Irish College of Ophthalmologists

Eye Doctors of Ireland

Protecting your Vision

ICO Annual Conference 2026

13-15 May, 2026

The Galmont Hotel
Galway

Irish College of
Ophthalmologists
Eye Doctors of Ireland
Protecting your Vision

Irish College of Ophthalmologists

Annual Conference 2026

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Gerry Fahy

President's Welcome Message

Dear Colleagues,

It's my great pleasure to welcome you to the Irish College of Ophthalmologists annual conference 2026, taking place here in Galway from the 13th to the 15th of May.

This conference represents a key event in the college's calendar and provides an important forum for professional engagement, education, and collaboration among ophthalmologists, trainees, and indeed medical students with an interest in the specialty. The programme for this year's meeting has been carefully developed to reflect the breadth, complexity, and ongoing advancement of ophthalmology.

I'm extremely grateful to the scientific committee led by Professor Connor Murphy for their work putting the programme together. Thanks also to the speakers and also, of course, Siobhan Kelly and her team for all the organising.

Across the three days, you will have the opportunity to engage with a wide variety of clinical topics, emerging research and contemporary issues relevant to the practice of ophthalmology in Ireland and abroad. The conference also offers an invaluable setting for the exchange of ideas and experiences, supporting both professional development and collegial connection.

We're particularly pleased to welcome a strong cohort of trainees and medical students. Their presence is an important reminder of the future of our specialty and of the college's ongoing commitment to education, mentorship and the development of clinical excellence.

Galway provides an ideal setting for this meeting, combining a rich cultural heritage with a welcoming and vibrant atmosphere. The city has long been associated with academic and clinical endeavour, and we're delighted to return here for this year's conference.

The continued success of this event is made possible by the ongoing support and participation of our members and delegates. Their commitment ensures that the conference remains relevant, engaging, and of the highest standard.

On behalf of the College, I express my sincere thanks to all who have contributed to the organisation of this meeting, as well as our speakers and sponsors. I trust that you will find the conference both informative and rewarding.

Warm regards,

GERRY FAHY
President
Irish College of Ophthalmologists
May 2026

Wednesday 13th May

9.00am **Official Welcome**
Mr Gerry Fahy
President, Irish College of Ophthalmologists

9.05am **Paper Session**
Co-Chairs: Ms Emily Hughes and Mr Khaild Kamel

Treatment Burden Associated with Intravitreal Injections: A Cross-Sectional Study at a Tertiary Eye Centre in Ireland
Ann Marie O Leary

Audit of the Value of an Autonomous Vessel Vector Change Detection Algorithm for Optic Disc Haemorrhage in Retina Photographs from a Diabetic Screening Population
Kate Coleman

Corneal Transplantation Practices in the Republic of Ireland: 14-year Data from the National Corneal Transplant Registry
Emmanual Neves

Diabetic Retinopathy Screening Outcomes in Pregnancy: A Review of the Pregnancy Pathway in the Irish National Diabetic Retinal Screening Programme
Mouayad Masalkhi

Non-attendance Rates of Patients Attending Treatment Centres for Diabetic Retinopathy
Stephen Kelly

Periocular Primary Basal Cell Carcinoma and Squamous Cell Carcinoma: A Systematic Review of Surgical Treatment
Aisling McGlacken Byrne

A Systematic Review Assessing the Effects of Myopia and Myopia Treatment on Quality of Life in Africa, Asia, and Latin America
Emilie Mahon

A Multicentre Retrospective Analysis on the Efficacy and Safety of Glaucoma Drainage Devices in Ireland
Caoilfhinn Tan

10.30am **Refreshments**

11.00am **Cataract Symposium**
Chair: Mr Rory Murphy, Royal Victoria Eye and Ear Hospital, Dublin

Best of Cataract Coach – Recovering from Complications
Professor Uday Devgan
Consultant Ophthalmologist
Devgan Eye Surgery, Los Angeles

Cataract Surgery in Challenging Corneal Conditions
Professor Alvin Young
Clinical Professor
Chinese University of Hong Kong

A Cataract Pathway – The Galway Experience
Dr Geraldine Comer
Consultant Ophthalmologist
HSE West/North West

12.30pm **Lunch**

1.30pm **Top Ten Tips**
Chair: Ms Clare McCloskey, Sligo University Hospital

Top Ten Tips with Examples of Paediatric Ophthalmology MDT Working
Ms Sarah Chamney
Consultant Ophthalmic Surgeon
Children's Health Ireland

Top Ten Tips in Strabismus
Mr Edward Loane
Consultant Ophthalmic Surgeon
Royal Victoria Eye and Ear Hospital, Dublin

Pterygium Surgery
Professor Alvin Young
Clinical Professor
Chinese University of Hong Kong

When the Eye is on Fire - Tips in Managing Acute Uveitis
Dr Máiríde McGuire
Consultant Ophthalmologist
HSE West/North West

2.30pm **Annual Mooney Lecture 2026**
Introduced by Mr Gerry Fahy
President, Irish College of Ophthalmologists

The Challenge for Surgeons Managing Glaucoma
Professor Keith Barton
Consultant Ophthalmic Surgeon
Moorfields Eye Hospital, London

3.30pm **Refreshments**

4.00pm **Paper Session**
Co-Chairs:
Ms Nikolina Budimlija and Professor Uday Devgan

A Comparison of Traditional Hospital vs Direct Optometrist Referrals to a Community Cataract Clinic
Tim Keogh

Five-Year Surgical Outcomes of Scleral-Fixated Intraocular Lens Implantation at Waterford University Hospital
Sarah Powell

Incidence, Severity, and Management of Retinopathy of Prematurity (ROP) at Cork University Hospital in the Period July 2024 - July 2025
Muzan Badreldin

Wednesday 13th May

Diagnostic Outcomes of Glaucoma Referrals to a Tertiary Long-Wait Clinic
Elizabeth Tallon

Macular GCIPL Thickness on Spectral-Domain OCT as an Early Biomarker for Alzheimer's Disease: A Narrow Systematic Review
Ahmed Abdalla

Lacrimal Gland Biopsy: Diagnostic Yield and Safety Profile from a 14-Year Retrospective Audit in a Tertiary Referral Centre
Caoimhe Normile

A Review of Selective Laser Trabeculoplasty (SLT) Outcomes in an Ophthalmology Clinic (2024–2025)
Charlotte Morrissey

One Year On: Real World Response to Intravitreal Aflibercept-8mg in Previously Non-responsive Wet Age-Related Macular Degeneration Patients
Natalie Ng

Quality Improvement Project: Optimising the Urgent Referral Pathway for New Neovascular Age-related Macular Degeneration (nAMD) Patients at the RVEEH
Denis Nevrov

Upper Eyelid Gold Weight Implantation for Lagophthalmos: Post-operative Outcomes and Complications
Kirsty Veitch

Incision and Insight: Orbital Biopsies
Adan Khan

Demand for Intravitreal Therapy in a Tertiary Irish Medical Retina Service: A Service Evaluation
Lowri Edwards

Photodynamic Therapy in Central Serous Chorioretinopathy: Can we Predict Outcomes with Patient History and Multimodal Imaging
Alan Hopkins

Challenges in Performing and Teaching Phaco-emulsification for Advanced Cataracts in Rural Kenya
Dara Kilmartin & David Wallace

5.00pm **Effective and Sustainable Teams**
Chair: Professor Conor Murphy
Royal Victoria Eye and Ear Hospital, Dublin

The Cellular Foundation of Resilience
Dr Monique Hope-Ross
Surgeon, Author and Director of Medicine
Healthbuddi Life Sciences

Building Long-Term, High-Performing Teams
Mr Stuart Lancaster
Head Coach
Connacht Rugby

Thursday 14th May

8.00am **Sponsored Breakfast Session kindly supported by Bayer**

Rethinking AMD - Research Findings that may help us as Clinicians
Mr Mark Cahill
Consultant Ophthalmic Surgeon
Royal Victoria Eye & Ear Hospital, Dublin

Clinical Insights into Eylea 8mg: Advancing the Treatment of Neovascular AMD with Real-world Evidence
Dr Patricia Udaondo,
Consultant Ophthalmologist
Hospital Universitario La Fede Valencia

9.00am **Short Papers**
Co-Chairs: Professor Colm O'Brien and Dr Fiona Harney

Endophthalmitis Incidence after Vitrectomy: A Systematic Review and Meta-Analysis of Risk Factors and Prevention Strategy
Robert McGrath

Evaluating MicroRNAs and Other Molecular Biomarkers in the Diagnosis of Uveitis: A Scoping Review Protocol
Ray Abbas

Characterising MicroRNA Expression on the Ocular Surface in Response to Cyclosporine A 0.1% Treatment in Aqueous-Deficient Dry Eye Disease
Emily Greenan

Functional Annotation of Glaucoma Genome Wide Association Studies (GWAS) Loci Implicates the Involvement of Cell Cycle and Proliferation Related Genes in Disease Pathogenesis
Conor Kearns

Thursday 14th May

A Reflexive Thematic Analysis of Examiner Feedback and Decision-Making in the Ophthalmology Objective Structured Examinations (OSEs)
Alison Greene

Development of a Scaled-Up GelMA-based 3D Lamina Cribrosa Model using Digital Light Processing Bioprinting
Basem Fouda

Investigating the Expression and Role of Hic-5 (TGFB1I1) in Human Glaucomatous Lamina Cribrosa Cells
Ross Layden

Stickler Syndrome in Ireland: Cohort Insights Driving a National Care Pathway
Bridget Moran

Carer Experience Using Visual Social Stories with Autistic Patients at RVEEH
Ian Brennan

Awareness of Sepsis Recognition and Early Management amongst Ophthalmologists in Ireland
Sean Casey

Impact of Reversible Visual Impairment on Cognition and Blood-Brain Barrier Integrity
Mark Cahill

10.30am **European Society of Ophthalmology (SOE) Lecture 2026**
Introduction: Professor Louise O'Toole
ICO Representative to the Board of the SOE

