorder worldwide with an increasing prevalence in the last 40 years. It is predicted that the worldwide prevalence of myopia will increase from the current 25 to 50% in the next three decades, while the prevalence already exceeds 80% in several parts of Asia. Isolated myopia is rare, which represent a non-syndromic severe myopia, which may be associated with cataract and retinal detachment that may lead to blindness. In addition, high myopia may also occur in other rare disorders, e.g. in retinal disorders like retinitis pigmentosa and congenital stationary night blindness. The aim of this symposium is to summarize the knowledge of myopia in respect to clinical aspects of myopia, the identification of candidate genes and environmental factors by genome-wide association studies and by in vivo modeling.

Organizer: **Christina Zeitz** (France)

Co-organizer: **Baptiste Wilmet** (France)

- 16:45 Myopia and OCT
Falk Schrödl (Austria)
- 17:00 Importance of phenotyping patients with myopia
Isabelle Audo (France)
- 17:15 Focus on Mendelian myopia & treatment
Virginie Verhoeven (The Netherlands)
- 17:30 Shedding light of myopia using mouse models in inherited retinal disorders
Baptiste Wilmet (France)
- 17:45 Next generation myopia control lenses concept and clinical results
Saoirse McCrann (Ireland)



16:45-18:00 | Room 4



PBP 90 - Standardization and excellence in Ophthalmology Training Across Europe: Surveys and Opportunities

Organizer: **Helena Prior Filipe** (Portugal)

Co-organizer: **Rimvydas Asoklis** (Lithuania)

16:45 Cataract / surgical training in Europe
Marcin Stopa (Poland)

17:01 ETR and EPAs in ophthalmology
Helena Prior Filipe (Portugal)

17:17 Increased mobility within training centers with EBO grants
Huban Atilla (Türkiye)

17:33 Fellowship and other post residency training: EBO surveys
Barbara Cvenkel (Slovenia)

17:49 Discussion

18:00-18:45 | Room 2



General Assembly

08:30-09:15 | Room 2

KN EVER ACTA Lecture

An overview on new diagnostics regarding ocular surface neoplasia will be discussed. This includes high resolution optical coherence tomography, in vivo confocal microscopy and high resolution UBM. Furthermore, new clinical observations along with treatment modalities for conjunctival melanoma including targeted therapy and the use of check point inhibitors for metastases will be discussed. Malignant lymphoma of the conjunctiva, clinics along with treatment modalities such as low dose radiation therapy will be discussed. Conjunctival squamous cell carcinoma will be presented with clinical signs, two different subtypes due to HPV positivity, treatment modalities and new immunotherapy.

- 08:30 Introduction
Kai Kaarniranta (Finland)
- 08:35 Current developments in the diagnosis and therapy of ocular surface neoplasias
Steffen Heegaard (Denmark)
- 09:05 Discussion



09:15-10:30 | Room 2

SIS MBGE 49 - Disease modelling in inherited retinal disorders

Measuring protein biomarkers in individual, living RP patients could help clarify the molecular and cellular factors underlying RP. We integrated microvolume liquid biopsy proteomics, single-cell transcriptomics, and artificial intelligence to examine disease mechanisms at the cell level in vivo. We refer to this approach as TEMPO (Tracing Expression of Multiple Protein Origins). Exploiting extant single-cell transcriptomic maps (scRNA seq-based) from all known ocular cell types, we traced the cellular origins of nearly 6000 proteins detected in the aqueous humor (AH). We developed AI models to assess aging of individual cell types and found accelerated molecular aging in RP. Application of TEMPO offers a precision health approach to retinal disease.

Organizer: **Christina Zeitz** (France)
Co-organizer: **Baptiste Wilmet** (France)

- 09:15 Retinal organoids to investigate retinitis pigmentosa
Olivier Goureau (France)
- 09:36 Using models of IRDs to understand disease mechanisms and test therapies
Mike Cheetham (United Kingdom)
- 10:57 Nonsense mutation in USH2A exon-13 disrupts Müller glial cell homeostasis
Rossella Valenzano (The Netherlands)
- 10:18 Discussion



09:15-10:30 | Room B



COS 75 - New technologies and innovations in corneal surgery

Corneal surgery has evolved rapidly over the last years. The introduction and refinement of lamellar transplantation techniques, as well as advancements in tissue bio-engineering and regenerative medicine have revolutionized corneal transplantation surgery. Moreover, translational research has contributed enormously towards the fabrication of artificial corneal transplants. Finally, employment of modern technology, such as the use of femtosecond laser, together with technological innovations including intraoperative optical coherence tomography or 3D head-up surgery, provided increased precision and safety, particularly in complex cases. In this special interest symposium, we provide useful insights into new technologies and innovations in corneal surgery, aiming to improve the clinical and surgical practice of both novice surgeons and seasoned experts in the field.

Organizer: **Zisis Gkatzioufas** (Switzerland)

Co-organizer: **Thomas Fuchsluger** (Germany)

- 09:15 Current approaches in corneal endothelial bioengineering
Gilles Thuret (France)
- 09:28 Artificial cornea – Where are we standing?
Thomas Fuchsluger (Germany)
- 09:41 Intraoperative OCT applications in corneal surgery
Zisis Gkatzioufas (Switzerland)
- 09:54 Femtosecond laser applications in corneal transplantation
Mohamed Elalfy (Egypt)
- 10:07 Novel surgery for acute corneal hydrops
Arne Viestenz (Germany)
- 10:20 Discussion

SATURDAY
11 OCTOBER 2025

09:15-10:30 | Hall 3A

 Women in EVER

Women in EVER is made possible by EVER's overall Programme Secretary Dr. Marta Agudo Barriuso (Instituto Murciano de Investigación Biosanitaria Pascual Parrilla, and University of Murcia, Spain). Organized by Dr. Franziska Rauscher (Leipzig University, Germany) and Dr. Rebekka Heitmar (Huddersfield University, UK), the session centers around meeting up, networking and forming new connections. Distinguished and accomplished women scientists and leading clinician experts will facilitate a round table discussion during an exciting informal get-together with EVER delegates to inspire, foster ideas, aid career decisions, connect with peers and mentors, nurture and share experience.

Come and meet **Prof. Dr. Miriam Kolko**, **Prof. Dr. Nora Szentmary**, **Dr. Caroline Manicam**, and **Prof. Dr. Jarmila Heissigerova** to hear and discuss about their career paths, their challenges and choices and the obstacles overcome.

Please join us for this exciting session!

Topics of this round table discussion and informal get-together will focus on matters close to your heart and questions raised by your interest. Please find some stimulating and thought-provoking questions under the five headings below. Multifaceted discussion may include all of the following and more!

09:15 Building an international community of women scientists and clinicians at EVER - Fostering an inclusive and diverse Scientific Community

Franziska Rauscher (Germany), **Rebekka Heitmar** (United Kingdom)

The European Association for Vision and Eye Research (EVER) is committed to fostering an international community of women scientists and clinicians in Ophthalmology and Vision Science. By promoting open dialogue and inspiring the next generation of female leaders, EVER encourages women to pursue their professional goals. Key strategies for support include being an active listener, maintaining an open mind, setting realistic goals, and taking concrete actions to empower women. Emphasizing positive life skills such as perseverance, optimism, and responsibility, while being mindful of challenges, is essential to helping women achieve success in their careers. At EVER, creating an equal and interconnected world for women in science is a shared responsibility. Our round table discussions aim to celebrate diversity and foster open exchanges of experiences. This session will focus on sharing clinical and research insights, discussing personal and professional ambitions, and facilitating informal interactions with the broader EVER community. By encouraging collaboration and dialogue, EVER promotes a supportive environment where women in Ophthalmology and Vision Science can grow and succeed, ensuring that diversity is celebrated and represented at every level of science.

09:26 Recognizing the contributions and overcoming challenges for women in ophthalmology

Miriam Kolko (Denmark)

EVER recognizes the creativity, energy, and invaluable contributions of women in Ophthalmology and Vision Science. Despite their impact, women continue to face significant challenges such as a lack of representation in leadership, patriarchal systems, and issues of sexism, racism, and economic inequality. Women also navigate the complexities of balancing career aspirations with motherhood and caregiving roles. By addressing these challenges and advocating for greater access to leadership roles and decision-making positions, EVER supports women in overcoming these barriers and advancing their careers in science and healthcare.

09:37 Advancing women's leadership in science through EVER

Nora Szentmary (Hungary)

WOMEN in EVER is dedicated to supporting the advancement of women researchers, clinicians, and academics with a focus on leadership development. Despite representing half of the global population, women make up only 33% of researchers worldwide. Gender equality is both a fundamental human right and essential for realizing human potential and achieving sustainable development. EVER is committed to creating a more equitable and connected world for women scientists. By providing the tools, opportunities, and support needed, EVER aims to prepare women for leadership roles and influence in the scientific community.

09:48 Empowering women in science at the WOMEN in EVER session

Caroline Manicam (Germany)

The WOMEN in EVER session connects early-career and established women scientists across Europe, addressing the underrepresentation of women in science by increasing visibility and support. Distinguished female scientists and clinicians will share their experiences and inspire the next generation of women in Ophthalmology and Vision Science. Empowerment strategies include fostering critical thinking, promoting collective decision-making, ensuring equal participation, and enhancing self-confidence. With only 20% of top-tier professorships held by women, gender equality is crucial not only for fairness but also for improving research quality through diverse perspectives.

09:59 "Sit at the table" - Empower women to claim their rightful place in professional settings

Jarmila Heissigerova (Czech Republic)

The WOMEN in EVER session will dedicate the final segment to examining and discussing personal narratives that illustrate the impact of internalized self-doubt on women's participation in professional environments, preventing women from claiming their rightful place in professional settings. The discussion will investigate how subtle forms of social conditioning, alongside imposter syndrome, discourage women from occupying positions of visibility and influence, contributing to the underrepresentation of women in seats of power - even in contexts where formal structural barriers have been eliminated. Increasing awareness of these internalized constraints is posited as a critical step toward empowering women to assert their presence in leadership roles and fostering the transformation of institutional cultures and claim their place at the table.



09:15-10:30 | Hall 3.1

FP

Free Paper Session 3

Moderators: **Mert Mestanoglu** (Germany), **Giuseppe Suanno** (Italy)

- 514 Deciphering the role of miRNAs derived from licensed mesenchymal stromal cells extracellular vesicle cargo in the regeneration of the corneal epithelium
Manon Jammes¹, Yedizza Rautavaara², Seyedmohammad Moosavizadeh¹, Petros Moustardas², Trung Bach¹, Abbas Tabasi¹, Jiemin Wang¹, Neil Lagali², Thomas Ritter¹ (¹Ireland, ²Sweden)
- 517 Change in central corneal thickness after descemet membrane endothelial keratoplasty in fibrillar layer positive vs. negative fuchs endothelial corneal dystrophy eyes
Mert Mestanoglu, Antonia Howaldt, Nihan Demiralay, Claus Cursiefen, Björn Bachmann, Mario Matthaei (Germany)
- 518 The impact of sex on injury-induced corneal denervation: implications for the ocular surface
Giuseppe Suanno, Philippe Fonteyne, Silvia Palombella, De Micheli Massimo, Francesco Bandello, Giulio Ferrari (Italy)
- 552 Topographic astigmatism after deep anterior lamellar keratoplasty: orientation, power, and correlation with preoperative values
Antonia Carmen Sangregorio, Andrea Taloni, Maria Angela Romeo, Giuseppe Alessio, Andrea Lucisano, Vincenzo Scorgia, Giovanna Carnovale Scalzo (Italy)
- 576 Ultra-structure of corneal stroma, collagen fibril and interfibrillar spacing in myopic cornea and myopic cornea treated with pallet containing L-tyrosine
Saeed Akhtar¹, Bartosz Machna², Adrian Smedowski² (¹Saudi Arabia, ²Poland)
- 590 Understanding preservative effects on bioequivalence of topical ocular products
Eva Maria del Amo¹, Susanna Posio¹, Jooseppi Puranen¹, Annika Valtari¹, Anam Hammid¹, Mira Laurila¹, Katariina Kauppinen¹, Lea Piskanen¹, Eetu Valkama¹, Yan Wang², Andre O'Reilly Beringhs², Amir Sadeghi¹, Elisa Toropainen¹, Kati-Sisko Vellonen¹, Arto Urtti¹ (¹Finland, ²USA)

09:15-10:30 | Hall 3.2



G 32 - Why gonioscopy still remains essential in the time of anterior segment OCT

Besides the examination of optic nerve head and retinal nerve fiber bundles, gonioscopy is the most important examination we have when performing structure analysis. The differentiation between angle closure, angle closure suspect and open angle is essential not only for the correct diagnosis, but as well in order to draw the best therapeutic consequences out of these findings. In addition to grading systems that help us to classify the types of glaucoma, we can find pathological changes like abnormal vessels, inflammatory induced changes, pigmentations, clefts etc. that help us to make the right diagnosis and therapy. Nowadays, AS-OCT is a big help and makes it a lot easier, but there are still essential deficits, that do not allow to replace gonioscopy completely by this new examination. In this course, we will show what we can see in normal and pathological eyes and which findings can be observed in AS-OCT and which cannot. We will also explain how a state of the art gonioscopy examination is performed.

Organizer: **Anton Hommer** (Austria)

Co-organizer: **Doreen Schmidl** (Austria)

- 09:15 Normal findings
Nikolaus Hommer (Austria)
- 09:36 Abnormal findings
Anton Hommer (Austria)
- 09:57 Comparison AS-OCT and others vs. gonioscopy
Doreen Schmidl (Austria)
- 10:18 Discussion

09:15-10:30 | Room 4



IM 68 - Controversies in ocular inflammation

This session will explore key debates in the diagnosis and management of ocular inflammatory diseases, examining the evolving role of imaging modalities and treatment strategies. Experts will discuss whether fluorescein angiography remains essential in the era of OCT angiography, the necessity of indocyanine green angiography in diagnosing Birdshot chorioretinopathy, and the choice between systemic and local therapy in ocular lymphoma. Additionally, we will assess whether multimodal imaging can replace traditional clinical examination and if local therapies can serve as alternatives to conventional immunosuppression. Through case-based discussions and interactive debates, this session will challenge current paradigms and provide insights into optimizing patient care in ocular inflammation.

Organizer: **Ester Carreño Salas** (Spain)

Co-organizer: **François Willermain** (Belgium)

- 09:15 Can multimodal imaging substitute clinical examination?
Will Tucker (United Kingdom)
- 09:28 Is dye really needed today? Fluorescein angiography vs OCTA
Ester Carreño Salas (Spain)
- 09:41 Is ICG mandatory in birdshot chorioretinopathy?
Colin Chu (United Kingdom)
- 09:54 Can local therapy substitute conventional immunosuppression?
François Willermain (Belgium)
- 10:07 Lymphoma: systemic or local therapy?
Jarmila Heissigerova (Czech Republic)
- 10:20 Discussion

10:30-11:00 | Coffee break



11:00-12:00 | Poster Area

POS **Poster Session 3**
(see page 68)

12:05-12:50 | Room 2

KN **Ophthalmic Research Lecture**

Since 1990, over 300 genes have been implicated in the pathogenesis of inherited retinal disorders (IRDs). High-throughput molecular genetic screening now allows for the underlying genotype to be elucidated in a majority of IRD patients. The advent of genetic therapies promises to save vision in them. But how to deal with the developmental hurdles for over 300 genes? And which strategies to use? This talk will address the current state of affairs in retinal genetics and gene therapy.

- 12:05 Introduction
Hendrik Scholl (*Austria*)
- 12:10 Therapies for Inherited Retinal Diseases - An Undulating Road
Bart Leroy (*Belgium*)
- 12:40 Discussion

12:50-13:50

BM **Business Meetings**

ACB - COS - EOVS	Room 2
G - IM - LC	Room B
MBGE	Hall 3A
NSPH	Hall 3.1
PBP - PO	Hall 3.2
RV	Room 4

14:10-15:25 | Room 2

**MBGE / ACB 55 - Genomic DNA and Single-cell sequencing technologies**

Systems biology and big data are rapidly transforming biomedical science. This joint course, organized by MGBE and ABC, introduces advanced technologies used in genomic DNA and single-cell research. The course covers key methodologies, including exome and genome sequencing for monogenic diseases, long-read genome sequencing for rare disease diagnostics, and single-cell RNA sequencing (scRNA-seq) alongside chromatin accessibility analysis (ATAC-seq). Participants will gain insights into the applications and interpretation of these technologies in biomedical research.