Medical Retina - A Three Pronged Approach
Dr Ann O'Connell
Consultant Ophthalmologist
HSE South East

11.00am **Refreshments**

11.30am **Glaucoma Symposium**
Chair: Mr Edward Dervan, Bon Secours Hospital, Dublin

Combining Surgery: Cataract and Glaucoma
Professor Uday Devgan
Consultant Ophthalmologist
Devgan EyeSurgery, Los Angeles

Challenging Cases
Professor Keith Barton
Consultant Ophthalmic Surgeon
Moorfields Eye Hospital Hospital, London

Glaucoma - A Hub-and-Spoke Model of Care
Dr David Gildea
Consultant Ophthalmologist
HSE Dublin South East

1.00pm **Lunch**

2.00pm **Clinical Seminar: Everyday Hot Topics in Paediatric Ophthalmology**

Refractive Error and Amblyopia Management
Miss Arundhati Dev Borman
Consultant Ophthalmic Surgeon
Royal Victoria Eye and Ear Hospital

When to Refer for the Surgical Management of Childhood Squint and CHI Pathway
Ms Treasa Murphy
Consultant Ophthalmic Surgeon for Treasa Murphy.
Children's Health Ireland

Management of Vernal Keratoconjunctivitis
Dr Bobby Tang
Consultant Ophthalmologist
Our Lady of Lourdes Hospital, Drogheda

Tele Retinopathy of Prematurity Project
Dr Bobby Tang

Myopia Management
Ms Kathryn McCreery
Consultant Ophthalmic Surgeon
Children's Health Ireland

Update on New Children's Hospital
Ms Sarah Chamney
Consultant Ophthalmic Surgeon
Children's Health Ireland

3.00pm **ECLO Service: Enhancing Patient Independence through Vision Ireland and Accessible Technology**
Ms Janice Brady
Consultant Ophthalmic Surgeon
University Hospital Waterford

Ms Elaine Power
South East Technology Trainer
Vision Ireland

Ms Claire Dowling
Eye Clinic Liaison Officer
University Hospital Waterford

Ms Hilary Devlin
Eye Clinic Liaison Officer
CHI at Temple Street and Crumlin Hospitals

4.00pm **Refreshments**

4.30pm **Sponsored Session kindly supported by Alimera**

From Burden to Benefit: Moorfields DMO Audit and the Vitreoretinal Role in Optimising Care
Chair & Speaker: Miss Marie Hickey Dwyer
Consultant Ophthalmic Surgeon
University Hospital Limerick

VR Surgeon's Perspective: When to Involve a VR Surgeon in Diabetic Eye Disease
Mr Arijit Mitra
Consultant Ophthalmologist
Sandwell and West Birmingham Hospitals NHS Trust

ILUVIEN Moorfields Audit and DMO Presentation
Miss Angela Rees
Consultant Ophthalmologist
Moorfields Hospital London

Friday 15th May

8.00am **Sponsored Breakfast Session kindly supported by Nordic Pharma**

Ocular Surface Control: A Modern Approach to Peri-operative Dry Eye Management.

Mastering Perioperative Dry Eye Management and Introduction to Lacrifill
Ms Nikolina Budimlija
Consultant Ophthalmic Surgeon
Institute of Eye Surgery
Waterford and Kildare

Lacrifill: The American Perspective. The Emerging Importance of Ocular Surface Management Around the Time of Cataract Surgery
Mr Jai Parekh
Consultant Ophthalmic Surgeon
Eye Care Consultants of New Jersey

Demonstration of Lacrifill and Q&A

9.00am **Irish College of Ophthalmologists AGM**
Chair: Mr Gerry Fahy
President, Irish College of Ophthalmologists

9.30am **Managing Neuropathic Pain in Ophthalmology**
Chair: Mr David Gallagher,
Mater Misericordiae University Hospital, Dublin

The Invisible Scar: Chronic Pain in the Post Surgical Eye
Dr Conor Hearty
Clinical Lead for Pain Medicine
Mater Misericordiae University Hospital, Dublin

Case Presentations on Neuropathic Pain
Dr Fionnuala Kennedy
Medical Ophthalmology Trainee
Irish College of Ophthalmologists

10.30am **Paper Session**
Co-Chairs: Ms Deirdre Townley and Mr Barry Power

Real-World Outcomes from the iTrack Global Data Registry of Ab-Interno Canaloplasty Combined with Cataract Surgery
Keith Barton

Barriers and Enablers to Medication Adherence & Compliance in Glaucoma – A Scoping Review Protocol
Aine Kelly

Patient and Public Involvement in Autoimmune and Inflammatory Ocular Disease Research: A Scoping Review of Current Practice and Clinical Relevance
Joan Ni Gabhann

Demographics and Immunosuppressant Usage in 913 Adult Uveitis Patients from a Single Centre in the United Kingdom
Hana El Diwany

Assessing Visual Acuity Reporting Quality in Ophthalmic RCTs Over Time
Avantika Saaish & Yong Bin Lim

Can we Reliably Differentiate Orbital Lymphoma from Inflammatory Disease Before Biopsy?
Kit May Chow

11.00am **Launch of HSE NDTP Report - Ophthalmology Medical Workforce in Ireland 2025-2040**
Professor Anthony O'Regan
Medical Director
HSE National Doctors Training and Planning

Ms Aoife Doyle
Clinical Lead for Ophthalmology

11.00am **Refreshments**

11.30am **Oculoplastics Symposium**
Chair: Mr Gerry Fahy, Irish College of Ophthalmologists

Occam's Razor or Hickam's Dictum? How to Spot the Unusual in Oculoplastics and Orbits
Mr Jimmy Uddin
Consultant Ophthalmologist
Moorfields Eye Hospital, London

Thyroid Eye Disease Update – a Golden Age of Therapeutics?
Mr Jimmy Uddin

Orbital Disease Uncovered – from Frequent Presentations to Systemic Stories
Ms Elizabeth McElnea
Consultant Ophthalmic Surgeon
University Hospital Galway

Periocular Infection and Inflammation: Practice Update
Ms Clare Quigley
Consultant Ophthalmic Surgeon
Royal Victoria Eye and Ear Hospital, Dublin

1.00pm **Presentation of ICO Medals for Best Paper and Best Poster**

Conference Close

Conference Posters

Risk of Retention or Breakage of 25 gauge Light Pipe During Endonasal Dacryocystorhinostomy: a salient case report. — Yasmin McGrath Chen

Clinical Audit on Visual Outcomes of Patients who Underwent Cataract Surgery at Charter Medical Private Hospital Mullingar — Misbah Naeem

Clinical Audit on Waiting Time For Cataract Surgery in Charter Medical Private Hospital — Misbah Naeem

Early-Onset Bilateral Cataracts After Hyperbaric Oxygen Therapy: A Case Report — Natalie Lane

Ten-year Visual Acuity Outcomes Following Laser Treatment for Diabetic Retinopathy: A Closed-loop Audit and Literature Review from an Irish Tertiary Ophthalmology Service — Richard Farnan

A Retrospective Clinical Audit Measuring Compliance with National IIH Guidelines. — Richard Farnan

Under-recognition of Visual Impairment in Hip Fracture Patients: A Retrospective Review in a Regional Trauma Unit — Richard Farnan

Are Plastic Eye Shields Necessary After Uncomplicated Cataract Surgery? A Large Multi-site Case Control Study. — Alexander Silvester

Topical Antibiotics Are Not Required Following Uncomplicated Cataract Surgery — Alexander Silvester

Percentage of Patients Having Second Eye Surgery on the Same Day of their Post –op Review of their First eye in Charter Medical Private Hospital — Misbah Naeem

Anterior Capsular Schisis During Cataract Surgery: A Case Series and Review of Intraoperative Management — Dearbhla Treacy

SF6 Gas Entrapment in the Canal of Petit: A Rarely Documented Complication of Pneumatic Retinopexy — Marcus Conway

Tuberculous Retinal Vasculitis – A Case Report and Literature Review — Joe Keenan

Putting a SUS in Suspicious Stroke – Susacs Syndrome: A case presentation — Muhammad Fauzi

A Case Series of Endogenous Endophthalmitis: Aetiology, Management and Outcomes — Luke O Brien

The Posterior Chamber of Secrets: Ocular Dirofilariasis — Danyal Memon

Refractive Outcomes Following Cataract Surgery: A Comparison of SRK/T and Barrett Universal II Formulae — Denis Nevrod

The Small Eye with a Big Problem: Uveal Effusion Syndrome and Secondary Angle Closure in Nanophthalmos — Sarah Powell

Flashes and Floaters in Eye Casualty: Incidence of Sight-Threatening Retinal Pathology in a Tertiary Centre Audit — Izatti Fadzil

BALAD of a Thin Macula: Loss of the Outer Retina Following Bacillary Layer Detachment in Rhegmatogenous Retinal Detachment — Liam Mulcahy

Investigating the Association Between Impaired Lung Function and Glaucoma — Daniela De Paula

Switching to an Aflibercept Biosimilar – a Real-World Evaluation of Safety and Efficacy — Alexander Silvester

The Burden of Treatment – a Quality-of-Life questionnaire on Patients Undergoing Long-term Intravitreal Injections for Wet Age-Related Macular Degeneration at University Hospital Waterford. — Julie Stokes

Active Triage Through Local Category Assignment in New Paediatric Referrals: A Proposed Audit. — Aniela Krezel

Management of Post-Traumatic Hyperopia and Corectopia with a Hyperopic Implantable Collamer Lens: A Case Report — Shane Smith

Current Investigative and Management Practices for Giant Cell Arteritis among Irish Ophthalmologists — Ian Brennan

Sequential Histologically Distinct Eyelid Malignancies in Sjögren Syndrome: Implications for Surveillance — Ian Brennan

Post-operative Prescribing Practices Following Strabismus Surgery Among Irish Ophthalmologists — Ian Brennan