Organizer: **Joni Turunen** (Finland)

Co-organizer: **Heli Skottman** (Finland)

- 14:10 Exome and genome sequencing in monogenic diseases
Mathieu Quinodoz (Switzerland)
- 14:31 Rare disease diagnostics with long-read genome sequencing
Stephan Ossowski (Germany)
- 14:52 Single-cell RNA sequencing (scRNA-seq) and assay for transposase-accessible chromatin using sequencing (ATAC-seq) analyses
Jo Zhou (The Netherlands)
- 15:13 Discussion

14:10-15:25 | Room B

**COS 60 - Tear fluid biomarkers of the ocular surface: diagnostics, immunology and methodology**

Tear fluid is emerging as a source of non-invasive biomarkers since tear fluid biomarkers are the only way to gather biological information about the ocular surface in real time. During this Special Interest Group session, presentations will explore the diagnostic value of these biomarkers in limbal stem cell deficiency and dry eye disease, as well as their significance in ocular immunology. A critical overview of current research methodologies will address common practices and challenges in the field. Furthermore, the session will introduce recent insights into tear fluid miRNAs, discussing their potential applications in non-invasive diagnostics. Overall, the programme aims to stimulate thoughtful discussion on the interdisciplinary links between ocular surface biology and immunology, with an emphasis on clinical relevance and future research directions.

Organizer: **Marlies Gijs** (The Netherlands)

Co-organizer: **Piera Versura** (Italy)

Co-organizer: **Amalia Enriquez de Salamanca** (Spain)

- 14:10 Optimization of tear fluid collection methods for multi-omics analysis
Clemence Bonnet (USA)
- 14:23 Tear fluid biomarkers in ocular immunology
Antonio Di Zazzo (Italy), **Alessandra Micera** (Italy)
- 14:36 Advances in tear fluid biomarkers for dry eye disease
Christophe Baudouin (France)
- 14:49 Methodology of tear fluid biomarker research: common practices and challenges
Marlies Gijs (The Netherlands)
- 15:02 Tear fluid biomarkers for ocular pain
Amalia Enriquez de Salamanca (Spain)

14:10-15:25 | Hall 3.1

FP Free Paper Session 4

Moderators: **Andrea Taloni** (Italy), **Xiaomeng Wang** (Singapore)

- 598 Spironolactone as a candidate for ocular surface regeneration: evidence from a limbal stem cell model
Raquel Gregorio Arribada, Rodrigues-Braz Daniela, francine Behar-Cohen (France)
- 647 Contralateral-eye analysis of deep anterior lamellar keratoplasty versus mushroom penetrating keratoplasty over 5 years
Andrea Taloni, Raphael Kilian, Valentino De Ruvo, Georgiana Camburu, Luigi De Rosa, Niccolò Salgari, Andrea Sollazzo, Angeli Christy Yu, Massimo Busin (Italy)
- 652 Distribution of chondroitin sulphate glycosaminoglycan in rat corneal stroma treated with Ultraviolet-A and Riboflavin: Ultrastructural studies
Saeed Akhtar¹, Turki Almubrad¹, Aljohara Alkanaa¹, Adrian Smedowski² (¹Saudi Arabia, ²Poland)
- 610 Evaluating burden of dry eye disease using utility scores: a mapping approach with "Ocular Surface Disease Index" and "European Quality of Life Five Dimensions"
Siheem Lazreg¹, Julia Gonzalez² (¹Algeria, ²France)
- 259 Selective serotonin reuptake inhibitor (SSRI) for amblyopia treatment: a systematic review and meta-analysis of randomized controlled trials
Ehtesham Shamsheer¹, Luisa de Barros Saccaro², Victor Barreiros Pungirum³, Bao Nghi Tran⁴, Omar Alghaith¹, Fatemeh Khabazianzadeh⁵, I. Betina Ip¹, Holly Bridge¹ (¹United Kingdom, ²Brazil, ³Argentina, ⁴Hungary, ⁵Iran)
- 180 Identification and validation of a novel anti-angiogenic factor
Xiaomeng Wang, Ching-Jou Chen, Hang-Tang Chen (Singapore)

14:10-15:25 | Hall 3.1

C

PO 65 - Identifying histopathological lesions in AMD: BLamD, BLinD, and soft drusen for research and clinical practice

This course provides an in-depth examination of histopathological lesions associated with age-related macular degeneration (AMD), including basal laminar deposit (BLamD), basal linear deposit (BLinD), and soft drusen. Participants will learn to identify these lesions in tissue samples through case-based learning and practical insights applicable to research, post-mortem examinations, and pathology practice. The session combines didactic presentations, panel discussions, and audience interaction to ensure comprehensive learning. At the conclusion of this course, the attendee will be able to: 1. identify and differentiate BLamD, BLinD, and soft drusen in histological samples; 2. understand the significance of these lesions in AMD progression and research contexts; 3. Apply histological diagnostic techniques to improve post-mortem examination and pathology reporting; 4. recognise challenges and limitations in identifying AMD-associated lesions and discuss solutions; 5. Utilise structured reporting templates for these lesions in clinical and research practice.

Organizer: **Svetlana Cherepanoff** (Australia)

- 14:10 Didactic Presentation 1: Recognising AMD-specific lesions in resin and paraffin sections
Svetlana Cherepanoff (Australia)
- 14:30 Didactic Presentation 2: AMD mimics on ex vivo imaging: histological keys to accurate diagnosis
Svetlana Cherepanoff (Australia)
- 14:50 Panel Discussion

14:10-15:25 | Hall 3.2



G 81 - Back to big surgery

Glaucoma, a leading cause of irreversible blindness worldwide, necessitates effective management strategies to preserve vision and quality of life. Despite advances in pharmacological treatments, some patients experience inadequate intraocular pressure (IOP) control or suffer from medication side effects. Surgery offers significant advantages over medical management for glaucoma patients, particularly in those with advanced or refractory disease. Filtration surgery presents notable advantages over minimally invasive glaucoma surgery (MIGS) for treating glaucoma, especially in cases of advanced or poorly controlled disease. One of the key benefits of filtration surgery is its effectiveness in achieving substantial and sustained reduction in intraocular pressure (IOP), often surpassing the levels attainable through MIGS. Furthermore, filtration surgery typically provides a longer-lasting solution, with the potential for fewer reoperations compared to MIGS, which may require additional procedures over time to maintain IOP control. Additionally, filtration surgery has a well-established track record and comprehensive understanding of postoperative management, whereas MIGS, being newer, may have varying outcomes that are still being studied. By offering robust IOP control and durability in treatment outcomes, filtration surgery remains a cornerstone in the management of glaucoma.

Organizer: **Adrian Smedowski** (Poland)

Co-organizer: **Miriam Kolko** (Denmark)

14:10 Back to big surgery
Adrian Smedowski (Poland)

14:26 Back to trabeculectomy
Carlo Traverso (Italy)

14:42 Back to tubes
Karl Mercieca (Germany)

14:58 Back to deep sclerectomy
Cédric Schweitzer (France)

15:14 Discussion

14:10-15:25 | Room 4



IM 72 - How nutrition and dysbiosis are implicated in uveitis; therapeutic opportunities

This symposium will outline the cellular, hormonal, immune, and neural signalling mechanisms that link the gut microbiome, immune system, and eye health focussing on uveitis. We will explore some of the research related to microbiota imbalance and the association with inflammatory conditions that can affect the eye, and the use of probiotics and prebiotics as potential treatment for managing ocular inflammatory conditions. We will also discuss how nutrition and lifestyle impact systemic and ocular health by exploring the effects of Western diet, sedentary lifestyle, stress and disrupted sleep on gut microbiota and metabolic health, and how these factors result in insulin resistance, mitochondrial dysfunction, and systemic and ocular inflammation. We will conclude with an overview of the socioeconomic determinants of health, and associated discrepancies in visual impairment and eye care services, and discuss how food insecurity and nutritional inequalities can lead to ocular diseases.

Organizer: **Jarmila Heissigerova** (Czech Republic)

Co-organizer: **Gabriela Ortiz Nieva** (United Kingdom)

14:10 General introduction
Teresa Sandinha (United Kingdom)

14:26 Broad description of the association of microbiota imbalance in systemic and ocular pathologies
Gabriela Ortiz Nieva (United Kingdom)

14:42 The gut immunology, microbiome and intestinal barrier disruption impact in the posterior segment inflammation: experimental evidence and potential clinical applications.
Jarmila Heissigerova (Czech Republic)

14:58 Nutrition and life style influences on the cellular and gut health
Russel Philips (Australia)

15:14 Discussion



15:25-15:55 | Coffee break

16:00-16:45 | Room 2

KN

European Academy of Ophthalmology Lecture

Two approaches of controlling the refractive state of tunable lenses are presented:

1. Bipolar contact lens ring electrodes positioned on the scleral conjunctiva right above the ciliary muscle allowed volunteers to use accommodative biopotentials at the surface of the eye to control the refractive state of electrically tunable external lenses. Presbyopes (>75 y) were able to use such biopotentials of their neuronal accommodation reflex to properly focus via electrically tunable lenses a series of computer-controlled optotypes randomly presented for far and near vision up to a 3 dpt accommodative demand.

2. Bipolar intraocular ring electrodes were implanted in Cynomolgous monkeys into the sulcus behind the iris in front of the anterior capsule, contacting the ciliary muscle. Its biopotentials were continuously recorded and wirelessly transmitted via a microcontroller, biopotential amplifier and a Bluetooth interface, positioned on an encapsulated flexible H-shaped printed circuit board (12x18 mm) placed under the superior rectus muscle, powered by a retrobulbar button-cell battery.

Summary: These experiments demonstrate that ciliary muscle biopotentials can be used to restore accommodation via electrically tunable lenses using the natural accommodation-reflex loop of the central nervous system that is defective in presbyopia. Although it will be still a long way to go until the first implantation in man, we have shown in volunteers and cynomolgus monkeys the principal feasibility of such a system to restore accommodation.

16:00 Introduction

Andrej Grzybowski (Poland)

16:05 Using ciliary muscle potentials for controlling the refractive state of tunable lenses to restore accommodation in presbyopia

Eberhart Zrenner (Germany)

16:35 Discussion



16:45-18:00 | Room 2

SIS

MBGE 56 - Recent breakthroughs in the genetics of inherited retinal diseases

This session aims to deliver input about disease modelling in inherited retinal disorder.

Organizer: **Joni Turunen** (Finland)

Co-organizer: **Christina Zeitz** (France)

16:45 Genetic discoveries in inherited retinal diseases in Finland

Joni Turunen (Finland)

17:01 Novel gene defect identification in inherited retinal disease

Christina Zeitz (France)

17:17 Structural variants causing retinal dystrophies

Alison Hardcastle (United Kingdom)

17:33 Variants in U4 and U6 small nuclear RNA genes cause retinitis pigmentosa

Mathieu Quinodoz (Switzerland)

17:49 Discussion

16:45-18:00 | Room B



COS 33 - Advanced microscopy techniques in the diagnosis of ocular surface diseases

Diagnosing ocular surface diseases is challenging due to their complexity and variability. Traditional methods, such as slit-lamp biomicroscopy and fluorescein staining, provide limited insights into cellular and subcellular changes in conditions like dry eye, allergic conjunctivitis, and infectious keratitis. These disorders often share overlapping symptoms, complicating accurate diagnosis. Subtle changes, such as glaucoma therapy-induced conjunctival damage, are also difficult to detect with conventional tools. Advanced techniques like in vivo confocal microscopy (IVCM) and scanning electron microscopy (SEM) provide high-resolution imaging of the ocular surface, enabling early detection of cellular abnormalities and pathogens. SEM is especially valuable in assessing infectious keratoconjunctivitis with negative culture results and cases unresponsive to broad-spectrum antibiotics. It also identifies changes in epithelial microvilli, an early biomarker of ocular surface health. However, challenges related to accessibility, expertise, and integration into clinical care limit their use. This course will explore the various microscopy techniques and the use of artificial intelligence in enhancing diagnostic and treatment outcomes.

Organizer: **Mario Troisi** (Italy)

Co-organizer: **Salvatore Del Prete** (Italy)

- 16:45 In vivo microscopic approach: the confocal microscopy
Maria Laura Passaro (Italy)
- 17:01 Ex vivo microscopic techniques for ocular infections and microbiome analysis
Salvatore Del Prete (Italy)
- 17:17 Scanning electron microscopy (SEM) applications in dry eye, allergies, and drug tolerability
Mario Troisi (Italy)
- 17:33 Future directions in ocular surface imaging: integrating AI to enhance microscopic diagnostics
Mario Savastano (Italy)
- 17:49 Discussion

16:45-18:00 | Hall 3A



LC 71 - Learning ophthalmic surgery in virtual reality

Virtual reality training is mandatory in the flight industry and is increasingly becoming mandatory for surgical training in medicine. The SIS will cover principles of motor skill learning, skill monitoring, expected evolution of skill during motor skill learning, and challenges in cataract surgery. Then, the technology behind ophthalmic virtual reality surgery will be presented. Subsequently, the development and experience of introducing virtual reality training as a mandatory step before ophthalmic surgery in patients, will be covered. Thereafter, strategies for and experience of measuring evidence for improvement of surgical skill with virtual reality training of cataract surgery will be presented. Finally, evidence for improvement of ophthalmic surgical skill will be presented. A simulator for virtual reality cataract surgery will be made available at the meeting for trial sessions.

Organizer: **Per Soderberg** (Sweden)

Co-organizer: **Ann Sofia Skou Thomsen** (Denmark)

- 16:45 Principles of motor skill learning and challenges in learning cataract surgery
Per Soderberg (Sweden)
- 16:58 The technology behind ophthalmic virtual reality surgery
Eva Skarman (Sweden)
- 17:11 Introducing virtual reality training as a mandatory step before surgery in patients
Ann Sofia Skou Thomsen (Denmark)
- 17:24 Measuring evidence for improvement of skill with virtual reality training
Zhaohua Yu (Sweden)
- 17:37 Evidence for improved surgical skill after virtual reality training
Amalie Carlsson (Denmark)
- 17:50 Discussion



16:45-18:00 | Hall 3.2



PO 69 - Scaling of Fundoscopy Images: optical origins, correction methods and impact on clinical studies

Emmetropization is a developmental process in which the ocular structures grow to achieve optimal focus of light on the retina, ideally with none or minimal residual refractive error. This process typically occurs during early childhood, involving coordination of ocular components such as axial length, corneal curvature, and lens power. These dimensional changes of the eye, if not accounted for, can directly impact the quantification of outcome measures derived from retinal images. For example, where the same eye is imaged once with a crystalline lens in situ and once without, the size of measured vessel diameter would differ by ~5-7%.

As the quantification of retinal structures, vasculature, layers and tissue abnormalities have been identified to be useful biomarkers for cardiovascular risk, disease progression and classification. Errors in quantitative measures from retinal images due to non-accounting for ocular dimensions can therefore lead to under/ overestimation of such risk but also impact on individual treatment outcomes, for example where tissue need to be ablated or removed.

In addition to normal eye growth, increased or decreased growth as well as alterations of the corneal/ lenticular surface can impact on the size measured of a retinal feature. This presentation aims to provide an overview of factors impacting dimensional outcomes and to give practical advice for future studies aiming to parameterize retinal features from fundus images. In order to be able to compare study results, conduct long-term observations and to get a better understanding of how retinal changes can be used for cardiovascular risk and disease progression analyses it is important to obtain reliable results and to account for variables such as growth which may change during long term observational studies.

Organizer: **Jan-Willem Beenakker** (*The Netherlands*)

Co-organizer: **Rebekka Heitmar** (*United Kingdom*)

16:45 Understanding and correcting for scaling of fundus photographs

Jan-Willem Beenakker (*The Netherlands*)

17:01 Impact of emmetropization and refractive errors on fundus images

Rebekka Heitmar (*United Kingdom*)

17:17 Correcting for changes in refractive error in longitudinal studies

Kristy Tatiana Rodríguez-Ramírez (*Germany*)

17:33 Peripheral images scaling of fundus photographs and their implications in ocular oncology

Corné Haasjes (*The Netherlands*)

17:49 Discussion

16:45-18:00 | Room 4

**ACB 57 - Advancing our understanding of corneal diseases with human cell-based approaches**

Session will showcase a series of research examples highlighting the critical role of human cell-based models in understanding and treating corneal diseases. Each presentation will demonstrate why and how these models are indispensable tools for studying corneal development, unravelling disease mechanisms, and exploring potential therapeutic interventions. By delving into these innovative methodologies, the session aims to underscore the importance of human cell-based models in advancing our knowledge and treatment of corneal diseases.