A Signalling Network Model of Lamina Cribrosa Fibrosis — Basem Fouda

Case Report of Normal Pressure Glaucoma in a Young Female with Loeys Dietz Syndrome Type 4. — Lauren Devitt

Keratopathy in Single Large-scale Mitochondrial DNA Deletion Syndrome (SLSMDS): A Report of Two Cases and Review of Literature — Michelle Dunne

Severe Right Odontogenic Orbital Cellulitis Complicated by Bilateral Orbital Involvement and Intracranial Extension — Lauren Devitt

The Quiet Vitreous and the Aggressive Retina: A Case of Fingolimod – Related Progressive Outer Retinal Necrosis — Sarah Powell

Routine Administration of Sub-tenon Triamcinolone at the Time of Uncomplicated Phacoemulsification and IOL Insertion for Patients with Diabetes Mellitus – Can it Affect Post-operative Central Macular Thickness and Therefore Cystoid Macular Oedema and Diabetic Macular Oedema? — Kirsty Veitch

Bilateral Endogenous Endophthalmitis Due to Candida dubliniensis in a Patient with High-Grade Lymphoma: A Rare Case with Favorable Visual Outcome — Muhammad Saad

Orbital Compartment Syndrome with Retrograde Anterior Chamber Haemorrhage via a PAUL Glaucoma Implant Tube: A Novel Complication in Uveitic Glaucoma Surgery — Charles Proxenos

Management and Outcomes of Ocular Ischaemic Syndrome (OIS): A 6-year retrospective audit of carotid imaging pathways — Conor Kearns

Mycobacterium Abscessus in an Exposed Scleral Buckle: A Rare Case Report — Fionnuala Kennedy

The Impact of a Text Reminder System on Non-Attendance Rates for Intravitreal Injection Appointments at Galway University Hospital: An Audit — Fionnuala Kennedy

Itch, Scratch, Detach: Retinal Detachment in Severe Atopic Dermatitis — Aoife Smyth

Rate of Visual Field Progression Using Mean Deviation in Glaucoma: A Clinical Audit of Humphrey Visual Fields — Izatti Fadzil

QuantiFERON testing for Uveitis: Indications and Appropriateness in a Tertiary Eye Service — Liam Connolly

Retinal Displacement Following Rhegmatogenous Retinal Detachment Repair — Aisling McGlacken Byrne

Visual Recovery Through Art: A Patient's Perspective Post Bevacizumab Injections for Wet Age-Related Macular Degeneration — Jane Loughrey

Importance of Detecting Late Onset Stargardt's Disease — Marcus Conway

Achromatopsia Diagnosis in Trisomy 21 Provides a Reassuring Prognosis and Hope for Future Treatment — Natalie Ng

Splice-altering Variants and their Influence on Phenotype in VEXAS Syndrome — Clara O Carroll

Limbal Stem Cell Deficiency Secondary to Addison's Disease: A Case Series of Three Patients — Azza Mohamed

Paediatric Corneal Hypoesthesia: Expanding the Ocular Spectrum of PHACES — Deirdre Harford

Laws and Literature of Children and E-scooters: A Case Study. — Deirdre Harford

Resolution of Subretinal Fluid in Optic Disc Pit Maculopathy after Cessation of Topical Latanoprost: A Case Report with Imaging — Fionnuala Kennedy

Cyclosporine as a Steroid-Sparing Agent in Thyroid Eye Disease: A Retrospective Cohort Study — Kit May Chow

Inherited Retinal Degeneration in Focus: A Contemporary Database Report — Bridget Moran

Sectoral Retinitis Pigmentosa with Slow Progression Due to a Hypomorphic CDH23 Variant in the Irish Population — Bridget Moran

Review of the Pre and Post operative OCTs of Patients that Underwent FTMH Repairs from August 2024 to February 2026. — Charlotte Morrissey

Clinical Outcomes Following Cataract Surgery Using the RayOne Galaxy Non-Diffractive Spiral-Optic IOL: A Retrospective Analysis of Prospectively Collected 3-Month Outcomes — Aine Kelly

Pars Planitis as the Initial Manifestation of Multiple Sclerosis — Deirdre Harford

A Novel Approach to Glaucoma Patient Care in a Secondary Ophthalmology Referral Service: A Glaucoma Outreach Clinic — Amy Coman

Audit of Antibody-Positive Optic Neuritis Presentations over a 5 Year Period — Amy Coman

Monocular Orbital Erdheim–Chester Disease Presenting as an Intraconal Mass with Optic Nerve Encasement — Ian Brennan

Functional Convergence Spasm — Deirdre Harford

Smoking Habits and AREDS Supplementation Patterns in Patients with Neovascular Age-Related Macular Degeneration Attending an Injection Clinic: A Cross-Sectional Survey — Eva Blennerhassett

A Suspected Case of CAVES Syndrome: Ocular and Audiovestibular Dysfunction Following Postpartum Chitosan Haemostatic Tamponade — Marcus Conway

An Audit of Toric Intraocular Lens use during Cataract Surgery in MMUH — Eoghan Culligan

Real-World Outcomes of Myopia Control Treatment in Children: A Single-Centre Study — Alison Greene

The Role of Early Multidisciplinary Intervention for Paediatric Patients with Genetic Eye Diseases. — Therese Kelly

Provision of Low Vision Services Across ERN-EYE: A Cross-Sectional European Survey — Elizabeth Tallon

Neurodegeneration and Retinal Ganglion Cells in Glaucoma: Cellular Pathways and Therapeutic Approaches — Sumyial Khalid

Acute Rate of Optic Nerve Head Swelling is Associated with Worsening of Visual Outcomes in Nonarteritic Anterior Ischemic Optic Neuropathy — Brian Woods

Appropriate Timing of Anti-VEGF Injection Before a Vitrectomy is Patient Dependent — Sarah Hayes

Glaucoma Surgical Innovations: What is the Evidence on their Long-term Effectiveness and Safety? A Systematic Review — Philip McCullough

A Simulation-Based Mastery Learning Model for Lateral Canthotomy and Cantholysis — Haaris Shiwani

An Audit of Documentation Quality in Ophthalmic Botulinum Toxin Injection Clinics — Ciaran Doyle

Annual Mooney Lecture

Professor Keith Barton

Professor Keith Barton

Consultant Ophthalmic Surgeon, Moorfields Eye Hospital London;
Professor of Ophthalmology, University College of London.

Professor Keith Barton is a Glaucoma Specialist at Moorfields Eye Hospital, Professor of Ophthalmology in UCL and innovator who has pioneered surgical treatments for advanced and complex glaucomas, as well as minimally invasive techniques.

Prof Barton is known throughout the world for complex glaucoma surgery, and has been instrumental in landmark trials that have defined the evidence base for glaucoma drainage devices and refined the indications for lasers and trabeculectomy, including TVT, ABC, PTVT, TAGS and LIGHT. He co-designed the Paul Glaucoma Implant and has dedicated his career to refining GDD implantation to achieve physiological intraocular pressure control early after surgery.

Prof Barton has been the BJO Editor-in-Chief, Chair of Glaucoma UK (charity), Director of Moorfields' Clinical Glaucoma Service and Hong Leong Visiting Professor at National University of Singapore. Awarded the Charamis Medal for achievement in surgery (2016) and the International Scholar Award of the American Glaucoma Society (2024). He also founded the ESCRS Glaucoma Day and founded and runs the much-acclaimed Moorfields International Glaucoma Symposium, now in its 17th year.

In 2012 he co-founded Ophthalmology Futures Forums, industry investor meetings in Ophthalmology which he continues to run annually in Europe and periodically in Asia. In 2018, Prof Barton co-founded the International Glaucoma Surgery Registry, a free to use, anonymised web-based registry of glaucoma surgery, giving surgeons audit data of their individual outcomes in comparison with the registry as a whole and providing wider international real world data across the whole spectrum of glaucoma surgery.

Professor Uday Devgan

Professor Uday Devgan

Consultant Ophthalmologist, Devgan Eye Surgery, Los Angeles.

Professor Uday Devgan is a cataract and refractive surgeon in private practice at Devgan Eye Surgery in Los Angeles and a partner at Specialty Surgical Center in Beverly Hills. A passionate educator, he has taught ocular surgery for over 20 years, formerly serving as Chief of Ophthalmology at Olive View UCLA Medical Center and clinical professor at the Jules Stein Eye Institute, UCLA.

As the founder of CataractCoach.com, Prof Devgan has created an influential and widely respected educational platform - an online resource with over 100,000 subscribers worldwide.

In late 2025, Prof Devgan performed the world's first robotic-assisted cataract surgery, a breakthrough in ophthalmic precision, successfully completing robotic cataract replacement in 10 patients.

Professor Alvin Young

Professor Alvin Young

Clinical Professor, University of Hong Kong and Prince of Wales Hospital, Hong Kong.

Professor Alvin L. Young is a champion for the corneal subspecialty for over two decades, dedicated to anterior segment advancement, education and training through The Asia Cornea Society, Asia-Pacific Artificial Cornea Society and the Hong Kong Society of Transplantation councils. Additionally, he was involved in the International Council of Ophthalmology Residency Curriculum (Cornea) and OSCAR Reviews. Prof Young takes an avid interest in mentoring aspiring younger generations. Many postgraduate scholars received his passionate mentorship, including 14 fellows (international and local) who were under his direct supervision (from China, Asia to South America).

Prof. Young serves as Section Editor for EYE & Asia-Pacific Journal of Ophthalmology. He has published over 300 peer reviewed papers with a Google h-index of 52. During his Chairmanship of the Hong Kong College of Ophthalmologists Exams, he set up the first ever independent Entry and Intermediate level exams and revamped the examiners system to ensure enhanced succession and sustainability. During his tenure as Chairman of the HK Hospital Authority Ophthalmic Service, he pioneered and laid the sturdy foundations for a territory-wide electronic ophthalmic image system impacting generations to come. His awards included M. Lateef Chaudhry Award Lecture, 1st AND 2nd Asia-Pacific Eye 100, APAO Senior Achievement Award, Outstanding Service in Prevention of Blindness Award aAPAO Distinguished Service Awards.

Dr. Geraldine Comer

Dr. Geraldine Comer

Consultant Ophthalmologist, HSE West/North West.

Dr. Comer graduated from University College Galway and completed her Ophthalmic training in Waterford and Limerick, before commencing as Clinical tutor in Ophthalmology at UCG, alongside sessional work as an Ophthalmic Physician for Mayo PCCC. She subsequently worked extensively in a busy private practice at the Galway Clinic along with hospital based medical ophthalmology at Galway University Hospital (GUH). Dr Comer has supported the Community service and as covid hit, pivoted full time to Public Ophthalmology at GUH, being involved in all aspects of medical ophthalmology. Her particular interests are Community Paediatric Ophthalmology with a keen focus on children with additional needs. Dr. Comer is a Consultant Medical Ophthalmologist for the HSE West and North-West health region.

Ms. Sarah Chamney

Ms. Sarah Chamney

Consultant Ophthalmic Surgeon, Children's Health Ireland.

Ms. Sarah Chamney is a Consultant Ophthalmic Surgeon based at Children's Health Ireland at Temple Street, the Mater Misericordiae University Hospital and the National Maternity Hospital, Dublin. She is a graduate of Trinity College, Dublin and completed her specialist ophthalmology training in the Northern Ireland Deanery. She undertook her paediatric ophthalmology fellowship at the Manchester Royal Eye Hospital.

Ms. Chamney is the cross site lead for ophthalmology in Children's Health Ireland with a specific interest in Retinopathy of Prematurity and Uveitis.

Mr. Edward Loane

Mr. Edward Loane

Consultant Ophthalmic Surgeon, Royal Victoria Eye and Ear Hospital and St James's Hospital Dublin.

Prof. Edward Loane has been a Consultant Ophthalmic Surgeon at the Royal Victoria Eye and Ear Hospital and St. James's Hospital, Dublin since 2017.

He sub-specialises in Strabismus management in adults and children, welcoming referrals of patients, irrespective of complexity, from across the country.

He graduated in Medicine from the National University of Ireland, Galway and completed his Higher Surgical Training in Ophthalmic Surgery in 2014 through the Royal College of Surgeons in Ireland and the Irish College of Ophthalmologists. Following this, he completed two International Surgical Fellowships in Strabismus Surgery, Paediatric Ophthalmology and Neuro-Ophthalmology at Leicester Royal Infirmary, and Strabismus Surgery and Neuro-Ophthalmology at Aintree University Hospital, Liverpool between 2015-2017.

He is a Fellow of the Royal College of Surgeons in Ireland, a Fellow of the European Board of Ophthalmologists, and a Member of the Royal College of Ophthalmologists in London. He also completed a PhD in Age-Related Macular Degeneration during his specialist training.

He has been an Associate Clinical Professor at the UCD School of Medicine since 2021. He is the ICO Education and Training Supervisor at the RVEEH and he has a keen interest in teaching and training, fostering the next generation of meticulous Ophthalmic Surgeons.

Dr. Mairide McGuire

Consultant Ophthalmologist, HSE West/North West.

Dr. Mairide McGuire

Dr. Máiríde McGuire is a Consultant Medical Ophthalmologist, working across the HSE West/North West area Roscommon Primary Care Service, Galway University Hospital and in private practice at Kingsbridge Private Hospital, Sligo.

Following conclusion of her specialist training in Dublin in 2014, she completed a fellowship in medical retina and uveitis, in the Bristol Eye Hospital, participating as sub-investigator in many large, multicentre clinic trials.

She returned to Sligo University Hospital, where she continued her role as a medical ophthalmologist, offering the first specialist uveitis service in the hospital and was subsequently appointed one of the first Consultant Medical Ophthalmologists in the CHO 6/ RVEEH in 2021.

Dr. Monique Hope-Ross

Ophthalmic Surgeon, Author and Director of Medicine at Healthbuddi Life Sciences.

Dr. Monique Hope-Ross

Dr. Monique Hope-Ross is a specialist physician and educator with extensive experience supporting clinicians in their professional lives. She is founder of The Diet Whisperer, where she combines her medical expertise with a deep understanding of wellbeing, behaviour change and sustainable healthy habits. Her work focuses on how doctors and other healthcare professionals can nurture resilience, maintain wellbeing and avoid burnout across the many stages of their careers, from training through to senior practice. Dr. Hope-Ross brings a compassionate, evidence-informed perspective to the challenges clinicians face in balancing the demands of medical practice with personal health and long-term career satisfaction.

Her talk at the 'Effective and Sustainable Teams' session on The Cellular Foundation of Resilience will explore the importance of wellbeing as a foundation for sustained professional performance and offer insights and practical strategies to help doctors in demanding environments.

Mr. Stuart Lancaster

Head Coach, Connacht Rugby.

Mr. Stuart Lancaster

Stuart Lancaster is an English rugby union coach appointed as Connacht Rugby's Head Coach in June 2025 on a two-year contract. Previously, he served as Head Coach of Racing 92, Senior Coach at Leinster Rugby (winning four titles), and England Head Coach (2011–2015), bringing vast experience in restructuring team cultures.

We are delighted that Stuart will join us at the session on 'Effective and Sustainable team' at this year's conference in Galway. With experience at the highest levels of professional rugby, he brings a wealth of insight into cultivating culture, sustaining excellence, and leading through challenges and change.

While his arena may be elite sport, the lessons in leadership, teamwork, communication and continuous improvement resonate strongly within healthcare and clinical practice.

Mr Mark Cahill

Mr. Mark Cahill

Consultant Ophthalmic Surgeon, Royal Victoria Eye and Ear Hospital, Dublin.

Mr. Mark Cahill is a consultant eye surgeon with a special interest in retinal diseases. He is the Clinical Director of Progressive Vision, and a Vitreo-Retinal consultant in the Royal Victoria Eye & Ear Hospital.

Mark qualified at University College Dublin. After completing higher surgical training in Dublin and Cork, he undertook a one-year fellowship in diabetic retinopathy at the Beetham Eye Institute in the Joslin Diabetes Center, a Harvard University hospital in Boston.

Mark then completed a two-year vitreo-retinal surgery fellowship at the Duke University Eye Centre, one of the leading vitreo-retinal surgery fellowships in the United States. Mark worked as a consultant eye surgeon in Duke University Eye Center after the fellowship before returning to Ireland in 2004.

Dr. Patricia Udaondo

Dr. Patricia Udaondo

Retina Specialist, University and Polytechnic Hospital La Fe and Associate Lecturer in Ophthalmology, University of Valencia, Spain.

Dr. Patricia Udaondo graduated in Medicine and Surgery from Miguel Hernández University in Elche, Spain, and specialised in ophthalmology at Hospital General Universitario de Valencia, where she also began her professional career. She now works in the medical-surgical retina team at Hospital Universitario La Fe de Valencia. Dr. Udaondo is also co-director and co-founder of the Aiken Clinic in Valencia and president of the Aiken Foundation.

As a lecturer, she collaborates on various master's degrees, has been an associate lecturer at Cardenal Herrera University, and is currently an associate lecturer in ophthalmology at the University of Valencia.

Dr. Udaondo has participated in many national and international ophthalmological forums and congresses and has made important contributions to ophthalmology journals as an author and reviewer. She has received several awards, including the American Academy of Ophthalmology achievement award for her collaboration and contribution to the American Academy of Ophthalmology in recent years. She also recently joined the board of the European Society of Retina Specialists (EURETINA) as a representative of Spain.

Dr. Udaondo's main areas of interest are cataract and retinal surgery, as well as medical pathology of the retina. She is a loyal advocate of the prevention of the various eye diseases that can affect the anterior and posterior segment of the eye, mainly diabetes and macular degeneration.

Dr. Ann O'Connell

Dr. Ann O'Connell

Consultant Ophthalmologist, University Hospital Waterford and HSE Waterford.

Dr Ann O'Connell was among the first graduates of Ireland's Higher Specialist Training programme in Medical Ophthalmology through the Irish College of Ophthalmologists. She subsequently undertook advanced training in medical retina, uveitis, and inherited retinal diseases (IRD) during fellowship at Moorfields Eye Hospital, London in 2025.

Alongside her subspecialty practice at University Hospital Waterford, Dr O'Connell leads area community services in paediatric ophthalmology and medical glaucoma. She is a Clinical Tutor to RCSI undergraduates and serves on the Irish College of Ophthalmologists interview board for incoming trainees.

She has been invited to deliver the European Society of Ophthalmology (SOE) Lecture 2026 at this year's national conference.

Dr. David Gildea

Dr. David Gildea

Consultant Ophthalmologist, HSE Dublin South.

Dr. David Gildea is a Consultant Medical Ophthalmologist at the Royal Victoria Eye and Ear Hospital and Dun Laoghaire Primary Care Centre (HSE Dublin South and Wicklow). His sub-specialist interests include glaucoma, medical retina, and paediatric ophthalmology.

He graduated in Medicine from Trinity College Dublin in 2014 and completed an MSc in Clinical Ophthalmology at University College London in 2017. He was awarded Membership of the Royal College of Surgeons in Ireland (MRCSI Ophthalmology) in 2021 and Fellowship of the European Board of Ophthalmology (FEBO) in 2022.

He received his Certificate of Completion of Specialist Training (CCST) in Medical Ophthalmology from the Irish College of Ophthalmologists in 2024 and subsequently undertook a Fellowship in Medical Glaucoma at Moorfields Eye Hospital, London. He returned to Ireland in 2025 to take up his current Consultant post.