Organizer: **Heli Skottman** (Finland)

Co-organizer: **Jo Zhou** (The Netherlands)

- 16:45 Immortalized cell lines from primary aniridia limbal epithelial cells as models for congenital aniridia
Nora Szentmary (Germany)
- 17:01 Transcriptional profiling of NLRP3 inflammasome-activated monocytes in keratitis fugax hereditaria
Sabita Kawan (Finland)
- 17:17 Single-cell RNA-seq on human cornea organoids
Dulce Lima Cunha (The Netherlands)
- 17:33 Harnessing human pluripotent stem cells for corneal tissue modeling
Heli Skottman (Finland)
- 17:49 Discussion

18:05-18:40 | Room 2

**Prize Award Ceremony and Closing Remarks**

18:40-19:10

Farewell Reception

SATURDAY
11 OCTOBER 2025

Poster Session 1

Evaluators: **Alessandro Arrigo** (Italy), **Marco Battista** (Italy), **Jan-Willem Beenakker** (The Netherlands), **Ester Carreño Salas** (Spain), **Carmen Ciavarella** (Italy), **Carla Rita Dos Santos Costa Lança** (United Arab Emirates), **Ariadna Garreta-Rafecas** (Spain), **Chiara La Morgia** (Italy), **Inés López-Cuenca** (Spain), **Daniela Pollutri** (Italy), **Gordon Plant** (United Kingdom), **Irene Schiavetti** (Italy), **Xiaomeng Wang** (Singapore), **Jo Zhou** (The Netherlands)

15:50-16:50

POS Poster Session ACB

- 99 T001 Comparative study of the ciliary body in mice and humans: new structural and vascular insights
Patricia Jaramillo, Ana Carretero, David Ramos González, Jesús Ruberte (Spain)
- 530 T002 Environmental, sex-dependent, and inflammasome-mediated modulation of retinal ganglion cell survival following LPS-induced sepsis
rf **Kristy T. Rodríguez-Ramírez, Ana Isabel Gómez, Pablo Pelegrín, Marta Agudo-Barriuso** (Spain)

POS Poster Session IM

- 191 T003 Optical coherence tomography biomarkers in Vogt-Koyanagi-Harada disease: a longitudinal analysis of choroidal vascularity index and choroid thickness
Vasco Lobo, Afonso Lima-Cabrita, Rafael Whitfield, Filomena Pinto, Sofia Mano, Ines Leal (Portugal)
- 465 T004 Ocular sarcoidosis - A case series in a tertiary uveitis clinic
rf **Pedro Martins, Sofia Teixeira, Daniel Ferreira Cardoso, João Castro Cabanas, Catarina Ferreira, Sofia Fonseca** (Portugal)
- 492 T005 Objective quantification of anterior uveitis inflammation using artificial intelligence: a scoping review
rf **Muneeb Ahmad Khan, Diya Baker** (United Kingdom)
- 522 T006 Refractory ocular inflammation in granulomatosis with polyangiitis: a rare case of anterior non-necrotising scleritis with pan-uveitis requiring enucleation
Sohail Daniel, Priya Bhatt, Abdelsattar Farrag (United Kingdom)
- 591 T007 To assess inflammatory markers corresponding to gut dysbiosis and macrophage activation in plasma of Idiopathic Uveitis (IU) patients
rf **Nabanita Halder, Gayatri Suresh, Madhu Nath, Rohan Chawla, Thirumurthy Velpandian** (India)
- 634 T008 Unilateral presentation of acute posterior multifocal placoid pigment epitheliopathy in a 16-year-old patient following influenza-B infection
Eftymia Kalogera, Evangelos Spanos, Nikolaos Garyfallos, Michael Karampelas, Vasileios Peponis, Kallirroï Konstantopoulou (Greece)
- 707 T009 Value of the Quantiferon Tb Gold Plus test in the diagnosis of presumed tuberculosis uveitis: a report of 258 cases
S. Aitbaziz, S. Djoudi, S. Bouayad, Y. Seghiri, D.J. Soultou (Algeria)
- 708 T010 Anterior chamber puncture a useful diagnostic tool
S. Aitbaziz, S. Djoudi, S. Bouayad, D.J. Soultou (Algeria)



Poster Session MBGE

- 67 T011 The profile of keratoconus in 60 years of age and older: a population-based study
AbbasAli Yekta, Hasan Hashemi, Mehdi Khabazkhoob, Alireza Jamali, Hadi Ostadimoghaddam, Asieh Ehsaei, Yeganeh Yekta, Reihaneh Yekta (Iran)
- 119 T012 Determinants of disability among people with diabetes in Kotayk province of Armenia
Aida Giloyan, Diana Muradyan, Tsovinar Harutyunyan, Varduhi Petrosyan (Armenia)
- 153 T013 Myopia in football player: influence of outdoors activities measured by conjunctival ultraviolet autofluorescence biomarker
Sergio Recalde, Alejandro Güemes, Maria Hernandez, María Fraga de la Viesca, Miriam De la Puente, Cristina Irigoyen, Jaione Bezunartea, Maite Moreno Orduña, Manuel Saenz de Viteri, Jesús Barrio, Valentina Bilbao, Jorge Gonzalez-Zamora, Alfredo García Layana (Spain)
- 160 T014 Deep learning-based morphometry of the human orbit using MRI data from the German NAKO study
Navid Farassat¹, Kevin Wornath¹, Moises Fuentes¹, Marco Reiser¹, Susanne Rospleszcz¹, Javier Rodriguez-Zabala², Daniel Böhringer¹, Christopher Schlett¹, Wolf Lagrèze¹ (¹Germany, ²Colombia)
- 161 T015 The impacts of high refractive errors on self-reported visual function and mental health
Arevak Saruhanian, Jens Møller, Jens Rovelt Andreassen, Josefine Freiberg, Marcel Reimann, Jeppe Samuelsen, Miriam Kolko, Nina Jacobsen (Denmark)
- 184 T016 A qualitative study exploring patient attitudes towards novel therapies for inherited retinal dystrophies
Marcela Votruba (United Kingdom)
- 309 T017 Identification and functional validation of a novel disease-causing variant in the non-coding region of NYX
Filip Spanic, Michiels Christelle, Julien Navarro, Aline Antonio, Christel Condroyer, Sylvie Berthémy-Pellet, Isabelle Audo, Christina Zeitz (France)
- 318 T018 One-year mortality after ophthalmic surgery: impact of age and ASA classification in a 10-year cohort
Rafael Whitfield, Joana Pargana, Henrique Reis, Vasco Lobo, Luis Abegão Pinto (Portugal)
- 373 T019 CRB1-associated retinopathy: new insights from a Portuguese cohort
Joana Ferreira¹, Ricardo Gertrudes¹, Kaminska Karolina², Luísa Santos¹, Ana Berta Sousa¹, Rita Anjos¹, Rita Pinto¹, Virginie Peters², Elifnaz Celik², Carlo Rivolta², Cristina Santos¹ (¹Portugal, ²Switzerland)
- 375 T020 Gyrate atrophy without scalloping: diagnostic clues in an actionable retinal dystrophy
Joana Ferreira, Kaminska Karolina, André Travessa, Júlio Rocha, Elifnaz Celik, Márcia Pereira, Virginie Peters, Carlo Rivolta, Luísa Santos, Cristina Santos (Portugal)
- 401 T021 Identification of a novel gene defect, EGFLAM, underlying complete congenital stationary night blindness and high myopia
Sanja Boranijasevic¹, Julien Navarro¹, Christel Condroyer¹, Lonneke Hear-Wigman², Aline Antonio¹, Dhaenens Claire-Marie¹, Sahel José-Alain^{1,3}, Ingeborgh van den Born², Martha Tjon-Fo-Sang², Sabine Defoort¹, Vasily Smirnov¹, Isabelle Audo¹, Christina Zeitz¹ (¹France, ²The Netherlands, ³USA)
- 404 T022 The impact of oral escitalopram therapy on the expression of brain-derived neurotrophic factor (BDNF) and the function of retinal neurons in mice
Klaudia Mroz, Bartosza Machna, Anna Pacwa, Mikołaj Górka, Magdalena Dębiec, Anna Gąsiorek, Joanna Lewin-Kowalik, Adrian Smedowski (Poland)

- 444 T024 Retinal dystrophies in focus - insights from transgenic mouse models
Anna Gasiorek, Anna Pacwa, Monika Katan, Klaudia Mroz, Bartosz Machna, Xiaonan Liu, Joanna Lewin-Kowalik, Adrian Smedowski (Poland)
- 461 T025 UCHL1 missense and loss-of-function variants are an emerging cause of autosomal dominant optic atrophy (ADOA)
Leonardo Caporali¹, Claudio Fiorini¹, Giada Capirossi¹, Federico Sadun¹, Maria Lucia Cascavilla¹, Chiara La Morgia¹, Marco Battista¹, Lorenzo Bianco¹, Piero Barboni¹, Xavier Dieu², Danara Ormanbekova¹, Flavia Palombo¹, Eleonora Pizzi¹, Valentina Del Dotto¹, Valerio Carelli¹, Patrizia Amati-Bonneau², Alessandra Maresca¹ (¹Italy, ²France)
- 467 T026 Congenital corneal opacities in a Finnish cohort
Elsa-Leea Kotola, Joni Turunen, Kari Krootila, Anna Majander (Finland)
- 470 T027 Investigation of factors promoting corneal wound healing
rf **Anna Pacwa, Bartosz Machna, Klaudia Mroz, Anna Gasiorek, Monika Katan, Maciej Oseka, Joanna Lewin-Kowalik, Adrian Smedowski** (Poland)
- 511 T029 Knobloch syndrome presenting with polymicrogyria and shallow anterior chamber: a case report
João Castro Cabanas, Pedro Martins, Carolina Madeira (Portugal)
- 520 T030 Sphingolipids plasma profile in keratoconus patients
rf **Uxía Regueiro, Maite López-López, Tania Alvite-Piñeiro, Alberto Ouro, Isabel Lema** (Spain)
- 523 T031 Near-infrared light-responsive retinal implants regulate neurotrophic gene expression in primary hippocampal neurons
rf **Şeyma Nur Yaman, Uğur Berkay Çalışkan, Humeyra Nur Kaleli, Tarık Safa Kaya, Murat Hasanreisoglu, Sedat Nizamoğlu** (Türkiye)
- 546 T032 The effects of long-term work in mesopic environments and lifestyle risk factors on the prevalence of myopia in adults
rf **Rafaela Garrido-Mercado¹, Olavi Pärssinen², Jesús Carballo-Álvarez¹, Maria Garcia Montero¹, Maria Cinta Puell Marin¹** (¹Spain, ²Finland)
- 622 T034 New insights on AAV2-ND4 transfer between eyes: post-mortem analyses in leber hereditary optic neuropathy following gene therapy
Valerio Carelli¹, Nancy Newman², Leonardo Caporali¹, Fred Ross-Cisneros², Valérie Biousse², Blando Santino¹, Elisa Boschetti¹, Lindreth Dubois², Henry Liu², Philippe Ancian³, Magali Taiel³, Alfredo Sadun³ (¹Italy, ²USA, ³France)
- 631 T035 Descriptive analysis of a Danish eye and vision cohort using the deep learning tool automorph for retinal vasculature assessment
rf **Hande Coskun, Marcel Reimann, Jeppe Samuelsen, Miriam Kolko** (Denmark)
- 644 T036 Transcriptional profiling of NLRP3 inflammasome- activated monocytes from keratitis fugax hereditaria
rf **Sabita Kawan, Pau Costa, Michael Backlund, Annamari Immonen, Helena Kilpinen, Olli Pietiläinen, Tero Kivelä, Joni Turunen** (Finland)
- 686 T037 Single-cell RNA-seq and ATAC-seq analysis: multi-omics approaches to study stem cell properties and functions
Jo Zhou (The Netherlands)
- 705 T038 Neuroprotective effects of estrogen signaling modulation and FasR/FasL pathway regulation in retinal ischemia outcomes in ovariectomized mice
Piotr Rodak, Edyta Olakowska, Anna Pacwa, Klaudia Mróz, Bartosz Machna, Joanna Machowicz, Bartłomiej Kocurek, Adrian Smedowski (Poland)



Poster Session NSPH

- 64 T039 Optical coherence tomography as a biomarker in multiple sclerosis
Amira Mabrouk, Besma Ben Achour, Houda Lajmi, Amine Zahaf, Wassim Hmaied (Tunisia)
- 76 T041 Corneal aberrometry and topography in children with amblyopia
Rym Maamouri, Selmi Slim, Azri Hassen, Molka Ferchichi, Monia Cheour (Tunisia)
- 81 T042 The importance of treatment compliance in myopia control: a retrospective study
Irene Schiavetti, Andrea Lembo, Alessandra Curci, Paolo Nucci (Italy)
- 98 T043 Mitochondria and oxidation: implications for LHON
Alfredo Sadun (USA)
- 103 T044 Defocus incorporated multiple segments spectacle lenses in clinical practice: a retrospective analysis of one-year outcomes and predictors of treatment success in a Turkish cohort
Nilay Akagun, Emrah Altiparmak (Türkiye)
- 116 T045 Pseudo-Foster Kennedy syndrome and idiopathic intracranial hypertension: a case report
Hounaida Chaabene, Zaghdoudi Asma, Hedhiri Mohamed Habib, Mbarek Sameh, Nada Sakli, Blel Olfa, Wafa Ammari, Mahmoud Anis, Riadh Messaoud (Tunisia)
- 127 T047 The role of astigmatism in myopia, its progression and management: a scoping review
Stephanie Kearney¹, Rakhee Shah^{2,3} (¹United Kingdom, ²The Netherlands)
- 138 T048 Off-label use of idebenone in pediatric patients with OPA1-dominant optic atrophy: a two-case report
Florina Stoica, Mihai Lucian Osman, Corina Ladariu, Mihaela Galea, Cosmin Valentin Rus, Chirita-Emandi Adela (Romania)
- 155 T049 Pediatric ocular rosacea (a serie case)
Oumayma Amara, Meriem Aissaoui, Zyad Laftimi, Ghizlane Daghouj, Loubna Elmaaloum, Bouchra Allali, Asmaa El Kettani (Morocco)
- 162 T050 CHARGE syndrome in a neonate presenting with ocular colobomas
Theodora Gianni, Anna Nikolaidou, Efthymia Tsina (Greece)
- 163 T0510 Characteristics and management of cataract following proton beam radiotherapy in pediatric orbital rhabdomyosarcoma
Dmitri Artemiev, Darius G. Hildebrand (Switzerland)
- 185 T052 Visual field defects and retinal nerve fiber layer analysis in Alzheimer's disease patients: a pilot study
Tania Alvite-Piñero, Miriam Ramallo Pita, Marta Rodríguez-Fernández, Maite López-López, Uxía Regueiro, Juan Manuel Pías-Peleteiro, Tomás Sobrino, Isabel Lema (Spain)
- 189 T053 Efficacy of lenadogene nolvarvovec gene therapy versus idebenone: a matched adjusted indirect comparison
Valérie Biousse¹, Patrick Yu-Wai-Man², Nancy Newman¹, Valerio Carelli³, Adeline Pierache⁴, François Montestruc⁴, Magali Taiel⁴, José-Alain Sahel¹ (¹USA, ²United Kingdom, ³Italy, ⁴France)
- 201 T054 Atropine and spectacle lens combination treatment (ASPECT): 24-month interim results of a randomised controlled trial for myopia control
Noemi Guemes Villahoz¹, Paula Talavero-Gonzalez¹, Paloma Porras-Angel¹, Rafael Bella-Gala¹, Alicia Ruiz-Pomeda¹, Beatriz Martín García¹, Elena Hernandez-Garcia¹, C Nunila Gomez-De-Liano¹, Rakhee Shah², Julian Garcia Feijoo¹, Rosario Gomez-De-Liano¹ (¹Spain, ²The Netherlands / United Kingdom)