Miss Arundhati Dev Borman

Miss Arundhati Dev Borman

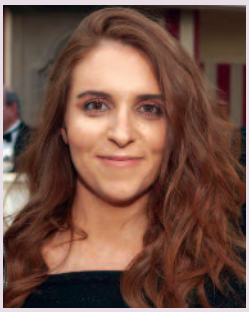
Consultant Ophthalmic Surgeon, Royal Victoria Eye and Ear Hospital, Children's Health Ireland and the Coombe Maternity Hospital, Dublin.

Miss Arundhati Dev Borman is a Consultant Ophthalmic Surgeon, with a special interest in Paediatric Ophthalmology working across the Royal Victoria Eye and Ear Hospital, Children's Health Ireland at Our Lady's Hospital, Crumlin, and the Coombe Maternity Hospital, Dublin.

She has extensive fellowship and consultant level experience from some of the leading paediatric ophthalmology departments across the UK and Ireland, and sub-specialises in paediatric cataract, retinopathy of prematurity, strabismus, genetics (ocular and systemic), neuro-ophthalmology and paediatric retinal vascular disease. She established new paediatric ophthalmic clinical services in Manchester and Bristol, leading the South-West UK Neonatal Regional ROP treatment service, and has assisted in implementing a new electronic patient record system.

Her research interests led to a Medical Doctorate from University College London in the field of ophthalmic genetics in 2016. Her findings have been widely presented internationally and have led to 25 publications in peer reviewed journals to date. She continues her research interests currently whilst maintaining a full clinical role. Miss Dev Borman is actively involved in undergraduate and postgraduate teaching, educational supervision, and mentorship.

Ms. Treasa Murphy



Ms. Treasa Murphy

Consultant Ophthalmic Surgeon, Children's Health Ireland.

Ms. Treasa Murphy is a Consultant Ophthalmologist at Children's Health Ireland. She received her CCST in Surgical Ophthalmology from the Irish College of Ophthalmologists and RCSI in 2022. She completed a paediatric ophthalmic surgery and adult strabismus fellowship at the British Columbia Children's Hospital under the University of British Columbia in Vancouver, Canada.

Upon her return to Ireland, she took up a post at the Mater Misericordiae University Hospital and at Children's Health Ireland at Temple Street.

Dr. Bobby Tang

Dr. Bobby Tang

Consultant Ophthalmologist, Our Lady of Lourdes Hospital, Drogheda.

Dr. Bobby Tang completed Medical Ophthalmology Training in Ireland before undertaking a Paediatric Ophthalmology Fellowship at the Manchester Royal Eye Hospital. He works as a Consultant Ophthalmologist in Our Lady of Lourdes Hospital Drogheda and Temple Street Hospital and he has a specialist interest in the management of Retinopathy of Prematurity.

Ms. Kathryn McCreery

Ms. Kathryn McCreery

Consultant Ophthalmic Surgeon, Children's Health Ireland.

Ms. Kathryn McCreery graduated from the Royal College of Surgeons in 1986. She undertook her Ophthalmology training at The Royal Victoria Eye and Ear Hospital, Dublin and at Baylor College of Medicine, Houston, Texas, USA. She completed her fellowship training in Paediatric Ophthalmology and Strabismus at The University of Pittsburgh/ Children's Hospital of Pittsburgh, Pittsburgh, USA.

She was appointed as Consultant Ophthalmologist/Assistant Professor at Baylor College of Medicine/Texas Children's' Hospital in 1999 and returned to Ireland in 2002 to take up her current role as Consultant Ophthalmic Surgeon at Children's Health Ireland at Crumlin and Blackrock Clinic, Dublin. Her areas of interest are Paediatric Ophthalmology and Strabismus, Cataract and Refractive Surgery.

Ms. McCreery's past leadership roles include Chair of the Scientific Committee ICO, Programme Director for Higher Surgical Training in Ophthalmology 2019-2022 and Council member of the ICO.

She has published more than 80 articles in peer-reviewed Ophthalmic journals, authored 5 book chapters, and made countless presentations at national and international Ophthalmic meetings.

She has been recognised as a dedicated teacher of Ophthalmology having received the Dan B. Jones Teaching Award from Baylor College of Medicine in 2002. Other awards include the Schindler award for the resident who exhibits high moral standards and compassion in patient care Baylor College of Medicine 1999 and SOE lecturer (European Society of Ophthalmology 2006.

Ms. Janice Brady

Ms. Janice Brady

Consultant Ophthalmic Surgeon, University Hospital Waterford.

Ms. Janice Brady is a Consultant Ophthalmic Surgeon at Waterford University Hospital. She graduated from University College Dublin with a First Class honours degree in Medicine and completed her specialist training in Ophthalmic Surgery in Ireland.

Ms. Brady has sub-specialty fellowships in cataract and refractive surgery, glaucoma and oculoplastics. She currently runs the glaucoma service at University Hospital Waterford.

She has been an invited lecturer at national and international meetings and has a particular interest in ophthalmology education and patient empowerment.

Ms. Brady is a member of ACE, Irish College of Ophthalmologists, the Royal College of Surgeons in Ireland, the Royal Society of Medicine and has contributed to guidelines with regard to the management of aesthetic complications.

Ms. Elaine Power

South East Technology Trainer, Vision Ireland.

Ms. Elaine Power

Elaine Power is a Technology Trainer with Vision Ireland, specialising in assistive technology for people who are blind or vision impaired. She has over 18 years' experience across social care, education, and training, bringing a strong foundation in supporting individuals to access practical, adaptive solutions to support independence. In her role within Vision Ireland's technology service, Elaine conducts personalised technology assessments to identify the most appropriate tools to promote independence. She delivers practical, tailored training to support people in using technology confidently and effectively in their daily lives. Elaine is passionate about promoting independence, ensuring individuals feel supported, confident and empowered to meet their goals.

Ms. Claire Dowling

Eye Clinic Liaison Officer, University Hospital Waterford.

Ms. Claire Dowling

Claire is the Eye Clinic Liaison Officer (ECLO) with Vision Ireland, with over 15 years' experience across health, social care, and education. Currently based within the Ophthalmology Department at University Hospital Waterford, Claire provides patient centred support at the point of diagnosis and beyond. She previously worked as a Community Resource Worker in the Southeast, delivering comprehensive needs assessments, mobility training, and community based supports for people with vision impairment. Claire's practice is rooted in person center support, advocacy, and collaboration with multidisciplinary teams to ensure holistic care. Claire's goal is to instill hope; build resilience and promote positive outcomes for the people she supports.

Ms. Hilary Devlin

Eye Clinic Liaison Officer, CHI Temple Street and Crumlin Hospital.

Ms. Hilary Devlin

Hilary Devlin is an Eye Clinic Liaison Officer (ECLO) working full time with paediatric patients. She has been in this role for 4 and a half years, has a background in vision impairment and rehabilitation with over 20 years' experience in the field of sight loss.

The ECLO service operates in the following Dublin hospitals: Mater University Hospital, Royal Victoria Eye and Ear Hospital, CHI at Temple Street, Crumlin Children's Hospital as well as Cork University Hospital, Cork.

The ECLO provides practical and emotional support to both patients and their families and aims to ensure patients are connected to support within the community. The ECLO knows that timely access to interventions and support is vital as it maximises coping strategies, adjustment to changes in eye conditions, increases independence and improves quality of life. Early intervention to children with a vision impairment is particularly important to promote overall development. The role of the ECLO allows clinicians time to focus on diagnosis, treatment and medical follow up.

Miss Marie Hickey-Dwyer

Consultant Ophthalmic Surgeon, University Hospital Limerick.

Miss Marie Hickey-Dwyer

Miss Marie Hickey Dwyer is Head of the Ophthalmology Department at University Hospital, Limerick where she has worked as a Consultant Ophthalmic Surgeon since 1997. Her specialist interests include surgical and medical retina and cataract surgery.

She is a past President and current member of the Irish College of Ophthalmologists, Senior Examiner for the Fellowship of the European Board of Ophthalmology and a Council Member of the Oxford Ophthalmological Society in the UK.

Mr. Arijit Mitra

Mr. Arijit Mitra

Consultant Ophthalmologist, Birmingham and Midland Eye Centre.

Mr. Arijit Mitra is a Consultant Ophthalmologist at Birmingham and Midland Eye Centre, with a subspecialty interest in Surgical and Medical Retina. He graduated from and completed basic surgical training in Ophthalmology from Calcutta National Medical College and Hospital, in India.

He undertook higher specialist training in Ophthalmology at West Midlands School of Ophthalmology. He underwent further specialist training in the management of complex vitreoretinal disorders at Manchester Royal Eye Hospital.

He has won several prizes during his training at the West Midlands Deanery. He has published over 35 papers in peer-reviewed journals and has presented widely at national and international meetings.

Together with his colleagues, he has been successfully running simulation courses since 2016.

He was the first Simulation Lead for the Royal College of Ophthalmologists from 2017 to 2021 and was responsible for promoting Simulation training in Ophthalmology, throughout the country.

Miss Angela Rees

Miss Angela Rees

Consultant Ophthalmologist, Moorfields Eye Hospital, London.

Miss Angela Rees is a Consultant Ophthalmologist specialising in medical retina and uveitis at Moorfields Eye Hospital City Road and St George's Hospital. Miss Rees Trained initially as an optometrist graduating from Aston University 1989. She subsequently studied medicine at The United Medical and Dental schools of Guy's and St Thomas' graduating in 1996. Ophthalmology training was in the North London Deanery with an MD at UCL in Age-related Macular Degeneration and psychophysics.

She has participated in many commercial medical retina and uveitis Trials as sub investigator.
Current research interests in Birdshot Chorioretinopathy, uveitis treatments, and infective uveitis.

Ms. Nikolina Budimlija

Ms. Nikolina Budimlija

Consultant Ophthalmic Surgeon Institute of Eye Surgery, Waterford and Kildare.

Ms Nikolina Budimlija is a Consultant Ophthalmologist and Ocular Surface Specialist at the Institute of Eye Surgery clinic in Waterford and Kildare.

Ms. Budimlija graduated from the School of Medicine, University of Zagreb, Croatia in 2005 and later earned a master's in health management. She was a Fellow of the European Masters Program in Health Promotion. She trained in ophthalmic surgery at the Clinical Hospital Centre, Sestre Milosrdnice Zagreb, Croatia.

Ms. Budimlija's experience includes her role as an investigator at a screening database for diabetic retinopathy (DriDB) and as a medical associate at the Glaucoma Reference Center, Croatian Ministry of Health. She spent four years working as lead consultant at Health Centre in Zagreb until early 2018, when she relocated to Ireland and took up a position as a consultant in private practice in Bray, Co. Wicklow.

Ms Budimlija joined the Institute of Eye Surgery in 2019.

She is a member of the Tear Film & Ocular Surface Society (TFOS), European Society of Cornea & Ocular Surface Disease Specialists (EuCornea), Irish College of Ophthalmologists, Croatian Ophthalmological Society, and the European Society of Cataract & Refractive Surgeons (ESCRS). She has participated in numerous medical conferences worldwide.

Mr. Jai Parekh

Consultant Ophthalmic Surgeon, Eye Care Consultants of New Jersey.

Mr. Jai Parekh is an anterior segment eye surgeon who completed his fellowship at the New York Eye and Ear Infirmary of Mount Sinai. He serves as Chief of Cornea and External Diseases and Medical Director of the Research Institute at St. Joseph's Health System in New Jersey. Mr. Parekh is also a Clinical Associate Professor of Ophthalmology at the Icahn School of Medicine at Mount Sinai, where he contributes to the Cornea Service at the New York Eye and Ear Infirmary. As co-founder of EyeCare Consultants of NJ, he founded the Center for Ocular Surface Excellence of New Jersey (COSE-NJ) and the Center for Interventional Glaucoma (CIG-NJ), advancing care in ocular surface diseases and minimally invasive glaucoma surgery.

Mr. Jai Parekh

Dr. Conor Hearty

Clinical Lead for Pain Medicine, Mater Misericordiae University Hospital, Dublin.

Dr Conor Hearty is the Dean of the Faculty of Pain Medicine and the Clinical Lead for Pain Medicine at the Mater Misericordiae University Hospital, Dublin. A graduate of University College Dublin, he completed his specialist anaesthesiology training in Ireland before undertaking a clinical fellowship at the Royal Adelaide Hospital. He is a Fellow of both the College of Anaesthesiologists of Ireland and the Australian Faculty of Pain Medicine. Dr Hearty has spent over a decade leading multidisciplinary pain services and is a key figure in the development of national medical training standards.

Dr. Conor Hearty

Dr. Fionnuala Kennedy

Medical Ophthalmology Trainee, Irish College of Ophthalmologists.

Dr Fionnuala Kennedy graduated with first-class honours and a gold medal from Trinity College Dublin in 2017. She is currently in her second year of Basic Medical Ophthalmology Training, and is also a member of the Royal College of Physicians of Ireland. She has a particular interest in uveitis.

Dr. Fionnuala Kennedy

Professor Anthony O'Regan

Medical Director, HSE National Doctors Training and Planning.

Professor Anthony O'Regan is a Consultant Respiratory Physician and Director of Postgraduate Clinical Education for Saolta University Healthcare Group. In June 2024, he was appointed Medical Director of National Doctors Training and Planning (NDTP) at the Health Service Executive.

Professor O'Regan previously served as Dean of the Institute of Medicine and has an extensive understanding of postgraduate medical training and education, demonstrating agility to respond to the changing landscape of medical education, healthcare delivery and population needs.

Professor Anthony O'Regan

Ms Aoife Doyle

Ms. Aoife Doyle

National Clinical Lead for Ophthalmology; Consultant Ophthalmic Surgeon, Royal Victoria Eye and Ear Hospital and St James's Hospital, Dublin.

Ms Aoife Doyle graduated from UCD in 1994 and obtained her Masters of Medical Science (Physiology) in 1996. She underwent Fellowship training at The Glaucoma Institute, Foundation Hospital St Joseph, Paris between 2004 and 2005.

She has held the position of Consultant Ophthalmic Surgeon at Royal Victoria Eye and Ear Hospital and St. James's Hospital since 2005. She is a Glaucoma Specialist at RVEEH specialising in all forms of glaucoma laser and surgery including trabeculectomy, non-penetrating surgery, Baerveldt tubes and Ahmed valves.

Ms Doyle was appointed the Clinical Lead for the national Clinical Programme for Ophthalmology in 2023.

Mr. Jimmy Uddin

Mr. Jimmy Uddin

Consultant Ophthalmologist, Moorfields Eye Hospital, London.

Mr. Jimmy Uddin is a Consultant Adnexal Surgeon, specialising in Orbits & complex oculoplastics at Moorfields Eye Hospital in London with more than 25 years of specialist expertise in managing conditions affecting the eyelids, orbit and lacrimal system.

He is renowned for his work in thyroid eye disease, leading the TED service at Moorfields with extensive experience in orbital decompression and multidisciplinary care, as well as for treating ptosis, eyelid tumours, lacrimal disorders and complex reconstructive and cosmetic procedures.

Mr. Uddin also plays a key role in training and mentoring oculoplastic surgeons nationally and internationally, and has contributed widely to education, clinical research and specialist societies in the field.

He is a founding member and former President of the International Thyroid Eye Disease Society (ITEDS), an original member of the award-winning TEAMed working group, and a past chairman of TEDct. He is a Founder member of the British Oculoplastics Surgery Society. He has been Principle Investigator for a number of TED trials and active in orbital and oculoplastics research. Through these roles, he has championed education, research, and patient support on a global scale.

Ms. Elizabeth McElnea

Ms. Elizabeth McElnea

Consultant Ophthalmic Surgeon, University Hospital Galway.

Ms. Elizabeth McElnea is a graduate of University College Dublin. She has completed fellowship training in oculoplastic, orbit and lacrimal disease at the Royal Victorian Eye and Ear Hospital in Melbourne, Victoria and in cornea and anterior segment disease at Royal Perth Hospital in Perth, Western Australia. She currently works as a Consultant Ophthalmologist in University Hospital Galway.

Ms. Clare Quigley

Ms. Clare Quigley

Consultant Ophthalmic Surgeon, Royal Victoria Eye and Ear Hospital, Dublin.

Ms. Clare Quigley is a consultant ophthalmic surgeon in public practice at the Royal Victoria Eye and Ear Hospital and St. James's Hospital, and in private practice at Progressive Vision, Dublin. Ms. Quigley is also an honorary consultant paediatric oculoplastic surgeon at CHI, Temple Street. Ms Quigley graduated from Trinity College Dublin in 2014 and completed ophthalmic surgery training in Ireland in 2023, followed by subspecialty fellowship training in oculoplastics, lacrimal, and orbital disease at James Cook University Hospital, Middlesbrough, and the Royal Adelaide Hospital, South Australia. Ms. Quigley also lectures at Trinity College Dublin in the Precision Medicine module of the Genomic Medicine MSc.

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Book of Abstracts

PRESENTATION ABSTRACTS

Wednesday AM 9am to 10.30am

Treatment Burden Associated with Intravitreal Injections: A Cross-Sectional Study at a Tertiary Eye Centre in Ireland

O'Leary A, Coakley D, O'Connell E.
South Infirmary Victoria University Hospital, Cork.

Objectives
To assess treatment burden and identify key predictors among patients receiving intravitreal injections for retinal conditions at a tertiary eye centre in Ireland.

Methods
A cross-sectional questionnaire-based study was conducted using a modified Treatment Burden Questionnaire (TBQ) alongside demographic and qualitative assessments. Eligible participants included adults undergoing intravitreal injection treatment, excluding first-time attendees and those with insufficient English proficiency. The TBQ assessed treatment demands, medical follow-up, and financial burdens on a 0-10 Likert scale (total range 0-130). Supplementary questions addressed travel logistics, costs, and service perceptions. Correlation analysis and multiple linear regression identified predictors of treatment burden.

Results
We enrolled 73 participants (52.1% male, mean age 74.2 years). Most participants (74%) required transport assistance, with mean travel times of 54.9 minutes and average costs of €22.08 per appointment. The mean TBQ score was 34.1 (SD 21.71), with 13.7% experiencing high treatment burden (≥59). Parking difficulties affected 89.8% of respondents. Correlation analysis identified commute duration ($r = 0.400$, $p < 0.001$) and difficulty arranging transport ($r = 0.465$, $p < 0.001$) as the strongest predictors of treatment burden. Age, gender, and costs did not show significant associations.

Conclusions
We demonstrated that transportation logistics are the primary drivers of treatment burden in Irish patients receiving intravitreal therapy, rather than demographic or financial factors. These findings highlight the urgent need for satellite treatment centres and enhanced transport support along with possible extended dosing intervals and bilateral same day injections to reduce patient burden and improve treatment sustainability.

Audit of the Value of an Autonomous Vessel Vector Change Detection Algorithm for Optic Disc Haemorrhage in Retina Photographs from a Diabetic Screening Population

Coleman K, Mousalkhi M, Dunne E, Keane G, Franco O'Penya H , Coleman J, Dervan E, O'Brien C, Chaturvedi A, Kelly S, Keegan D, O'Toole L.
Mater Misericordiae University Hospital, Dublin.

Objectives
To assess the value of SightTrack, an autonomous vessel vector change-detection algorithm, as a low-burden pre-screening tool for glaucoma in retinal photographs from a diabetic screening population

Methods
There is a clear need to develop low-burden pre-screening for glaucoma. Structural change is known to precede functional sight loss, and retinal biomarkers may include optic disc blood vessels that shift with underlying neuroretinal rim thinning.

Retinal photography is already widely used in diabetic screening programmes. SightTrack was developed as an autonomous AI application to recognise optic disc vessel vector patterns, with shift, rotation, or embolic occlusion all capable of generating a change alert. We audited a retrospective cohort of diabetic patients screened at MMUH between 2012 and 2017 who were referred for glaucoma assessment because optic disc haemorrhage had been identified on retinal photographs. A total of 170 image sets were suitable for analysis.