- 202 T055 Increased macular density correlates with high expanded disability status scale in neuromyelitis optic spectrum disorder Patients without optic neuritis: Indications of primary retinal vasculopathy
Lee Chaeyeon, Jaeryung Kim, Kyung Ah Park (South Korea)
- 208 rf T056 Choroidal thickness changes in myopic children using combination treatment of atropine eyedrops and defocus incorporated multiple segments (DIMS) spectacle lenses
Noemi Guemes Villahoz¹, Paula Talavero-Gonzalez¹, Paloma Porras-Angel¹, Alicia Ruiz-Pomeda¹, Rafael Bella-Gala¹, Elena Hernandez-Garcia¹, Beatriz Martín García¹, C Nunila Gomez-De-Liano¹, Rakhee Shah², Julian Garcia Feijoo¹, Rosario Gomez-De-Liano¹ (¹Spain, ²The Netherlands / United Kingdom)
- 211 T057 CARs in a diagnostic pathway: a cancer-associated retinopathy case series
Vasco Lobo, Bernardo Monteiro, Filomena Pinto, Luis Abegão Pinto, Joana Ferreira (Portugal)
- 226 rf T058 Characterising spontaneous retinal venous pulsations in patients with idiopathic intracranial hypertension
Mojtaba Golzan¹, Solmaz Bastani¹, Ashish Agar¹, Mitchell Lawlor¹, Sheng Chiong Hong², Renoh Chalakkal², Clare Fraser¹ (¹Australia, ²New Zealand)
- 245 T059 Management of vertical incomitant strabismus: utility of the Scott procedure
Edurne De La Cámara Sahuquillo, Diana Perez Garcia, Leon Remon, Juan Ibañez, Pablo Tejada González, Inmaculada Herrero Sánchez, Cristina Calvo Simón, Francisco Javier Ascaso (Spain)
- 257 T060 Digital eye strain in health students: are symptoms driven by binocular vision or ocular surface factors?
Maria João Santos Barata¹, Pedro Aguiar¹, Andrzej Grzybowski², André Moreira-Rosário¹, Carla Rita dos Santos Costa Lança³ (¹Portugal, ²Poland, ³United Arab Emirates)
- 264 T061 "Cat-scratch disease" - A rare case of ocular trauma
Inês Ludovico, Patrícia Barros da Silva, Ricardo Costa-Gertrudes, Carlos Batalha (Portugal)
- 271 rf T062 Lenadogene nolparvovec gene therapy for leber hereditary optic neuropathy in the real-life setting
Chiara La Morgia¹, Catherine Vignal-Clermont², Valerio Carelli¹, Patrick Yu-Wai-Man³, Mark Moster⁴, Robert Sergott⁴, Sarah Thornton⁴, Sean Donahue⁴, Hélène Dollfus², Thomas Klopstock⁵, Vasily Smirnov², Catherine Cochard², Marie-Benedicte Rougier², Pierre Lebranchu², Caroline Froment², Frederic Pollet-Villard², Claudia Prospero-Ponce⁴, Francis Munier⁶, Magali Tiel², José-Alain Sahel⁴ (¹Italy, ²France, ³United Kingdom, ⁴Germany, ⁵Switzerland)
- 274 rf T063 The onset of photophobia: impact of acute bright light exposure on cellular and molecular changes from the retina to the brain
Jiayi Zhang, Jian Huang, Reboussin Elodie, Laurence Bourgeais, Stéphane Mélik Parsadaniantz, Réaux-Le Goazigo Annabelle (France)
- 275 rf T064 Indirect comparison of lenadogene nolparvovec gene therapy versus natural history in patients with m.11778G>A MT-ND4 leber hereditary optic neuropathy
Patrick Yu-Wai-Man¹, Nancy Newman², Mark Moster², Valerio Carelli³, Valérie Biousse², Prem Subramanian², Catherine Vignal-Clermont⁴, An-Guor Wang⁵, Sean Donahue², Bart Leroy⁶, Robert Sergott², Thomas Klopstock⁷, Alfredo Sadun², Gema Rebolleda Fernandez⁸, Bart Chwalisz², Rudrani Banik², Magali Tiel⁴, José-Alain Sahel² (¹United Kingdom, ²USA, ³Italy, ⁴France, ⁵Taiwan, ⁶Belgium, ⁷Germany, ⁸Spain)
- 293 T065 Effectiveness of defocus incorporated multiple segments spectacle lenses on myopia control in Romanian children: 2-year results
Daniela Goicea (Romania)
- 319 T066 Surgery for congenital fibrosis of extraocular muscles in siblings with KIF21A mutation
Rafael Whitfield, Filipa Teixeira, Susana Duarte, Bernardo Monteiro, Emanuel Fernandes, Pedro Lino, Rita Gama (Portugal)

- 342 *rf* T067 Machine learning analysis of visual field progression for dominant optic atrophy-OPA1
Catarina Coutinho, Ferdinando Zanchetta, Michele Carbonelli, Marco Battista, Alice Galzignato, Chiara La Morgia, Giulia Amore, Martina Romagnoli, Luigi Brotto, Paolo Nucci, Leonardo Caporali, Francesco Bandello, Valerio Carelli, Maria Lucia Cascavilla, Rita Fioresi, Piero Barboni (Italy)
- 352 T068 Beyond the tumor - Pediatric bilateral IgG4-related orbital disease masquerading as neoplasia
Bernardo Monteiro, Rafael Whitfield, Vasco Lobo, Inês Lourenço, Nuno Simas, Ana Patricia Reis, Filipa Teixeira, Joana Couceiro, Ana Cláudia Fonseca (Portugal)
- 358 T070 Traumatic bilateral acute vision loss due to pituitary apoplexy ; a case report
Heavin Rakhmat Saintika, Wino Vrieda Vierlia, Seskoati Prayitnaningsih (Indonesia)
- 396 T071 Axial lenght distribution in patients with OPA1-associated dominant optic atrophy
Maria Lucia Cascavilla, Lorenzo Bianco, Marco Battista, Maria Francesca Gennaro, Alessio Antropoli, Valerio Carelli, Chiara La Morgia, Leonardo Caporali, Anna Maria De Negri, Piero Barboni, Francesco Bandello (Italy)
- 435 T072 Development of a chromatic pupillometer
Sebastien Buchwalder, Martial Geiser, Filippo Piffaretti (Switzerland)
- 445 T073 Correction of residual paretic esotropia with partial transposition of hummelsheim combined with botulinum toxin injection
Inmaculada Herrero Sanchez, Víctor Aguado Casanova, Diana Perez Garcia, Patricia Ramiro, Leon Remon, Pablo Tejada González, Edurne De La Cámara Sahuquillo, Francisco Javier Ascaso (Spain)
- 479 T074 Trifocal Intraocular lens implantation in unilateral cataract in a pediatric patient: indications and outcomes
Ana María Abad Pascual, Diana Perez Garcia, Francisco Javier Ascaso, Juan Ibañez, Javier Ramos Duarte, Inmaculada Herrero Sánchez, Pablo Tejada González, Edurne De La Cámara Sahuquillo, Luca Manuel Bueno Borghi, Cristina Calvo Simón, Carla Sánchez Remacha, Miguel Castillo Fernández (Spain)
- 484 T075 Distinct pattern observed after intermittent exotropia surgery: characteristics of patients exhibiting postoperative rebound esodrift
Seong-Joon Kim (South Korea)
- 499 T076 Late-onset Leber hereditary neuropathy: study in a large Italian cohort
Marco Battista, Michele Carbonelli, Luigi Brotto, Giulia Amore, Catarina Coutinho, Martina Romagnoli, Alice Galzignato, Paolo Nucci, Leonardo Caporali, Maria Lucia Cascavilla, Claudio Fiorini, Chiara La Morgia, Valerio Carelli, Piero Barboni (Italy)
- 526 T077 Post-traumatic ocular hypertension : epidemiological, clinical, therapeutic, and evolutive profiles
Oumayma Amara, Meriem Aissaoui, Zyad Laftimi, Ghizlane Daghouj, Loubna Elmaaloum, Bouchra Allali, Asmaa El Kettani (Morocco)
- 563 T078 Retinal structure and visual function in asymptomatic Leber hereditary optic neuropathy carriers
Johan Hedström, Maria Nilsson, Martin Engvall, Pete Williams, Abinaya Venkataraman (Sweden)
- 571 T079 Correlations between ophthalmological, multi-OMICs and Quality of life data of a large cohort of dominant optic atrophy cases related to OPA1 variants
Aymane Bouzidi¹, Christina Eckmann-Hansen², Beatrice Bocquet¹, Méline Wery¹, Cinzia Bocca¹, Valérie Desquirit-Dumas¹, Adélie Mellinger¹, Michael Larsen^{2,3}, Isabelle Meunier¹, Xavier Zanlonghi¹, Guy Lenaers¹ (¹France, ²Denmark)

- 584 T080 OPA1 rescue by trans-splicing : an update
Aymane Bouzidi, Yannick Ledantec, Adélie Mellinger, Valérie Desquiret-Dumas, Olivier Baris, Alexis Bemelmans, Jing Wang⁴, Guy Lenaers (France)
- 596 T081 Idiopathic intracranial hypotension presenting as horizontal binocular diplopia: a rare case report
Nikolaos Garyfallos, Evangelos Spanos, Dionisios Vakalopoulos, Konstantinos Kardamakis, Dimitra Antonopoulou (Greece)
- 604 T082 Brain MRI abnormalities of the visual pathway in subacute LHON: what is the prevalence?
Giulia Amore, Michele Carbonelli, Martina Romagnoli, Caterina Tonon, Raffaele Lodi, Valerio Carelli, Chiara La Morgia (Italy)
- 606 T083 Visual acuity outcomes by causative mutation in Leber hereditary optic neuropathy: analyses from LEROS and Case Record Survey-2
Patrick Yu-Wai-Man¹, Bart Leroy², Judith van Everdingen³, Maciej Krawczynski⁴, Valerio Carelli⁵, Xavier Llòria⁵, Thomas Klopstock⁶ (¹United Kingdom, ²Belgium, ³The Netherlands, ⁴Poland, ⁵Italy, ⁶Germany)
- 609 *rf* T084 Disease severity at baseline in Leber hereditary optic neuropathy patients from the Case Record Survey-2 with simultaneous versus sequential bilateral vision loss
Thomas Klopstock¹, Bart Leroy², Patrick Yu-Wai-Man³, Judith van Everdingen⁴, Maciej Krawczynski⁵, Valerio Carelli⁶, Xavier Llòria⁶ (¹Germany, ²Belgium, ³United Kingdom, ⁴The Netherlands, ⁵Poland, ⁶Italy)
- 611 T085 Patient demographics and disease characteristics in a historical cohort of patients with Leber hereditary optic neuropathy from Case Record Survey-2
Neringa Jurkute¹, Bart Leroy², Patrick Yu-Wai-Man¹, Judith Van Everdingen³, Maciej Krawczynski⁴, Valerio Carelli⁵, Xavier Llòria⁵, Thomas Klopstock⁶ (¹United Kingdom, ²Belgium, ³The Netherlands, ⁴Poland, ⁵Italy, ⁶Germany)
- 612 T086 The effects of mutation and age at onset on individual disease trajectories in Leber hereditary optic neuropathy eyes from the Case Record Survey-2
Marcela Votruba¹, Bart Leroy², Patrick Yu-Wai-Man¹, Judith Van Everdingen³, Maciej Krawczynski⁴, Valerio Carelli⁵, Xavier Llòria⁵, Thomas Klopstock⁶ (¹United Kingdom, ²Belgium, ³The Netherlands, ⁴Poland, ⁵Italy, ⁶Germany)
- 632 T087 Dominant optic atrophy clinical variability in the largest-ever identified OPA1 family displaying a deletion of OPA1 last two exons
Xavier Zanlonghi¹, Bouzidi Aymane¹, Patrizia Amati-Bonneau¹, Meunier Isabelle¹, Beatrice Bocquet¹, Charif Majida², Guichet Agnès¹, Valérie Desquiret-Dumas¹, Guy Lenaers¹ (¹France, ²Morocco)
- 640 T088 Optic neuropathy: an atypical presentation of lyme disease
Taha Koutheir Bizani, Alioua Haifa, Khammeri Housseem, Sayadi Jihene, Imene Zeghal (Tunisia)
- 641 T089 Hereditary optic atrophy in childhood: structural and functional analysis in a cohort of Italian patients
Michele Carbonelli, Marco Battista, Giulia Amore, Luigi Brotto, Maria Lucia Cascavilla, Leonardo Caporali, Chiara La Morgia, Valerio Carelli, Piero Barboni (Italy)
- 645 *rf* T090 Impact of prematurity on ocular biometry and refractive development during the first years of life
Merve Mutlu, Burcin Cakir (Türkiye)
- 653 T091 Low-dose atropine-related esotropia in a four-year-old child with high myopia
Athanasia Sandali¹, Theodora Gianni², Anna Nikolaidou³, Lampros Lamprogiannis⁴ (¹Greece, ²Cyprus, ³Germany)

- 667 T092 Restrictive post-traumatic strabismus without muscle entrapment: surgical management with conjunctival grafting
Javier Ramos Duarte, Ana María Abad Pascual, Edurne De La Cámara Sahuquillo, Pablo Tejada González, Inmaculada Herrero Sánchez, Luca Manuel Bueno Borghi, Carla Sánchez Remacha, Cristina Calvo Simón, Miguel Castillo Fernández, Julia Aramburu Clavería, Marta Suñer Martínez, Francisco Javier Ascaso, Diana Perez Garcia (Spain)
- 669 T093 Pediatric open globe injuries: predictive factors for visual prognosis
Meriem Aissaoui, Oumayma Amara, Laftimi Zyad, Daghouj Ghizlane, Loubna Elmaaloum, Allali Bouchra, Asmaa El Kettani (Morocco)
- 680 T094 Evaluation of conjunctival wound closure after strabismus surgery using fibrin glue
Susana Duarte, Rafael Whitfield, Bernardo Monteiro, Emanuel Fernandes, Pedro Lino, Filipa Teixeira, Rita Gama (Portugal)
- 684 T095 Evaluation of vascular index by optical coherence tomography angiography in patients with ischemia-related paralytic strabismus
Seren Kaplan Gungordu, Burcin Cakir, Nilgun Ozkan Aksoy, Meryem Dilara Kilic (Türkiye)
- 696 T096 Pediatric traumatic cataract
Ghizlane Daghouj, Sara Ettouri, Ali Rami, Laftimi Zyad, Loubna El Maaloum, Bouchra Allali, Asmaa El Kettani (Morocco)
- 697 T097 Open globe trauma in children: epidemiological, clinical, therapeutic and prognostic aspects
Sara Ettouri, Daghouj Ghizlane, Kawtar El Hadi, Arab Lamiaa, Laftimi Zyad, Loubna El Maaloum, Bouchra Allali, Asmaa El Kettani (Morocco)

POS Poster Session PO

- 261 T098 Cherry tear - A rare case of caruncular oncocyoma
Inês Ludovico, Tiago das Neves, Ricardo Costa-Grtrudes, Catarina Mota, Carlos Batalha (Portugal)
- 306 T099 Begnin oncocyoma of the ocular caruncle: a case series and literature review
Stefano Dore, Sara Sechi, Laura Dessole, Rita Serra, Matteo Sacchi, Clara Ellecosta (Italy)
- 346 rf T100 Tear drops and Alzheimer's: unveiling early detection biomarkers - A systematic review
Inés López-Cuenca, Lidia Sánchez-Puebla, Lorena Elvira-Hurtado, Rubén Masa-Castro, Yael Hoz-Ruiz, Elena Salobrar-Garcia, José A. Matamoros, José A. Fernández-Albarral, Hector Leal-Lasalle, Juan Jose Salazar, Ana Isabel Ramirez, Jose Manuel Ramirez, Rosa De Hoz (Spain)
- 349 T101 Multidisciplinary management of cervicofacial necrotizing fasciitis with orbital involvement: a case report
Tomaz Oliveira, Bruno Rosa (Portugal)
- 350 T102 Evaluation of tarsorraphy in patients undergoing parotidectomy for oncological disease: a multidisciplinary assessment
Tomaz Oliveira, Ricardo Nogueira (Portugal)
- 430 rf T103 Circulating tumor DNA as a biomarker for surveillance of uveal melanoma
Vojtech Hanicinec, Eirunn Øvreggaard, Morten Carstens Moe, Henrik Jespersen, Agate Noer (Norway)
- 482 rf T104 Reconstruction of medium to large full-thickness lower eyelid defects by a novel single-stage procedure: update on the marginal approach for releasing the lid with closure handling (MARCH) technique
Anna March De Ribot¹, Santiago Ortiz-Pérez^{1,2}, Francesc March De Ribot¹ (¹New Zealand, ²Spain)



- 536 T105 Eyelid trichoblastic carcinoma: a diagnostic and therapeutic challenge
Amina El Mayel, Mohamed Ben Hadj Khelifa, Rim Kmiha, Ghassen Marzouk, Imen Abbas, Amel Chebbi (Tunisia)
- 540 T106 RB1 screening for previously untested retinoblastoma survivors
rf **Kalle Nummi, Tero Kivelä** (Finland)
- 589 T107 Role of CDKN1A, MDM2, MTHFR and MTR polymorphisms in retinoblastoma: a systemic study
rf **Shobhit Gupta, Sushma Nandyala, Tapas Roy, Deepsekhar Das** (India)
- 635 T108 Transcriptomic atlas of uveal melanoma
rf **Vojtech Hanicinec, Xavier Tekpli, Øystein Garred, Marie Fongaard, Sunniva Bøstrand, Michael Frisk, Thomas Bærland, Giang Nguyen, Jürgen Geisler, Morten Carstens Moe, Agate Noer, Henrik Jespersen** (Norway)

Poster Session 2

Evaluators: **Maddi Alonso-Agesta** (Spain), **Dmitri Artemiev** (Switzerland), **Gloria Astolfi** (Italy), **José António Dias** (Portugal), **Ariadna Diaz-Tahoces** (Spain), **Sara Ettouri** (Morocco), **Ariadna Garreta-Rafecas** (Spain), **Mohamed Geneid** (Finland), **Judit Hodrea** (Hungary), **Yuliya Huseva** (Belarus), **Bogumiła Sędziak-Marcinek** (Poland), **Piera Versura** (Italy)

11:05-12:05

POS Poster Session COS

- 59 F001 Distribution of keraconus assessed by belin/ambrosio parameters according to age and gender in tertiary eye center: across-sectional study
Ali Hakim Reyhan (Türkiye)
- 60 F002 Artificial intelligence in the differential diagnosis of ocular surface lesions
Eszter Szalai, Zoltan Richard Janki, Kincso Kozma, Adrienne Csutak, Vilmos Bilicki (Hungary)
- 63 F003 Functional dry eye disease severity and systemic manifestation in Sjogren's syndrome
Amira Mabrouk, Bisma Ben Achour, Rim Bourguiba, Wassim Hmaied (Tunisia)
- 71 F004 Keratoscope-guided opening of the graft host junction to treat elevated astigmatism after deep anterior lamellar keratoplasty
Costanza Rossi, Andrea Lucisano, Andrea Taloni, Massimiliano Borselli, Vincenzo Scorgia (Italy)
- 94 F005 The vision impact survey for keratoconus (VISYKO) for measuring the quality of life in patients with keratoconus
Matilde Buzzi, Rita Mencucci, Danilo Alunni-Fegatelli, Stefano Gallio, Alberto Carnicci, Mario Fruschelli, Giuseppe Lombardo, Marco Lombardo (Italy)
- 122 F006 Presence of fibrillar layer does not influence rebubbling rate after descemet membrane endothelial keratoplasty in advanced fuchs endothelial corneal dystrophy eyes
Nihan Demiralay, Mert Mestanoglu, Antonia Howaldt, Johanna Wiedemann, Silvia Schrittenlocher, Mario Matthaei, Claus Cursiefen, Björn Bachmann (Germany)
- 139 F007 Effect of autologous serum eye drops: 15 years of experience
Joana Pargana, Susana Duarte, Bruno Guerreiro Dias, Emanuel Fernandes, Rui Ferreira, Patrícia José, Ana Miguel Quintas, Paulo Silva Guerra (Portugal)
- 146 *rf* F009 Effects of DFL24498 on proinflammatory innate and adaptive immune cell responses in vitro and in a translational murine model of atopic keratoconjunctivitis
Marta Sacchetti, Anna Sirico, Maria De Lucia, Rafael Cypriano Dutra, Rubina Novelli, Giuseppina Vicaretti, Anna Lucia Valeri, Maria Concetta Dragani, Tiziana Romeo, Andrea Aramini, Marcello Allegretti (Italy)
- 152 F010 An artificial intelligence approach to detect keratitis in in vivo confocal microscopy
Katarzyna Kryszan, Mateusz Walasz, Ewa Wróblewska-Czajka, Edward Wylęgała, Adam Wylęgała (Poland)
- 176 F011 From prescription to protection: investigating informed consent gaps in contact lens practice
Onur Furundaoturan, Ilayda Korkmaz, Ozlem Barut Selver (Türkiye)
- 188 F012 Pioneering design and advancement of a one-piece keratoprosthesis (KPro) for human corneal restoration
Mozhgan Aghajanzadeh-Kiyaseh, Mostafa Zamani-Roudbaraki, Marie-Claude Robert, May Griffith (Canada)



- 210 F013 Impact of descemet membrane endothelial keratoplasty on corneal sensitivity in fuchs endothelial dystrophy: a comparative analysis
Bruno Guerreiro Dias, Bernardo Monteiro, Vasco Lobo, Joana Pargana, Rui Ferreira, Patrícia José, Ana Miguel Quintas, Paulo Silva Guerra (Portugal)
- 213 F014 Safety and efficacy of combined peripheral corneal crosslinking and fine-needle diathermy for regression of human corneal neovascularization
Mert Mestanoglu, Deniz Hos, Johanna Wiedemann, Heide Heinen, Friederike Schaub, Felix Bock, Claus Cursiefen (Germany)
- 218 F015 Clinical validation of enhanced optical coherence tomography tools for quantitative analysis of corneal transparency and haze in post-photorefractive keratectomy patients
Nuno Vivas Brás, Benjamin Memmi, Corentin Soubeiran, Maëlle Vilbert, Maëlle Bouhassane, Cristina Georgeon, Vincent Borderie, Anatole Chessel, Karsten Plamann (France)
- 220 F016 Investigating corneal sensitivity in hereditary transthyretin amyloidosis: a cross-sectional comparative analysis
Bruno Guerreiro Dias, Bernardo Monteiro, Vasco Lobo, Patrícia José, Paulo Silva Guerra, Carlos Marques-Neves, Isabel Conceição, Ana Miguel Quintas (Portugal)
- 225 F017 Injectable bioengineered hydrogel for the delivery of cells and extracellular vesicles to the conjunctiva
rf **Laura García-Posadas¹, Ismael Romero-Castillo¹, Antonio López-García¹, Mark Ahearne², Yolanda Diebold¹** (¹Spain, ²Ireland)
- 232 F018 Aesthetics vs. physiology^ the impact of cosmetic procedure on meibomian glands
Vitalyna Harkusha, Tetiana Zhmud, Olga Melnyk (Ukraine)
- 233 F019 Towards safer glaucoma treatment: cytological evaluation of the conjunctiva in preservative-free vs. preserved latanoprost users
Olga Melnyk, Tetiana Zhmud, Vladyslav Tetarchuk (Ukraine)
- 248 F020 Neurofilaments in tears as biomarkers of corneal neuronal degeneration in diabetic patients: a pilot study
Emanuela Aragona, Giovanni William Oliverio, Maura Mancini, Alessandro Arrigo, Paola Palino, M'hamed Aguenouz, Gianpaolo Zerbini, Francesco Bandello, Pasquale Aragona (Italy)
- 276 F021 Digital phantoms for improved OCT based corneal densitometry
Maria Miażdżyk, Alejandra Consejo, D. Robert Iskander (Spain)
- 298 F022 Relationship between ocular biomechanics and segmental biometry in myopic eyes
Beatriz Vieira¹, Gabriel Santos¹, João Heitor Marques¹, Renato Ambrósio², Pedro Menéres¹, João Melo Beirão¹, Pedro Baptista¹ (¹Portugal, ²Brazil)
- 300 F023 Ocular side effects of Dupilumab in patients treated for atopic dermatitis
Stefano Dore, Antonio Pinna, Rosanna Satta, Clara Ellecosta (Italy)
- 312 F024 Novel artificial intelligence approaches for redness hyperemia analysis
rf **Nico Curti, Tommaso Giacometti, Luigi Fontana, Gastone Castellani, Piera Versura** (Italy)
- 326 F025 Antimicrobial efficacy and corneal safety of cold atmospheric plasma in keratitis treatment
Fanyue Meng, Volker Stoldt, FriedrichAnton Steindor, Joana Witt, Florian Groeber-Becker, Gerd Geerling (Germany)
- 343 F026 Femtosecond laser-assisted implantation of corneal allogenic intrastromal ring segments for visual rehabilitation in keratoconus after corneal crosslinking: a case series
Dafni Planta, Eleftherios Chatzimichail, Dimitrios Kyroudis, Frank Blaser, Nicolas Feltgen, Zisis Gkatziofufas (Switzerland)

- 379 F027 Clinical outcomes of repeated corneal crosslinking for progressive keratoconus after failure of primary procedure: safety and efficacy at 12-month follow up
Eleftherios Chatzimichail, Mohamed Elalfy, Frank Blaser, Nicolas Feltgen, Zisis Gkatzoufas (Switzerland)
- 380 F028 Management of a difficult case of toxic epidermal necrolysis after topical use of chloramphenicol
Evangelia Dalieraki, Georgios Dalianis, Chryssa Terzidou (Greece)
- 381 F029 Femtosecond laser-assisted implantation of corneal allogenic intrastromal ring segments for visual rehabilitation in keratoconus after corneal crosslinking
Eleftherios Chatzimichail, Dimitrios Kyroudis, Frank Blaser, Nicolas Feltgen, Zisis Gkatzoufas (Switzerland)
- 409 F030 3D printed nanocomposite contact lenses for ocular health management
Haider Butt (United Arab Emirates)
- 417 F031 Evaluation of novel drug targets in eye samples from patients affected with rare eye diseases
Silvia Palombella, Matteo Pederzoli, Gianluca Tilaro, Philippe Fonteyne, Erica Alessandra Lecchi, Federico Procopio, Giulio Ferrari (Italy)
- 418 F032 Cord blood serum attenuates hyperosmotic-induced stress in human conjunctival epithelial cells
Gloria Astolfi, Carmen Ciavarella, Chiara Coslovi, Elisa Bergantin, Marina Buzzzi, Luigi Fontana, Piera Versura (Italy)
- 421 F033 Corneal wounds: epidemiological, clinical, progressive and therapeutic profile (about 200 cases)
Sara Ettouri, Daghouj Ghizlane, Kawtar El Hadi, Arab Lamiaa, Ali Rami, Laftimi Zyad, Loubna El Maaloum, Bouchra Allali, Asmaa El Kettani (Morocco)
- 426 F034 Biomechanical & tomographical outcomes in keratoconus offspring: a 3-year prospective study
Maite López-López, Uxía Regueiro, Tania Alvite-Piñeiro, Isabel Lema (Spain)
- 437 F035 MicroRNA profile in human corneal tissue of Keratoconus patients undergoing lamellar keratoplasty
Carmen Ciavarella, Antonio Moramarco, Silvia Odorici, Natalie Di Geronimo, Gianandrea Pasquinelli, Luigi Fontana, Piera Versura (Italy)
- 441 F036 A personalized treatment approach with cord blood prp eye drops in severe dry eye associated with EGFR inhibitors: a pilot study on hla-dr expression as efficacy biomarker
Daniela Pollutri, Natalie De Geronimo, Andrea De Giglio, Francesco Gelsomino, Andrea Ardizzoni, Luigi Fontana, Piera Versura (Italy)
- 456 F037 Standardizing tear fluid biomarker research: a comprehensive review of collection methods and analysis protocols
Marlies Gijs¹, Nienke van de Sande¹, Clemence Bonnet², Jente Schmeetz¹, Rosa Fernandes³, Sonia Trave-Huarte⁴, Marcela Huertas-Bello², Jeremy Chung Bo Chiang⁴, Nikolay Boychev², Shrutti Sharma², Tear Research Network Scoping Review taskforce¹ (¹The Netherlands, ²USA, ³Portugal, ⁴United Kingdom)
- 464 F038 Tear proteomic signatures reveal and predict keratoconus progression in a case-control cohort
Maddi Alonso-Agosta, Itziar Martinez-Soraa, Txomin Alberdi, Aritz Bidaguren, Arantxa Acera (Spain)
- 473 F039 Sub400 corneal crosslinking for advanced pediatric keratoconus
Ricardo Costa-Gertrudes, Pedro Lopes, Joana Ferreira, Tiago das Neves, Vitor Maduro, Nuno Alves, Pedro Gil, Eduardo Silva, João Feijão (Portugal)
- 500 F040 Ocular and corneal topography findings in patients with ichthyosis
Rym Maamouri, Zaoauk Anissa, Aouni Jaafer, Kammoun Alyssa, Fenniche Samy, Monia Cheour (Tunisia)



- 533 F041 DMEK for corneal decompensation following anterior chamber dislocation of a dexamethasone implant
Jacqueline Fröhlich, Eleftherios Chatzimichail, Alexandra Steinemann, Nicolas Feltgen, Zisis Gkatziofas (Switzerland)
- 535 F042 Outcomes of posterior approach ptosis repair: 5-year retrospective study at a tertiary referral center
rf **Tiago das Neves, Joana Ferreira, Ricardo Costa-Gertrudes, Pedro Lopes, Ana Magriço** (Portugal)
- 537 F043 Combined corneal graft suture revision, pars-plana vitrectomy and cataract surgery in case of a previous penetrating keratoplasty complicated with anterior capsule integrity and malignant glaucoma after multi-resistant pseudomonas aeruginosa corneal ulcer
Tiago das Neves, Pedro Lopes, Joana Ferreira, Ricardo Costa-Gertrudes, Lívio Costa, Sara Crisóstomo (Portugal)
- 543 F044 In vitro evaluation of the effects of serotonin-norepinephrine reuptake inhibitors and neurokinin-1 receptor antagonists on corneal cold sensory nerve terminal activity
Laura Frutos-Rincón, M Carmen Acosta, Juana Gallar (Spain)
- 556 F045 Diesel exhaust particles exposure disrupts lipid metabolism in immortalised meibomian gland epithelial cells
rf **Ha Duong, V Cioanca, Minh Phan, Michele Madigan, Blanka Golebiowski** (Australia)
- 562 F046 Preoperative ocular surface inflammation in corneal transplant candidates: role of HLA-DR expression
rf **Silvia Odorici, Carmen Ciavarella, Michele Potenza, Daniela Pollutri, Antonio Moramarco, Luigi Fontana, Piera Versura** (Italy)
- 557 F047 Pearson syndrome-associated endothelial dysfunction: a case report
Ricardo Costa-Gertrudes, Joana Ferreira, Tiago das Neves, Pedro Lopes, Bruna Cunha, Pedro Gil, Eduardo Silva (Portugal)
- 567 F048 Effectiveness of amino-acids in the treatment of chemical burns in the stage of trophical disorders
Iryna Pshenychna, Kateryna Hrizhymalska, Olga Andrushkova (Ukraine)
- 569 F049 Contribution of voltage-gated sodium and calcium channels to the excitability of menthol-sensitive corneal nerve terminals in mice
Fernando Aleixandre-Carrera, Almudena Iñigo-Portugués, M Carmen Acosta, Juana Gallar, Víctor Meseguer (Spain)
- 573 F050 Severe chemical injury of the cornea managed with amniotic membrane graft: a case report
Inês Mendo, Mariana Vaz, Filipe Moraes, Tomas Loureiro (Portugal)
- 575 F051 Corneal nerve fiber morphology is altered in central serous chorioretinopathy
Jean-Louis Bourges, Behar-Cohen Francine (France)
- 578 F052 Evaluation of cross-linking of donor corneas following therapeutic keratoplasty in cases of infectious keratitis
rf **Sushma Nandyala, Aafreen Bari, Himanshu Khandelwal, Namrata Sharma** (India)
- 587 F054 Comparative evaluation of corneal and epithelial thickness measurements using spectral-domain and swept-source anterior segment optical coherence tomography in eyes with keratoconus
Mirza Karamovic, Marika Wahlberg Ramsay, Branka Samolov, Abinaya Venkataraman I Alberto Dominguez-Vicent (Sweden)
- 600 F055 Monotherapy with polihexanide 0.08% for the treatment of acanthamoeba keratitis in complex cases
Jacqueline Fröhlich, Eleftherios Chatzimichail, Daniela Starosta, Konstantin Gugleta, Nicolas Feltgen, Zisis Gkatziofas (Switzerland)
- 607 F056 Clinical proteomics characterized age- and tear secretion-associated molecular changes in dry eye syndrome
rf **Natarajan Perumal, Hao Lin, Anna Lindner, Adina Glasmacher, Bettina Multani, Caroline Manicam** (Germany)

- 613 *rf* F058 Extracellular vesicles and exosomes in corneal graft integration
Grace Lin, Neethi Thathapudi, Mostafa Zamani-Roudbaraki, Marie-Claude Robert, May Griffith (Canada)
- 623 *rf* F059 Examination of the potential influence of baseline corneal fluorescein staining score on dry eye symptom improvement in patients treated with ciclosporin 0.1% cationic emulsion: analysis of data from the PERSPECTIVE study
Anita Reynolds¹, Elisabeth M. Messmer², Ines Lanzl² (¹United Kingdom, ²Germany)
- 636 F060 Results of advanced surface ablation surgery for patients with myopia above 9 diopters who have been under observation for more than 2 years
Liudmyla Ivzhenko, Armen Prokipets (Ukraine)
- 665 F062 Corneal crosslinking surgery following intrastromal corneal ring segment removal in progressive keratoconus: functional, tomographic and biomechanical improvement after one year of follow up
Júlio Brissos¹, Guilherme Almeida¹, Gonçalo Tardão², Renato Ambrósio Jr.¹ (¹Portugal, ²Brazil)
- 706 F064 A 10-Year (2015-2025) retrospective review of fungal keratitis at a UK Tertiary referral centre: it remains a regular threat
Mohammed Talha Bashir, Parwez Nazir Hossain (United Kingdom)
- 712 F065 The SUNLIGHT trial: a double-blind Phase 1 safety and tolerability clinical trial of OC134 eye drops
Asya Petkova, Andreas G. Schatzlein, Ijeoma F. Uchegbu (United Kingdom)