Results
Of 170 suitable image sets, SightTrack alerted to change on 5.2% with 94.1% negative predictive value, i.e. unnecessary referrals detected. 1/170 was a false negative change detection. Total sensitivity was 88.9%, specificity 98.8%, positive predictive value 80% and accuracy 98.2%.

Conclusions
In this preliminary audit, SightTrack performed well on retinal photographs from a diabetic screening population. The findings suggest potential value as a pre-screening or triage tool to reduce unnecessary referrals, while identifying eyes requiring further glaucoma assessment. Because it can be deployed wherever retinal photography is available, this approach may have particular relevance in settings with a high glaucoma burden and limited access to specialist services, such as parts of Africa.

Corneal Transplantation Practices in the Republic of Ireland: 14-year Data from the National Corneal Transplant Registry

Neves E, Quill B, Power W, Murphy C.
Royal Victoria Eye and Ear Hospital, Dublin.

Objectives
To describe corneal transplantation practices in the Republic of Ireland and evaluate temporal trends in surgical techniques over time.

Methods
A retrospective review of keratoplasties performed between 2012 and 2025 using data from the National Corneal Transplant Registry.

Results
A total of 2,376 keratoplasties were performed during the study period. Of these, 944 (39.7%) were Penetrating Keratoplasties (PK), 781 (32.9%) were Descemet Stripping Automated Endothelial Keratoplasties (DSAEK), 448 (18.9%) were Descemet Membrane Endothelial Keratoplasties (DMEK), 137 (5.8%) were Deep Anterior Lamellar Keratoplasties (DALK), 49 (2.0%) were Boston Type 1 Keratoprostheses, and 17 (0.7%) were Superficial Anterior Lamellar Keratoplasties (SALK).

The most common indications for surgery were Fuchs' Endothelial Dystrophy (FED) (24.2%, n=575), Keratoconus (KC) (16.5%, n=392), and Pseudophakic Corneal Oedema/Bullous Keratopathy (PBK) (14.9%, n=354). Keratoconus was the leading indication for both PK (33.3%, n=314) and DALK (55.5%, n=76), while FED and PBK accounted for 66.3% (n=516) and 84.5% (n=376) of DSAEK and DMEK procedures, respectively.

Over the study period, there was a significant decrease in the annual number of PK procedures ($p < 0.05$) and a significant increase in both DALK and DMEK procedures ($p < 0.05$). In addition, the annual number of DSAEK procedures remained stable ($p = 0.82$).

Conclusions
This is the first study to report over a decade of data from the National Corneal Transplant Registry in the Republic of Ireland. In line with international trends, there has been a decline in full thickness keratoplasty and a corresponding shift towards lamellar techniques.

Diabetic Retinopathy Screening Outcomes in Pregnancy: A Review of the Pregnancy Pathway in the Irish National Diabetic Retinal Screening Programme

Masalkhi M, Brady D, O'Reilly D, Keegan D, Kavanagh H, O'Toole L.
UCD School of Medicine, Dublin.

Objectives
To review the Irish national pregnancy screening pathway by assessing pathway completion rates, screening intervals, diabetic retinopathy (DR) progression, and associations between glycaemic control and retinopathy outcomes.

Methods
Retrospective cohort analysis of 1,103 pregnancy episodes from 1,001 participants in the Diabetic Retinopathy Screening (DRS) pregnancy pathway (January 2023–October 2025). DR was classified as R0 (none), R1 (mild), R2 (pre-proliferative), or R3 (proliferative); maculopathy as M0 (absent) or M1 (present). R1M1, R2, and R3 grades require Treatment Centre (TC) referral; once referred, patients leave the DRS pathway and are monitored by TC. Screening events were classified as DRS community screens or TC monitoring visits based on the preceding outcome field, validated by inter-screen intervals. Pathway completion, wait times, did-not-attend (DNA) rates, and DR progression on the DRS pathway were evaluated, with TC outcomes reported separately. The Haemoglobin A1c (HbA1c) level was extracted when documented on the patient's referral letter.

Results
Median age was 34 years (range 18–50); 79.5% had Type 2 diabetes, 9.4% Type 1. Of 1,103 participants, 533 (48.3%) completed all pathway screens including post-partum. Among DRS community patients (n=747), pre-delivery attendance was 89.6% but dropped to 47.0% post-partum; 135 (12.2%) experienced miscarriage. Referrals were appropriately early (80% in first trimester, median 8 weeks). At first screening (n=848), 50.0% had no DR, 39.7% mild, 4.7% pre-proliferative, and 5.5% proliferative. Maculopathy was present in 14.4%. Overall, 166 (19.6%) met TC referral criteria at first screen; 42 additional participants progressed to TC-referable status, totalling 208 (24.5%) requiring specialist referral. Among 446 participants with ≥2 DRS community screens before delivery, 75.3% remained stable, 17.3% worsened, and 7.4% improved. All improvements were DR grade reductions (R1→R0, n=33); maculopathy resolution occurred exclusively under TC monitoring (60% of M1 resolving post-partum). Progression to R3 within the DRS pathway was rare (0.2%, n=1). HbA1c was available for 786 (71.3%); mean was 53.0 mmol/mol, with 45% achieving good control (<48 mmol/mol). HbA1c was weakly associated with DR severity (ρ=0.10, p=0.01) but did not predict progression (p=0.72).

Conclusions
This first national review demonstrates appropriately early referrals (80% first trimester), with most participants managed without TC referral (80%). On the DRS community pathway, the majority maintained stable DR (75%), with 7% improving (all DR grade reductions). Progression to proliferative disease was rare (0.2%). Among patients with maculopathy monitored by TC, 60% showed resolution post-partum. Optimising time to first screen and post-partum DRS attendance (47%) represent key improvement targets.

Non-attendance Rates of Patients Attending Treatment Centres for Diabetic Retinopathy

Kelly S[1], Brady D[2], O'Reilly D[2], Kavanagh H[2], O'Toole L[1,2], Keegan D[1,2].
[1] **Dept of Ophthalmology, Mater Hospital, Dublin**
[2] **Diabetic RetinaScreen, National Screening Service, HSE**

Objectives
To determine the patient and clinic level factors that are associated with non-attendance among patients attending treatment centres for diabetic retinopathy. A secondary aim was to understand the transition from treatment centres back to surveillance or screening after discharge.

Methods
Mixed-effects models were used to estimate factors associated with non-attendance in diabetic retinopathy treatment centres. A total of 81,106 appointments from 16,089 patients over seven years were included in the analysis.

Results
The overall rate of non-attendance within the treatment centres was 0.13 with the highest rates of non-attendance (0.21) found in patients who were referred for non-diabetic eye disease (NDED). Morning appointments had lower rates of non-attendance when compared to afternoon appointments (OR: 0.55). One in four discharges from the treatment centres were for repeated non-attendance.

Conclusions
This study is the first to explore the non-attendance rates of patients attending treatment centres for DR on a national scale. Several factors that are linked with higher rates of non-attendance have been identified. A majority of patients with non-proliferative DR who are discharged into screening or surveillance maintain stable DR grades demonstrating out-of-hospital monitoring is a reasonable pathway for this cohort.

Periocular Primary Basal Cell Carcinoma and Squamous Cell Carcinoma: A Systematic Review of Surgical Treatment

Mc Glacken-Byrne A, Cassidy L.
Royal Victoria Eye & Ear Hospital, Dublin.

Objectives
This study involves a narrative systematic review of the existing literature regarding surgical treatment of primary periocular basal cell carcinoma and squamous cell carcinomas. The aim was to evaluate and discuss the tumour recurrence rates for each method of surgical treatment; surgical excision, Moh's surgery and Slow Moh's surgery. The secondary outcome was to investigate complications of each surgery type; functionality and cosmetic acceptability.

Methods
16 articles were deemed eligible for inclusion. Studies included those that describe surgical treatment of at least 50 tumours and that noted recurrence rates after the treatment of primary BCC or primary SCC by surgical excision, Moh's surgery and Slow Moh's surgery.

Results
Recurrence rates ranged from 0 to 5% for primary basal cell carcinomas and 0 to 12.1% for primary squamous cell carcinomas using wide local excision, Slow Moh's surgery or Moh's micrographic surgery. Margin size, tumour location and histological features all add nuances to recurrence risk. Secondary outcomes like cosmetic and functional results are often under-reported, but are meaningful for comprehensive decision-making.

Conclusions
Caution is advised when comparing recurrence rates as there are different surgical techniques, margins and various methods of determining recurrence. Margin size, tumour location and histological features all add nuances to recurrence risk.

A Systematic Review Assessing the Effects of Myopia and Myopia Treatment on Quality of Life in Africa, Asia, and Latin America

Mahon E, Prieto L.
London School of Hygiene and Tropical Medicine.

Objectives
This systematic review was conducted as part of an MSc in public health, with the overarching aim to provide an overview of the effects of myopia and myopia treatment in adult and paediatric populations in Africa, Asia and Latin America. Specifically ascertaining the impact of myopia treatments on quality of life in myopic persons, assessing the impact of myopia on quality of life in myopic persons, and subtyping the impact of myopia on quality of life based on whether low or high myope.

Methods
The databases Medline, Embase, Cochrane Library and CINAHL were searched for articles relating to myopia and quality of life in Asia, Africa and Latin America. Inclusion criteria included publication from 2021 to 2025, in English, Spanish or French. The articles were screened utilising the CASP tool for quality appraisal. No articles carried out in Latin America met the inclusion criteria of the review.