POS Poster Session G

- 120 F066 Long-term evaluation of ocular surface disease signs in patients with open-angle glaucoma or ocular hypertension using the preservative-free 0.005% latanoprost eye drop emulsion: open-label extension data following a 3-month randomized study
Kai Kaarniranta¹, Francesco Oddone², Christophe Baudouin³ (¹Finland, ²Italy, ³France)
- 158 F068 Investigating the relationship between intraocular pressure and body mass index in project FOREVER
Christina Eckmann-Hansen, Jens Rovelt Andreasen, Josefine Freiberg, Arevak Saruhanian, Miriam Kolko (Denmark)
- 164 *rf* F069 Galectin-3 is associated with Müller cells in glaucoma
Anne Rombaut, Alan Nicol, Rune Brautaset, Pete Williams, James Tribble (Sweden)
- 182 *rf* F070 Evaluation of synthetically generated optical coherence tomography images
Damon Wong¹, Ashish Jith¹, Jacqueline Chua¹, Leopold Schmetterer^{1,2} (¹Singapore, ²Austria)
- 207 *rf* F071 Proteomics analyses of ocular small extracellular vesicles in glaucoma
Ana Guzman Aranguéz, Raquel Rejas-Gonzalez, Ana Montero-Calle, Rodrigo Bardenas, Natalia Pastora Salvador, María José Crespo Carballes, Juan Snachez-Naves (Spain)
- 231 F072 Preservatives in glaucoma treatment: a comparative study of preserved and preservative-free latanoprost eye drops on conjunctival goblet cells
Nisa Lise Secim, Silje Ehlers Bonne, Umalbaninn Alnoor, Miriam Kolko (Denmark)
- 238 *rf* F073 Impact of preserved and preservative-free latanoprost eye drops on calcium regulation in conjunctival goblet cells
Umalbaninn Alnoor¹, Jeffrey A. Bair², Steffen Heegaard¹, Miriam Kolko¹ (¹Denmark, ²USA)



- 260 F074 The Influence of age-related changes of lamina cribrosa of sclera on neurofilaments susceptibility in optic neuropathy
Yuliya Huseva (Belarus)
- 270 F075 Tolerability of preservative-free latanoprost/timolol fixed combination versus preserved bimatoprost/timolol in patients with open-angle glaucoma or ocular hypertension - The AdEQUATE study
rf **Julian Garcia Feijoo¹, Leopold Schmetterer^{2,3}, Noemí Guemes¹** (¹Spain, ²Singapore, ³Austria)
- 325 F076 A clinical evaluation of a virtual reality headset-based visual field test compared to standard automated perimetry in healthy volunteers and glaucoma patients
rf **Maribel Espinosa-Cabrera** (United Kingdom)
- 327 F077 A qualitative assessment of open-angle glaucoma treatment from the perspectives of ophthalmologists
Cindy M.L. Hutnik¹, Pedro Corsino Fernandez Vila², Tarek Hassan³, Shivani Ohri Vignesh⁴ (¹Canada, ²Spain, ³USA, ⁴India)
- 334 F078 Relationship between macrophage inflammatory protein-1 α and basic fibroblast growth factor concentrations in the anterior lens capsule and intraocular pressure in patients with primary open-angle glaucoma, pseudoexfoliation glaucoma and without glaucoma undergoing cataract surgery
Katarzyna Gontarz, Mariola Dorecka, Wojciech Garczorz, Tomasz Francuz (Poland)
- 339 F079 Hidden clues in micro eye movements - Tracking glaucoma progression with retinal eye-tracker NeuroFET
Aleksandra Gorczyca-Liczbiak, Marta Skrok, Robert Konklewski, Martyna Gebeska-Toloczko, Karolina Suwała, Maciej Nowakowski, Valentyna Pryhodiuk, Krzysztof Tołpa, Bogna Bylicka, Anna Szkulmowska, Katarzyna Zabel, Przemysław Zabel, Maciej Szkulmowski, Jakub Kaluzny (Poland)
- 351 F080 How short is too short? Evaluating postoperative survival after glaucoma surgery in a real-world cohort
rf **Bernardo Monteiro, Rafael Whitfield, Vasco Lobo, Emanuel Fernandes, Dina Costa, Nuno Amaro, Miguel Santos, André Diogo Barata, Rafael Correia Barão, Luis Abegão Pinto** (Portugal)
- 377 F081 Our 3-year experience with the PAUL glaucoma implant
Evangelia Dalieraki, Georgios Dalianis, Alexandra Trivli, Chryssa Terzidou (Greece)
- 431 F082 Exploring the associations of self-reported glaucoma and physical activity: findings from a danish eye and vision cohort - Project FOREVER
rf **Thao Tran, Jens Rovelt Andreasen, Josefine Freiberg, Christina Eckmann-Hansen, Miriam Kolko** (Denmark)
- 450 F083 Sigma-1 receptor activation represents a novel therapeutic strategy for ocular hypertension
rf **Judit Hodrea¹, Timea Medveczki¹, Tamas Lakat¹, Minh Tran¹, Akos Toth¹, Anna Takacsi-Nagy¹, Gyorgy Torok¹, Szabo Attila¹, Illes Kovacs^{1,1}, Dr. Fekete Andrea^{1,2}** (¹Hungary, ²USA)
- 451 F084 Targeting taurine metabolism for neuroprotection in a rat model of ocular hypertensive glaucoma
Eleonora Daghini^{1,2}, Alan Nicol¹, Baninia Habchi¹, Evangelia Daskalakis¹, Craig Wheelock¹, Rosario Amato², Maurizio Cammalleri², Massimo Dal Monte², James Tribble¹, Pete Williams¹ (¹Sweden, ²Pisa)
- 452 F085 Sigma-1 receptor agonist fluvoxamine is protective against hyperglycemia-induced fibrosis in human trabecular meshwork cells
Alexandra Rozsahegyi¹, Judit Hodrea¹, Marcell Cserhalmi¹, Timea Medveczki¹, Balazs Besztercei¹, Illes Kovacs^{1,2}, Szabo Attila¹, Fekete Andrea¹ (¹Hungary, ²USA)
- 455 F086 Challenges in glaucoma diagnosis: agreement in clinical diagnosis and deep learning glaucoma screening
rf **Joana Pargana¹, Afonso Lima-Cabrita¹, Rafael Whitfield¹, Vasco Lobo¹, Bernardo Monteiro¹, Sanna Leinonen², Ana Miguel³, Marta Pazos⁴, Panayiota Founti⁵, Rafael Correia Barão¹, Ingeborg Stalmans⁶, Luis Abegão Pinto¹** (¹Portugal, ²Finland, ³France, ⁴Spain, ⁵United Kingdom, ⁶Belgium)

- 457 F087 Effect of different treatments on retrobulbar and choroidal blood flow parameters in normal tension glaucoma: a OCT-A and Color Doppler Imaging study
Enrico Lupardi, Alice Galzignato, Catarina Coutinho, Monica Ferri, Gian Luca Laffi, Andrea Distefano, Marco Battista, Alfredo Sadun, Piero Barboni, Luigi Brotto, Emma Zuliani (Italy)
- 505 F089 Female life cycle stages and intraocular pressure variations: an analysis of a representative Korean population
Haryung Park, Yun Jeong Lee, Jin Wook Jeoung, Ki Ho Park, Young Kook Kim (South Korea)
- 534 F090 Glaucoma implant as salvage therapy in refractory glaucoma following gold shunt failure and recurrent corneal graft
Ariadna Garreta-Rafecas, Elena Milla (Spain)
- 542 F091 Neovascular glaucoma: a single unit retrospective consecutive series from 2003 to present day to evaluate clinical profile, management and outcomes in the anti-VEGF era
Tushar Hari, Alex Tanner, Kieran Teeluck, Jayne Lee, Muneeb Ahmad Khan, Nish Srikantha, Alastair Lockwood (United Kingdom)
- 545 F092 Minimally invasive surgery in late presentation hypotony after trabeculectomy for complete resolution of bilateral choroidal effusions: a case report
Tushar Hari, Jayne Lee, Alex Tanner, Kieran Teeluck, Muneeb Ahmad Khan, Nish Srikantha, Alastair Lockwood (United Kingdom)
- 554 F093 Dynamic optic disc coloboma as a mask of glaucoma - case series study
Barłomiej Kocurek, Michał Głodzik, Adrian Smedowski (Poland)
- 555 F094 Selective laser trabeculoplasty (SLT) in practice: the promise of a drop-free future in the management of glaucoma and ocular hypertension?
Kieran Teeluck, Nish Srikantha, Tushar Hari, Alex Tanner, Jayne Lee, Muneeb Ahmad Khan, Alastair Lockwood (United Kingdom)
- 564 F095 Short-term high-dose nicotinamide treatment across glaucoma subtypes reveals increased mitochondrial DNA content and minimal metabolomic changes in blood
Simon Gustavsson¹, Antoni Vallbona Garcia², James Tribble¹, Pete Williams¹, Gauti Johannesson¹, Theo Gorgels², Birke Benedikter², Hubert Smeets², Patrick Lindsey², Carroll Webers² (¹Sweden, ²The Netherlands)
- 582 F098 Retinal nerve fibre layer and ganglion cell complex thickness in patients with metabolic syndrome
Ieva Simkiene¹, Jacqueline Chua², Gabriele Tarutyte¹, Jolita Badariene¹, Rimvydas Asoklis¹, Leopold Schmetterer² (Lithuania, ²Singapore)
- 625 F099 A new technique to make glaucoma surgery possible in those patients whose posture would normally preclude this
Alastair Lockwood, Muneeb Ahmad Khan, Kieran Teeluck, Tushar Hari, Alex Tanner, Jayne Lee, Nish Srikantha (United Kingdom)
- 633 F100 Regional disparities in glaucoma diagnosis and surgery in Denmark: urgent need for increased resources
Jeppe Samuelsen, Christina Eckmann-Hansen, Kim Holmgaard, Hadi Kjaerbo, Miriam Kolko (Denmark)
- 642 F101 Ensuring reliable glaucoma detection with deep learning: the critical role of calibration and evaluation practices
Marcel Reimann, Peter Tejlgaard Kampen, Josefine Vilsbøll Sundgaard, Miriam Kolko Anders Bjorholm Dahl (Denmark)
- 648 F102 Outcome for primary PAUL glaucoma implantation using tube ligature technique without intraluminal stent: a prospective observational single surgeon study
Mohamed Geneid, Jyri-Pekka Koskinen, Mika Harju, Juha Valimaki (Finland)
- 658 F103 Selective laser trabeculoplasty as an effective method of reducing intraocular pressure in a patient with primary angle-closure glaucoma after laser peripheral iridotomy in a 3-month follow-up period – a case report
Mariola Dorecka, Katarzyna Gontarz, Adrian Smedowski, Dorota Wyględowska-Promieńska (Poland)



- 659 F104 Mid-term outcomes of combined cataract surgery and iStent Inject W
Emanuel Fernandes, Afonso Lima-Cabrita, Bruno Guerreiro Dias, Susana Duarte, André Diogo Barata, Luis Abegão Pinto, Rafael Correia Barão (Portugal)
- 692 F105 Initial efficacy results of Latanoprost 0.005% + Netarsudil 0.02% combination drops, from a single centre
Bhavani Selvarasu, Eleanor Carr, Kleonikos Tsakiris (United Kingdom)
- 700 F106 "It's not always glaucoma": a misdiagnosed case of a carotid-cavernous fistula
Pedro Lopes, Joana Ferreira, Ricardo Costa-Gertrudes, Tiago Das Neves, Catarina Rodrigues (Portugal)
- 711 F107 The role of mitochondrial quality control and neuroinflammation in pathogenesis of Glaucoma.
Anjali Kalwar, Aleksandra Trifunovic (Germany)



Poster Session LC

- 77 F108 Refractive errors after cataract surgery
rf **Rym Maamouri, Molka Ferchichi, Riahi Souhir, Aouni Jaafer, Monia Cheour** (Tunisia)
- 79 F109 Comparison of corneal power assessment methods for true corneal power after myopic small-incision lenticule extraction
rf **Xiaoling Fang, Jiannan Huang, Leilei Wang, Wenwen Xue, Xia Chen** (China)
- 93 F110 Accuracy of twenty intraocular lens power calculation formulas in long eyes
rf **Wiktor Stopyra¹, Oleksiy Voytsekhivskyy², Andrzej Grzybowski¹** (¹Poland, ²Ukraine)
- 102 F111 Comparison between two extended depth of focus intraocular lenses
Kyungmin Koh (South Korea)
- 105 F112 Ophthalmological manifestations and visual outcomes of electrical and lightning trauma: a systematic review
rf **Maria Piedrahita, Felipe Pineda, Felipe Moreno, Maria Estevez, Nicolas España, Viviana Infante, Germán Mejía-Salgado, Carlos Cifuentes, Diana Rey, Laura Rodriguez-Camelo, Alejandra de-la-Torre** (Colombia)
- 249 F113 Comparison of surgically induced astigmatism after cataract surgery in post-LASIK eyes and virgin eyes with long axial length
Xia Chen, Xiaoling Fang, Wenwen Xue, Jiannan Huang, Jingjing Wang, Xiangui He, Leilei Wang (China)
- 256 F114 Influence of axial length on target refraction after intraocular lens implantation in children under 2 years of age
rf **Alejandro Alcaide Costa, Eva Calpe, Gemma Julio, Rafael Barraquer** (Spain)
- 301 F115 Systemic medications associate with cataract surgery in patients over 50 years
rf **Sirpa Loukovaara, Antti Riikonen, Tuomas Lilius, Jari Haukka** (Finland)
- 348 F116 Quantitative cataract grading based on blue-light autofluorescence confocal imaging
Alessandro Arrigo, Emanuela Aragona, Francesco Bandello (Italy)
- 494 F117 Historical overview of the studies about epidemiology of myopia
rf **Olavi Pärssinen** (Finland)

- 503 F118 Exploring the use of pre- and retro-pupillary artisan IOLs for managing complex crystalline lens dislocation: a long-term study of visual and endothelial outcomes
Windsor Chao¹, Howard Wen-Haur Chao¹, Penbai Hui², Hsiao-Ming Chao² (¹United Kingdom, ²Taiwan)
- 516 F119 Impact of cataract surgery on scotopic and photopic mydriasis
rf **Inês Mendo, Mariana Vaz, João Vaz, Filipe Moraes, Inês Machado, Tomas Loureiro, Nuno Campos** (Portugal)
- 638 F122 Chlorpromazine: a psychiatrist's ally, an ophthalmologist's adversary
Alaa Ghorbel, Sellem Ilhem, Ben abderrahmen Syrine, Ghorbel Mohamed (Tunisia)
- 709 F123 Determining the presence of TRPV4 channels and their influence on calcium signaling in human lens epithelium
Sofija Andjelic, Dasa Sarman, Bernarda Kinkela, Taja Vita Petrovic, Katarina Mestrovic, Marko Gosak, Marko Hawlina (Slovenia)

Poster Session 3

Evaluators: **Mohamed AL-Shabrawey** (USA), **Alessandro Arrigo** (Italy), **Dmitri Artemiev** (Switzerland), **Ivan Borjan** (Croatia), **José António Dias** (Portugal), **Johnny Di Pierdomenico** (Spain), **Maciej Gawęcki** (Poland), **Madhu Nath** (India), **Bogumiła Sędziak-Marcinek** (Poland), **Amany Tawfik** (USA), **Xiaomeng Wang** (Singapore), **Jo Zhou** (The Netherlands)

12:05-13:20

POS Poster Session EOVS

- 89 rf S001 Optical image quality of two toric extended depth of focus intraocular lenses based on wavefront engineering technology
Martina Vacalebre, Elena Anastasi, Renato Frison, Simon Federico Spanò, Benedetta Castroflorio, Maria Cristina Curatolo (Italy)
- 90 rf S002 Evaluation of a virtual reality headset at a tertiary care ophthalmology setting
Catherine Dang¹, Hong-An Nguyen¹, Soumya Podury¹, Matthew Quinn¹, Catherine Tsilfidis¹, Rustum Karanjia^{1,2} (¹Canada, ²USA)
- 91 rf S003 Defocus incorporated multiple segment spectacle lenses for myopia control: a retrospective study in a Turkish cohort
Nilay Akagun, Emrah Altıparmak (Türkiye)
- 170 rf S004 Association between building density and screening myopia in children and adolescents: a five-year longitudinal study from China
Jingjing Wang, Xiangui He (China)
- 173 rf S005 Visual activity enhances neuronal excitability in thalamic relay neurons
Aurore Aziz, Dumenieu Mael, Fronzaroli-Molinieres Laure, Naudin Lois, Bonnaure Cecile, Wakade Anushka, Zanin Emilie, Ankri Norbert, Incontro Salvatore, Denis Daniele, Marquize Beatrice, Brette Romain, Debanne Dominique, Russier Michael (France)
- 190 S006 Comparison of refractive errors in patients with Parkinson's disease and normal people
AbbasAli Yekta, Reyhaneh Shariati, Mehdi Khabazkhoob, Ali Shoeibi, Hadi Ostadimoghaddam, Akbar Derakhshan, Hasan Hashemi, Javad Heravian Shandiz, Asieh Ehsaei, Abbas Azimi Khorasani, Reihaneh Yekta, Yeganeh Yekta (Iran)
- 212 rf S007 Use of L-tyrosine supplementation to support retinal function in a mouse model of deprivation myopia
Bartosz Machna, Klaudia Mroz, Monika Katan, Anna Gasiorek, Anna Pacwa, Maciej Oseka, Mikołaj Górka, Joanna Lewin-Kowalik, Adrian Smedowski (Poland)
- 268 S008 The relationship between the cellular retinal structure measured with adaptive optics scanning laser ophthalmoscope and retinal function measured with multifocal electroretinogram in late-onset retinal degeneration
Stephanie Quinn, Penny Lawton, Andrew Browning, Laura Young (United Kingdom)
- 330 rf S009 Influence of head movement of fixation stability and eye angle changes during virtual reality perimetry
Hsin-yang Chen¹, Raphael Sznitman¹, Jan Darius Unterlauff², Martin Zinkernagel¹, Nathanael Urs Häner¹ (¹Switzerland, ²Germany)
- 359 rf S010 Assessing retinal function in an Alzheimer's disease mouse model APPNL-F/NL-F using electroretinography
Lidia Sánchez-Puebla¹, Santiago Milla Navarro¹, Inés López-Cuenca¹, José A. Matamoros¹, Elena Salobrar-García¹, José A. Fernández-Albarral¹, Lorena Elvira-Hurtado¹, Ana I. Ramírez¹, Juan Jose Salazar¹, Takaomi C. Saïdo², Takashi Saito², Carmen Nieto-Vaquero¹, María Ángeles Moro¹, Rosa De Hoz¹, Pedro De La Villa¹, Jose Manuel Ramirez¹ (¹Spain, ²Japan)

- 397 S011 Quantitative analysis of retinal vasculature in patients with autoimmune connective tissue disorders by retinal vessel analysis
Dmitri Artemiev, Margarita Todorova (Switzerland)
- 427 S012 Early pupillary dysfunction in optic neuropathies detected by chromatic pupillometry
Rocco Mastromartino¹, Martial Geiser², Fabian D'Apolito¹, Michele D'Ambrosio¹, Andrea Cusumano¹, Benedetto Falsini³ (¹Italy, ²Switzerland, ³USA)
- 471 S013 Variability and age-related changes in retinal layer thicknesses in healthy individuals - correlation with loss of flicker and chromatic sensitivity
Aiman Hafeez, Alison Binns, Irene Ctori, John L. Barbur (United Kingdom)
- 525 S014 Retinal colour vision: revisiting the limits of retinal mechanisms in colour perception
Sohail Daniel (United Kingdom)
- 581 S015 Retina-brain neurovascular coupling connection
Rui Bernardes¹, João Jordão¹, João Figueira¹, Miguel Morgado¹, Pedro Guimarães¹, Pedro Serranho¹, Delia DeBuc², Michel Paques³, Miguel Castelo-Branco¹ (¹Portugal, ²USA, ³France)
- 626 S016 The pulvinar's role in visual hierarchy communication and cortical integration
Christian Casanova, William Thomas, Nelson Cortes Hernandez (Canada)
- 639 S017 Comparative performance of six large language models in the self-assessment test of the American Academy of Ophthalmology
Andrea Taloni, Antonia Carmen Sangregorio, Filippo Lixi, Mario Troisi, Francesco Paolo Mancini, Valerio Calabresi, Feyza Çukurova, Raphael Kilian, Valentino De Ruvo, Luigi De Rosa, Giulia Coco, Massimo Busin, Giuseppe Giannaccare (Italy)
- 677 S018 Evidence for altered color adaptation in autism spectrum disorder
Miguel Castelo-Branco, João Castelhana, Francisca Matias (Portugal)
- 691 S019 Age-related changes in cone-mediated dark adaptation
Beatriz Sánchez Gavilán, Maria Cinta Puell Marin, Shrinivas Pundlik (USA)

POS Poster Session PBP

- 129 S020 Implementation of and ex vivo assay for corneal permeation and irritation: evaluation of proparacaine hydrochloride as a case study
Natalia Carolina Gonzalez Jimenez, Yolima Baena Aristizabal, Maria Lozano Alvarez (Colombia)
- 130 S021 Multiple neural pathways light-independently drive TH2 wide-field amacrine cells in the developing and mature retina
Dao-Qi Zhang, Wenqiu Wang (USA)
- 193 S022 Comparative proteomic analysis of aqueous humour, anterior capsules and crystalline lenses in different human cataract subtypes versus healthy controls
Christina Karakosta^{1,2}, Martina Samiotaki¹, Anastasios Bisoukis², Nantieznta Kyriakidou¹, Konstantinos Moschou¹, Marilita Moschos¹ (¹Greece, ²United Kingdom)
- 224 S023 Pharmacogenomics of steroid-induced ocular hypertension
Stephen Schwartz, Zeyuan Song, Satyabrata Pany, Jonathan Huang, Tatsuo Itakura, Arpan Mazumder, Anastasia Gurinovich, Francis Price, Jr., W. Daniel Stamer, Srinivasan Senthilkumari, Colin Willoughby, Ronnie George, Srujana Chitipothu, Sudha Iyengar, Paola Sebastiani, Marianne Price, M. Elizabeth Fini (USA)



- 286 rf S024 Protective effects and mechanism of modified Qiju Dihuang Formula in experimental choroidal neovascularisation rats
Leilei Wang, Xiaoling Fang, Xia Chen, Wenwen Xue, Jiannan Huang, Xiaowei Tong (China)
- 288 S025 Magnetically actuated and biodegradable robotic intraocular dexamethasone implants
Erdoğ Yildız¹, Ugur Bozuyuk¹, Eray Yildiz², Fan Wang¹, Mertcan Han¹, Alp Karacakol¹, Devin Sheehan¹, Yan Yu¹, Metin Sitti¹ (¹Germany, ²Turkey)
- 314 S026 Re-evaluating the role of preservative-containing eyedrop formulations: a review of recent data
Cindy M.L. Hutnik¹, Andrew J. Tatham², Andrzej Grzybowski³, José António Dias⁴, Pedro Corsino Fernández Vila Fernández Vila⁵ (¹Canada, ²United Kingdom, ³Poland, ⁴Portugal, ⁵Spain)
- 329 S027 Patient perspectives on handling single dose versus multi-dose eye drops
José António Dias, Joao Filipe, Nuno Lopes, Mario Cruz, Paulo Margarido (Portugal)
- 392 rf S029 An in-depth overview on retinal morpho-functional and molecular features of the 5xFAD murine model
Lorenzo Guidotti, Martina Lucchesi, Rosario Amato, Giuseppe Neri, Silvia Marracci, Claudia Gargini, Ugo Borello, Maurizio Cammalleri, Giovanni Casini, Massimo Dal Monte (Italy)
- 406 S030 Local thyroid hormone system in retinal cell resilience to metabolic stress
Rosario Amato (Italy)
- 407 rf S031 Astrocyte-mediated protection of the hypoxic retina: involvement of beta3-adrenoceptors
Alessio Canovai, Lorenza Di Marsico, Massimo Dal Monte, Paola Bagnoli, Maurizio Cammalleri (Italy)
- 416 S032 Rescuing mitochondria functioning by antioxidant agent to prevent the onset of age-related macular degeneration
Darin Zerti, Luigi Donato, Ignacio Babiloni Chust, Giulia Carozza, Rosalia D'Angelo, Lucia Poggi, Maurizio Passacantanto, Rita Maccarone (Italy)
- 419 rf S033 Early retinal involvement in amyotrophic lateral sclerosis: functional and molecular characterization in SOD1G93A mice
Lorenza Di Marsico, Eleonora Daghini, Rosario Amato, Angela Cannavale, Alessio Canovai, Giuseppe Neri, Ugo Borello, Claudia Gargini, Maurizio Cammalleri, Massimo Dal Monte (Italy)
- 438 rf S035 Shear-stress dependent viscous properties of hyaluronic-based lubricants
Leopold Schmetterer, Gerhard Garhöfer (Austria)
- 454 rf S036 Toxicity of tranexamic acid in Müller cells: oxidative stress and inflammatory pathways
Dammak Azza, Nadine Gubernath, Wolf Armin (Germany)
- 488 S037 Global trends in climate change and sustainability in ophthalmology literature
Anna March De Ribot, Francisc March De Ribot (New Zealand)
- 510 S038 Extracellular vesicle therapy for sepsis-induced neurodegeneration: influence of host sex and transplant compatibility
Jhoana Abigail Guarnizo-Campoverde, Kristy Tatiana Rodríguez Ramírez, David García Bernal, Fernando Lucas-Ruiz, Jesus Isaías Gil Chinchilla, Caridad Galindo-Romero, Maria José Ruiz-Pastor, Marta Agudo-Barriuso (Spain)
- 529 S039 Spatiotemporal characterization of advillin retinal ganglion cell degeneration following optics nerve injury
Manuel Salinas-Navarro, José Antonio Gómez-Sánchez, Andreea Delia Necula, Juan Sáez-Sánchez, Manuel Vidal-Sanz, Marcelino Avilés-Trigueros (Spain)

- 566 *rf* S040 Safety and neuroprotective effects of intravitreal transplatation of bone-marrow-derived mononuclear cells exosomes to animal model of retinal degeneration
Johnny Di Pierdomenico, Ana Martínez Vacas, Andreea Delia Necula, David García Bernal, Maria Paz Villegas Perez, Diego García-Ayuso (Spain)
- 570 *rf* S041 Corneal endothelium protective effect of taurine-based ophthalmic surgical devices
Francesca Lazzara, Federica Conti, Grazia Maugeri, Erika Giuffrida, Giuseppe Lo Giudice, Matteo Cereda, Claudio Bucolo (Italy)
- 572 S042 Design of selective PI3K delta inhibitors for diabetic retinopathy
Chiara Bianca Maria Platania, Carmela Bonaccorso, Cristina Munzone, Isabel La Rosa, Erika Giuffrida, Francesca Lazzara, Claudio Bucolo (Italy)
- 616 S043 Ocular disposition of bio-therapeutics and the role of peptide transporters in blood ocular barriers
Tapas Roy, Nabanita Halder, Rohit Saxena, Thirumurthy Velpandian (India)
- 617 S044 Investigating the cellular impact of silicone oil exposure in retinal cells: insights from cone oil droplet in vertebrate retina
Dammak Azza, Lara Catherine Kutschbach, Wolf Armin (Germany)
- 620 S045 Dual serotonergic ligand exerts protective effect in an in vitro model of blood retinal barrier breakdown
Claudio Bucolo, Chiara Bianca Maria Platania, Erika Giuffrida, Francesca Lazzara (Italy)
- 683 S046 Cigarette smoking and ocular diseases
Zahra Javdani, Frank Goes, Guido Vanhal, Deborah Herrera (Belgium)
- 704 S047 A preclinical tool for proliferative retinopathy and retinal fibrosis based on a mouse model of pericyte immaturity
Nekane Maritorea-Hualde, Catalina Prats-Lluís, Hielke Van Splunder, Anabel Martínez-Romero, Xavier Vallvé, Emma Cerrato, Ana Méndez, Luis Arias-Barquet, Eloi Montañez, Mariona Graupera, Pilar Villacampa (Spain)

POS Poster Session RV

- 100 S049 OCT-A as a highly sensitive biomarker to study retinal change in the early phase of Alzheimer's disease
Claudio Iacobucci, Bernardo Billi, Eleonora Lacorte, Patrizia Lorenzini, Paola Piscopo, Anna Elisa Castellano (Italy)
- 124 *rf* S050 Bone morphogenetic protein signaling and retinal fibrosis
Mohamed Al-Shabrawey¹, Sonali Sharma¹, Ikbal Karkoukli¹, Alee Asaaf¹, Muhammad Haque¹, Gieth Alahdab¹, Mohamed Tarek^{1,2}, Yuji Mishina¹ (¹USA, ²Egypt)
- 157 *rf* S051 Biodegradable ultrathin nanofibrous carrier for retinal tissue engineering: optical, mechanical and degradation properties
Hana Studenovska, Mourad Souibgui, Jitka Nováčková, Vladimír Proks, Jiří Hodan, Věra Cimrová (Czech Republic)
- 171 *rf* S052 Diabetes and diabetic retinopathy in Finland during 2000-2017 based on nationwide survey and register data
Petri Purola, Seppo Koskinen, Hannu Uusitalo (Finland)



- 192 S053 Beyond the algorithm: challenges and future paths in ai-driven geographic atrophy segmentation
Eirini Maliagkani¹, Aikaterini Chatzara¹, Dimitra Mitsopoulou², Andreas Katsimpris², Ioannis Apostolopoulos¹, Elpiniki Papageorgiou¹, Ilias Georgalas¹ (¹Greece, ²United Kingdom)
- 196 S054 Uveal effusion and serous retinal detachment following cataract surgery in a patient with nanophthalmos
Konstantinos Tyrlis, Paraskevi Kotrogianni, Thomas Chontos, Constantine Angelidis, Ilias Georgalas (Greece)
- 197 S055 Golgman Favre syndrome complicated with choroidal neovascularisation: case series
Amira Mabrouk, Nabi Wijdene, Boubaker Cyrine, Khohtali Sana, Jelliti Bechir (Tunisia)
- 203 S056 From skin to sight: sequelae in Hansen's disease
Maria Piedrahita, Eduardo Cadena, Maria Estevez, Felipe Moreno, Fernando Godin (Colombia)
- 206 S057 *Escherichia coli* Nissle 1917 as an adjuvant therapy reduces inflammation severity in experimental autoimmune uveitis
Klara Dusova, Petra Prochazkova, Aneta Klímová, Monika Rova, Nikolina Canova, Jarmila Heissigerova, Miloslav Kverka, Radka Roubalova, Janet Jezkova, Michaela Brichova, Petra Svozilkova (Czech Republic)
- 214 S058 Follow-up report of a case of focal choroidal excavation secondary to COVID-19 infection
Leilei Wang, Xiaoling Fang, Xia Chen, Wenwen Xue, Jiannan Huang, Xiaowei Tong (China)
- 216 S059 Macular pigmentary changes in diabetic eyes without diabetic retinopathy
Alessandro Arrigo, Emanuela Aragona, Gianpaolo Zerbini, Pasquale Aragona, Francesco Bandello (Italy)
- 217 S060 Retinal vascular changes in mild cognitive impairment using SD-OCT angiography: pilot study
Lorena Elvira-Hurtado, Inés López-Cuenca, Lidia Sánchez-Puebla, José A. Matamoros, José A. Fernández-Albarral, Mario Salas-Carrillo, Pedro Gil, Ana Isabel Ramirez, Juan Jose Salazar, Rosa De Hoz, Jose Manuel Ramirez, Elena Salobar-Garcia (Spain)
- 221 S061 Detecting retinal alterations in vascular dementia using OCT and OCTA
Lorena Elvira-Hurtado, Inés López-Cuenca, Lidia Sánchez-Puebla, José Antonio Matamoros, José A. Fernández-Albarral, Mario Salas-Carrillo, Pedro Gil, Ana I. Ramirez, Juan Jose Salazar, Rosa De Hoz, Jose Manuel Ramirez, Julian Garcia Feijoo, Elena Salobar-Garcia (Spain)
- 222 S062 Evaluation of two novel riboflavin-based dyes for safe and effective vitreoretinal staining
Mario Troisi, Ciro Caruso, Carmine Ostacolo, Ciro Costagliola (Italy)
- 239 S063 Deep learning-based evaluation of heavy liquid-assisted retinal flattening on postoperative anatomical retinal reattachment in macular-involving rhegmatogenous retinal detachment treated with pars plana vitrectomy
Yan Gong, Meng Li (China)
- 251 S064 Advancing retinal imaging with artificial intelligence: evaluating performance in geographic atrophy segmentation
Aikaterini Chatzara¹, Eirini Maliagkani¹, Dimitra Mitsopoulou², Andreas Katsimpris², Ioannis Apostolopoulos¹, Elpiniki Papageorgiou¹, Ilias Georgalas¹ (¹Greece, ²United Kingdom)
- 263 S065 Bleeding honeycomb - A rare case of malattia leventinese
Inês Ludovico, Pedro Lopes, Joana Ferreira, Maria Elisa Luís, Rita Anjos (Portugal)
- 284 S066 Single-center evaluation of response to treatment with intravitreal faricimab injections in cases with neovascular age-related macular degeneration
Stamatina Kabanarou, Nikolaos Bitzanakis, Petros Fragkiskos, Christina Garnavou-Xirou, Evgenia Kontou, Ilias Gkizis, Tina Xirou (Greece)
- 290 S067 Automated quantification of macular perfusion in Behçet's uveitis using optical coherence tomography angiography
Cigdem Ardic¹, Almila Sarigul Sezenöz¹, Erdost Yıldız², Sirel Gür Güngör¹ (¹Turkey, ²Germany)

- 311 *rf* S068 Long-term outcomes of bilateral injection of lenadogene nolparvovec gene therapy for leber hereditary optic neuropathy
Nancy Newman¹, Patrick Yu-Wai-Man², Prem Subramanian¹, Sarah Thornton¹, An-Guor Wang³, Sean Donahue¹, Bart Leroy⁴, Valerio Carelli⁵, Valérie Biousse¹, Catherine Vignal-Clermont⁶, Alfredo Sadun¹, Robert Sergott¹, Gema Rebolleda Fernández⁷, Bart Chwalisz¹, Rudrani Banik¹, Magali Taiel⁶, José-Alain Sahel¹ (¹USA, ²United Kingdom, ³Taiwan, ⁴Belgium, ⁵Italy, ⁶France, ⁷Spain)
- 315 S069 Innovative automated imaging approach for quantitative analysis of retinal glial cells
Lidia Sánchez-Puebla, Miguel A. Sánchez-Puebla, Ana Granados, Valentín Moreno, Ana Isabel Ramírez, Jose Manuel Ramirez, Juan Llorens, Inés López-Cuenca (Spain)
- 322 S070 Lower retinal arteriolar and venular fractal dimension are associated with higher risk of incident dementia - The UK Biobank (n = 65,727)
Frank van der Heide¹, Anthony Khawaja², Seray van Montfort¹, Archana Singh-Manoux¹, Pearse Keane², Dan Milea¹ (¹France, ²United Kingdom)
- 323 S071 Relationship of macrophage-like cells and retinal ganglion cells in healthy eyes
Matteo Belletti^{1,2}, Ester Carreño Salas², Francesco Pichi^{3,4} (¹Italy, ²Spain, ³United Arab Emirates, ⁴USA)
- 335 S072 The enigma of frosted branch angiitis: an unexpected challenge in hematologic malignancies
Arturo Real Arellano, Bruno Taboada Moreno (Mexico)
- 338 S073 A deep learning algorithm for classifying diabetic retinopathy using optical coherence tomography angiography
Gahyung Ryu (South Korea)
- 344 S074 Evaluating annotation efficiency and consistency in autofluorescence imaging: a comparison of tools
Adam Threlfall, Barbra Hamill, Catherine Jamison, Alan Anderson, Enrico Pellegrini, Kereen Johnston, Iain Gourlay, Niall Strang, Tom MacGillivray, Gavin Robertson (United Kingdom)
- 362 S075 Retrofoveal neovascular AMD complication: FARICIMAB(Vabysmo) injections(IVT) treatment with PROREACTIVE protocol
Corinne Gonzalez (France)
- 364 *rf* S076 Structural, morphology and evolution study of AMD drusenoid deposits with OCT and morphology-structural software
Corinne Gonzalez (France)
- 366 S077 Intravenous thrombolysis in central retinal artery occlusion: a case report
Chrysa Agapitou, Alexia Risi-Koziona, Stamatios Lampsas, Panagiotis Theodossiadis, Irini Chatziralli (Greece)
- 367 S078 Microvascular changes on the macula and optic disc in patients with type 1 diabetes mellitus
Alexia Risi-Koziona, Chrysa Agapitou, Stamatios Lampsas, Konstantinos Pappelis, Panagiotis Theodossiadis, Irini Chatziralli (Greece)
- 369 *rf* S079 Randomized, controlled study to investigate the efficacy and safety of resveratrol vitamin supplements in patients with non-proliferative diabetic retinopathy without macular edema (REVOLUTION study)
Chrysa Agapitou, Alexia Risi-Koziona, Eleni Dimitriou, Stamatios Lampsas, Panagiotis Theodossiadis, Irini Chatziralli (Greece)
- 376 S080 Detection of choroidal neovascularization using swept-source optical coherence tomography angiography after half-fluence photodynamic therapy in chronic central serous chorioretinopathy: a three-year follow-up
Inmaculada Herrero Sanchez, Olivia Esteban, Pablo Tejada González, Edurne De La Cámara Sahuquillo, Ana María Abad Pascual, Javier Ramos Duarte, Luca Manuel Bueno Borghi, Cristina Calvo Simón, Carla Sánchez Remacha, Julia Aramburu Clavería, Miguel Castillo Fernández, Marta Suñer Martínez, Francisco Javier Ascaso (Spain)
- 378 S081 Long-term visual outcomes in complete susac syndrome: a 15-year follow-up
Ariadna Garreta-Rafecas, Elena Milla (Spain)



- 389 S082 Optimisation of the daily living tasks dependent on vision questionnaire in the setting of patients being treated for macular diseases
Francis Sanders, Eirini Skiadaresi, Colm Mcalinden (United Kingdom)
- 390 S083 Outcome of different surgical repair techniques for rhegmatogenous retinal detachment - A health economic analysis in the Split-Dalmatia County, Croatia
Ivan Borjan¹, Ivna Plestina-Borjan¹, Silvia N. W. Hertzberg², Alen Sinicic¹, Ljubo Znaor¹, Beáta Éva Petrovski², Goran Petrovski² (¹Croatia, ²Norway)
- 394 S085 Retinal layers in parkinson's disease: preliminary OCT biomarker analysis
Alessandra Mancini, Andrea Quattrone, Giovanna Carnovale Scalzo, Massimiliano Borselli, Domenico Chisari, Lorenzo Rijillo, Luca Bifezzi, Maria Angela Romeo, Armando Celia, Raffaella Gioia, Andrea Lucisano, Vincenzo Scoria, Gennarina Arabia, Aldo Quattrone, Adriano Carnevali (Italy)
- 398 S086 3 years of functional recovery quantified by multifocal electroretinogram after macular hole surgery
Thibaud Garcin, Nicolas Abihaidar, Housseem Fadli, Mathilde Kaspi, Borderie Vincent, Nacim Bouheraoua (France)
- 436 S087 Transplantation of human iPSC-derived RPE cells with the corrected MERTK mutation into minipig eyes
Taras Ardan¹, Slaven Erceg², Anna Brýmová¹, Hana Studenovska¹, Brigitte Mueller³, Knut Stieger³, Goran Petrovski^{4,5}, Lyubomir Lytvynchuk³, Zbyněk Straňák¹, Miroslav Veith¹, Štefan Juhás¹, Jana Juhasová¹, Yaroslav Nemesh¹, Zdeňka Ellederová¹, Jan Motlik¹ (¹Czech Republic, ²Spain, ³Germany, ⁴Norway, ⁵Croatia)
- 440 S088 Lutein-in-extra-virgin-olive-oil as a peroral intervention in an animal model of retinopathy of prematurity
Xiaoyuan Ye¹, Kwok Fai So¹, Jetty Chung Yung Lee¹, Wai Ching Lam², Amy Cheuk Yin Lo¹ (¹China, ²Canada)
- 442 S089 Impact of ectopic internal retinal layers in postoperative outcomes of idiopathic epiretinal membrane
João Castro Cabanas, Daniel Ferreira Cardoso, Pedro Martins, Catarina Ferreira, Filipe Sousa Neves, Miguel Bilhoto, Paula Sepúlveda (Portugal)
- 447 S090 Evaluating the consequences of appointment delays on AMD progression at the Western Eye Hospital during the COVID-19 lockdown
Inés López-Cuenca¹, Lorenzo Fabozzi², Saad Younis², Ahmad Ali², Francesca Cordeiro² (¹Spain, ²United Kingdom)
- 463 S091 Tackling macular edema and dislocated IOL: the fluocinolone-loaded iOL with scleral suspension (FLISS) technique
Pedro Martins, João Castro Cabanas, Daniel Ferreira Cardoso, Miguel Bilhoto, Paula Sepúlveda, Filipe Sousa Neves (Portugal)
- 475 S092 Retinal and choroidal vascular parameters in patients with Raynaud's syndrome assessed by SS-OCT and OCT-A: a cross-sectional study
Eduardo De La Cámara Sahuquillo, Olivia Esteban, Inmaculada Herrero Sánchez, Pablo Tejada González, Ana María Abad Pascual, Javier Ramos Duarte, Cristina Calvo Simón, Luca Manuel Bueno Borghi, Carla Sánchez Remacha, Julia Aramburu Clavería, Miguel Castillo Fernández, Marta Suñer Martínez, Francisco Javier Ascaso (Spain)
- 476 S093 Subthreshold micropulse laser for central serous chorioretinopathy: functional and anatomical outcomes
Pablo Tejada González, Inmaculada Herrero Sanchez, Eduardo De la Cámara Sahuquillo, Luca Manuel Bueno Borghi, Carla Sanchez Remacha, Cristina Calvo Simon, Miguel Castillo Fernández, Julia Aramburu Claveria, Marta Suñer Martinez, Ana Maria Abad Pascual, Javier Ramos Duarte, Olivia Esteban, Francisco Javier Ascaso (Spain)

- 481 S094 Evaluation of macular and optic disc nerve blood flow velocity in acute central serous chorioretinopathy measured with laser speckle flowmetry
Bogumiła Sędziak-Marcinek, Adam Wylegala, Natalia Lange, Jarosław Piłat, Edward Wylegala (Poland)
- 485 S095 Alpha-melanocyte-stimulating hormone protects neurons by inhibiting ferroptosis in experimental retinal ischemia/reperfusion injury
Lu Xiang¹, Andrew Taylor², Amy Cheuk Yin Lo¹ (¹China, ²USA)
- 489 S096 Pars plana vitrectomy in optic pit maculopathy
Luise Grajewski, Beate Wittkowski, Lothar Krause (Germany)
- 491 S097 Artificial intelligence in the treatment of diabetic retinopathy: a scoping review
Muneeb Ahmad Khan, Diya Baker (United Kingdom)
- 515 S098 Microvascular remodeling in macular edema secondary to retinal vein occlusion
Amina El Mayel, Mohamed Ben Hadj Khelifa, Rim Kmiha, Ghassen Marzouk, Amel Chebbi (Tunisia)
- 531 S099 Unilateral macular edema with mild inflammation: Look for the virus!
Aurelie Le, Majda Rachdi, Youssef Afifi, Maria Fernanda Flores Herrera, Dorine Makhoul, Younes Azzagnuni (Belgium)
- 550 S100 Resolution of submacular hemorrhage treated with intravitreal tissue plasminogen activator, pneumatic displacement, and faricimab – a case report
Olgierd Duchniewicz, Michał Orski (Poland)
- 583 S101 Management of persistent macular hole retinal detachment following wide-based inverted internal limiting membrane flap surgery in high myopia (mean axial length 30 mm): a modified surgical approach
Howard Wen-Haur Chao¹, Windsor Chao¹, Penbai Hui², Cheng-Kuo Cheng², Hsiao-Ming Chao² (¹United Kingdom, ²Taiwan)
- 595 S102 Investigating vision-related quality of life and functionality in patients with low vision
Anna Nikolaidou, Stavroula Almpnidou, Persefoni Talimtz, Diamantis Almaliotis, Vasileios Karampatakis (Greece)
- 621 S103 Predictive factors of final visual outcome in patients with Leber hereditary optic neuropathy treated with lenadogene nolpharvovec gene therapy
Piero Barboni¹, Nancy Newman², Valérie Biousse², Patrick Yu-Wai-Man³, Valerio Carelli¹, Catherine Vignal-Clermont⁴, Constant Josse⁵, Magali Tael⁵, José-Alain Sahel⁶, Robert Sergott⁶ (¹Italy, ²USA, ³United Kingdom, ⁴France, ⁶USA)
- 630 S104 Choroidal calcification revealing phosphocalcic metabolism disorder
Rym Maamouri, Ben Nacef Ibtissem, Aouni Jaafer, Rojban Eya, Maaloul Sahar, Monia Cheour (Tunisia)
- 651 S106 The proteome signatures of the retinal cellular response to psychosocial stress
Caroline Manicam, Franziska Neubauer, Norbert Pfeiffer, Marianne Müller, Natarajan Perumal (Germany)
- 668 S107 Diagnostic value of swept-source optical coherence tomography angiography in retinal lipemia
Saoussen Chebbah, Bouraoui Rim, Taha Kouthair Bizani, Mohamed Hassen Ben Salem, Iness Hachicha, Khaled El Matri, Chebil Ahmed, Rim Limaïem (Tunisia)
- 693 S108 MicroRNA-21 (miR-21) as a new player in retinal fibrosis
Manuela Bartoli (USA)



- 702 S109 Management of type 1 idiopathic macular telangiectasia
Saoussen Chebbah, Yasmine Houmane, Taha Koutheir Bizani, Emna Baklouti, Fatma Sakji, Rania Lazreg, Chebil Ahmed, Rim Limaïem (*Tunisia*)
- 703 S110 The unknown sign of concentric macular rings in albinism
Marta Caminal, Jaume Catala, Jesus Diaz Cascajosa, Eduard Pedemonte, Albert Saladrigas, Santiago Conversa (*Spain*)
- 710 S111 Bidirectional association between coronary artery disease and exudative age-related macular degeneration: a nationwide cohort study in Korea
Jee Myung Yang, Seung Won Lee (*South Korea*)
- 713 S112 Lipidomic profiling of murine models of photoreceptor degeneration reveals distinct fatty acid alterations
M.J. Ruiz-Pastor, C. Sánchez-Castillo, L. Vidal-Gil, E. Missonnier, M. Pastor-Mas, M. Agudo-Barriuso, P. Lax, N. Cuenca (*Spain*)

13:30-14:30 | Room 2



A new vision for glaucoma: harmonizing glaucoma management and ocular health

- 13:30 Welcome and introduction
Jose Antonio Dias (Portugal)
- 13:35 Artificial intelligence in glaucoma: the 2025 breakthroughs you need to know
Andrzej Grzybowski (Poland)
- 13:55 Overcoming barriers to adherence: usability
Jose Antonio Dias (Portugal)
- 14:15 Q&A, panel discussion & Closing remarks
Andrzej Grzybowski (Poland) and **Jose Antonio Dias** (Portugal)

THURSDAY
9 OCTOBER 2025



THURSDAY
9 OCTOBER 2025

13:30-14:30 | Room B



CIS

Industry Sponsored Symposium

Navigating the current complexities of LHON diagnosis and treatment

- 13:30 Welcome and Introduction
Valerio Carelli (*Italy*)
- 13:35 Assessing the current landscape in LHON clinical management
Valerie Biousse (*USA*)
- 13:45 Key Clinical Considerations for Idebenone Treatment in Patients with LHON
Nancy J. Newman (*USA*)
- 14:05 LHON: diagnostic challenges and emerging therapies
Patrick Yu-Wai-Man (*United Kingdom*)
- 14:15 Interactive Q&A
Valerie Biousse (*USA*), **Valerio Carelli** (*Italy*), **Nancy J. Newman** (*USA*) and **Patrick Yu-Wai-Man** (*United Kingdom*)
- 14:25 Closing Remarks
Valerio Carelli (*Italy*)

13:30-14:30 | Room 4

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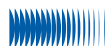
Shaping the future of myopia management

Speakers: **Saoirse McCrann** (Ireland), **Giorgio Parisotto** (Italy)

THURSDAY
9 OCTOBER 2025



13:05-14:05 | Room B

HOYA VISION CARE 

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Where evidence meets practice: D.I.M.S. spectacle lense for successful myopia management

13:05 MiYOSMART: where evidence meets confidence in myopia management
Matilde Ronzoni (*Italy*)

13:20 Why myopia matters: multiple approach for a successful myopia management
Noemi Guemes (*Spain*)

13:35 Theory meets practice: exploring real-world case studies
Daniela Goicea (*Romania*)

FRIDAY
10 OCTOBER 2025

13:05-14:05 | Room 4

CIS Industry Sponsored Symposium



Inflammation & innovation: new frontiers in ocular surface health

Moderator: **Jesus Merayo** (Spain)

Cyclosporine and dry eye: addressing the underlying immunopathology

Christophe Baudouin (France)

Parainflammation and complement system: striking a delicate balance on ocular surface

Antonio Di Zazzo (Italy)

When inflammation is unavoidable: the newest advancement for contact lens specialists

Christina Grupcheva (Bulgaria)

Beyond the lid: atopic blepharitis in focus

Serge Doan (France)

FRIDAY
10 OCTOBER 2025



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Navigating the current complexities of LHON diagnosis and treatment

A Chiesi sponsored industry symposium

28th EVER Congress

Thursday 9th October 2025 | 13:30 – 14:30

Location: Room B | Palazzo degli Affari, Florence, Italy



Valerio Carelli (Chair)
Università di Bologna, Italy



Nancy J Newman
Emory University School
of Medicine, US



Valerie Biousse
Emory University School of Medicine, US



Patrick Yu-Wai-Man
Moorfields Eye Hospital, UK
and University of Cambridge, UK

Time	Session	Speakers
5'	Welcome and Introduction	V Carelli
10'	Assessing the Current Landscape in LHON Clinical Management	V Biousse
20'	Key Clinical Considerations for Idebenone Treatment in Patients with LHON	NJ Newman
10'	LHON: Diagnostic Challenges and Emerging Therapies	P Yu-Wai-Man
10'	Interactive Q&A	V Carelli, NJ Newman, V Biousse and P Yu-Wai-Man
5'	Closing Remarks	V Carelli



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