Results
This literature review yielded 18 articles. 9 articles discussed the comparative effect of various treatment modalities for myopia management on quality of life, while 9 articles discussed the impact of myopic disease on affecting individuals' mental health and quality of life.
Ortho-K therapy yielded the highest improvement in quality of life in Asian participants, with soft contact lenses also positively impacting perceived appearance. In Africa, myopia of progressive severity was found to negatively impact quality of life and mental health scores, with significant improvement in quality of life with single vision spectacles.

Conclusions
The various modalities available for correction and control of myopia can be tailored to be selected for their positive impact on myopic individuals. Groups investigating the mental health impact of atropine, multifocal contact lenses and orthokeratology lenses in Asian populations highlighted key differences in quality of life; in comparison, data in Africa solely investigated the effect of single vision lens correction of myopia, and no articles based in Latin American populations met the inclusion criteria.

These results highlight that mental health and social functioning should also be key considerations, with emphasis on the significant impact of undiagnosed myopia on the quality of life of myopes. The benefits of myopia management on quality of life can be observed in participants of all age groups in Asia and Africa, and there is a highlighted need for further research in Latin America.

A Multicentre Retrospective Analysis on the Efficacy and Safety of Glaucoma Drainage Devices in Ireland

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Ophthalmology Department, Royal Victoria Eye and Ear Hospital, Dublin.
Ophthalmology Department, University Hospital Galway, Galway.

Objectives
To evaluate the efficacy and outcomes of the Paul Glaucoma Implant (PGI), Baerveldt Glaucoma Implant (BGI) and Ahmed Glaucoma Valve (AGV) in Ireland from 2019 - 2024. This represents the largest analysis of glaucoma drainage devices in Ireland to date.

Methods
This is a retrospective comparative analysis of 252 patients that underwent glaucoma drainage device surgery at the Mater Misericordiae University Hospital, Royal Victoria Eye and Ear Hospital from January 2019 to December 2024 and University Hospital Galway 2023-2024.

The primary outcome was surgical success based on predefined IOP criteria (A ≤ 21, B ≤ 18, C ≤ 15, and D ≤ 12 mmHg). Success is characterized as qualified if achieved with ocular hypotensive medications and complete without medication. Failure was determined by an IOP level measured above the upper limit or below the lower limit of 6 mmHg on two consecutive visits or loss of light perception attributable to glaucoma. Secondary outcomes included reduction in IOP-lowering medications, maintenance of BCVA, complications, visual field progression over an extended follow up of 5 years.

Results
Across three centres (MMUH, RVEEH, UHG) a total of 252 charts were reviewed. 141 patients received the PGI, 71 patients received the AGV and 40 patients received the BGI.

Initial results show a marked reduction in mean IOP at 12 months (P<0.0001) which was greater in the PGI group (16.77±1.18) compared to AGV (13.37±1.58) and BGI (11.53±1.63). The mean IOP was 13.12±4.16 in PGI group, 14.46±5.29in BGI group and 17.10±7.17 in AGV group. Mean reduction in drops was similar between PGI (-2.06) and BGI (-1.95) groups compared to AGV (-0.97). The complication rate was lowest in PGI group (13%) compared to AGV (29%) and BGI (21%).

Conclusions
As a novel device the PGI is an effective and safe surgical intervention for the management of medially refractive glaucoma compared to its predecessors. This study is the first to compare PGI, AGV and BGI devices and represents the largest analysis of glaucoma drainage devices in Ireland.

Wednesday PM 4pm to 5pm

A Comparison of Traditional Hospital v's Direct Optometrist Referrals to a Community Cataract Clinic

Keogh T, Commins E, Forde T, Comer G.
Community Healthcare West - Galway University Hospital.

Objectives

The Community Eye Team commenced the cataract pre-assessment pathway in spring 2024 in conjunction with Galway University Hospital (GUH) with referrals accepted from central appointments at GUH following triage by an Ophthalmic Surgeon. The direct Optometric Cataract Referral form was launched in late October 2025 in the Community healthcare west Galway area. Prior to the rollout of the Direct Optometric Cataract Referral form, an education process was undertaken with the local Optometrists and GPs via WhatsApp, email and an education evening with the Community Eye Team. The objective of this audit is to evaluate whether a standardised optometrist referral form enabling direct referral for cataract pre-assessment to community ophthalmology improves referral efficiency compared with the traditional hospital referral pathway in terms of:
Patient waiting times to initial cataract pre-assessment appointment.
Conversion rate to cataract surgery.

Methods
A Retrospective chart review was carried out on all cataract referrals to the Community Ophthalmology team over a four-month period from November 2025 to the end of February 2026. Relevant data required was collected, reviewed and analysed. These were divided into the traditional pathway via GUH and the new direct referral pathway to Community Primary Care Ophthalmology. The wait time from referral to their initial cataract pre-assessment appointment was determined along with the conversion rate to cataract surgery for each group.

Results
152 patients were seen for cataract pre-assessment from November 2025 to February 2026.
115 patients were referred through the traditional hospital pathway.
37 patients were referred through the direct optometric pathway.
With the use of the direct optometric referral form:
Wait times to the first appointment were reduced from 61.6 weeks to 5.8 weeks, an absolute reduction of 56 weeks and a relative reduction of 90.6%, demonstrating a dramatic acceleration of patient access.
Conversion to surgery increased from 59.0% to 89.2%, representing an absolute improvement of 30% and a relative increase of 51%, reflecting enhanced referral appropriateness and surgical throughput.

Conclusions
Implementation of the standardised optometrist referral form has led to substantial improvements in both initial appointment waiting time and conversion to cataract surgery.
Together, these findings highlight the effectiveness of the direct referral pathway in improving patient care and service efficiency.
This supports the use of structured optometrist referrals to streamline cataract pathways and reduce hospital patient outpatient burden. Wider adoption of structured optometrist referral pathways may improve patient flow and support delivery of community based ophthalmology services.

Future developments
A second centre for cataract pre-assessment will be commencing in summer 2026 in Tuam Primary Care Centre to facilitate appointments for patients East of Galway City who currently have to travel to Shantalla in Galway City Centre for their appointment. This is in keeping with the guiding principle for Sláintecare, "Right Care, Right Place, and Right Time".

Five-Year Surgical Outcomes of Scleral-Fixated Intraocular Lens Implantation at Waterford University Hospital

Powell S, O'Regan A, Doris JP.
University Hospital Waterford.

Objectives
To evaluate the visual outcomes and safety profile of scleral-fixated intraocular lens (SFIOL) implantation in a tertiary referral population.

Methods
A retrospective review of thirty-one eyes undergoing SFIOL implantation at a single tertiary centre was performed. All procedures were carried out by a single vitreoretinal surgeon between January 2021 and January 2026. Best-corrected visual acuity (BCVA) was recorded pre-operatively and at final post-operative follow-up. The primary outcome measure was post-operative BCVA. Secondary outcomes included the proportion of eyes achieving a clinically meaningful visual improvement of ≥0.3 logMAR, mean visual gain, and the incidence of post-operative cystoid macular oedema (CMO) and other surgical complications.

Results
Mean pre-operative BCVA was 1.03 ± 0.42 logMAR, improving to 0.33 ± 0.31 logMAR following surgery. A clinically meaningful visual improvement of ≥0.3 logMAR was achieved in 27 of 31 eyes (87.1%). Post-operative CMO occurred in five eyes (16%). Two eyes (6.5%) had worse post-operative acuity due to pre-existing ocular comorbidity (iridocorneal adhesion with corneal decompensation and exudative age-related macular degeneration). Other complications included haptic subluxation or dislocation in four eyes and uveitis–glaucoma–hyphaema syndrome in two eyes, all successfully managed with secondary IOL repositioning.

Conclusions
87% of patients achieved clinically meaningful visual improvement following SFIOL implantation. The CMO rate is consistent with the accepted range for complex secondary IOL procedures, and no sight-threatening complications were recorded. This study supports SFIOL implantation as a safe and effective intervention for eyes with inadequate capsular support.

Incidence, Severity, and Management of Retinopathy of Prematurity (ROP) at Cork University Hospital in the Period July 2024-July 2025

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2 Ophthalmology Department, South Infirmary Victoria University Hospital, Cork.

Objectives
To determine the incidence of retinopathy of prematurity (ROP), including cases requiring active treatment; to assess disease severity according to standardized staging criteria; to evaluate the modalities and timing of therapeutic interventions; and to quantify the follow-up burden by calculating the average number of ROP screening visits per infant.

Methods
A retrospective cohort study was conducted including all neonates who underwent retinopathy of prematurity (ROP) screening at Cork University Hospital between January and December 2024. Eligibility was determined in accordance with UK screening guidelines, encompassing infants born at <32 weeks' gestational age or with a birth weight <1501 g.

Clinical data were systematically extracted from electronic medical records and analysed using SPSS software. Variables of interest included the incidence and stage of ROP, presence of Plus or Pre-Plus disease, treatment modality, postmenstrual age at the time of intervention, and the number of screening examinations per infant

Results
During the audit period, 86 preterm infants met the screening criteria for retinopathy of prematurity (ROP), of whom 51.2% were female and 48.8% were male. The overall incidence of ROP was 20.9% (n = 18).

Five infants (5.8%) required treatment, corresponding to a treatment-requiring incidence of 58.1 per 1,000 screened infants. The mean gestational age of infants requiring treatment was 25.6 weeks (SD ±1.26).

Infants who required treatment for ROP had significantly lower gestational ages and birth weights compared to those who did not develop ROP. The mean gestational age at birth in the treated group was 179.0 days (approximately 25.6 weeks), compared to 210.1 days (approximately 30.0 weeks) in the non-ROP group. Similarly, the mean birth weight was 0.752 kg in treated infants versus 1.318 kg in those without ROP.

Independent samples t-test analysis demonstrated that both gestational age ($t = -7.433$, $p = 0.00062$) and birth weight ($t = -5.487$, $p = 0.00218$) were significantly lower in infants requiring treatment for ROP.

Among infants requiring treatment, one case was classified as Stage 1 ROP with both Plus and Pre-Plus disease. A second infant had Stage 2 ROP with Pre-Plus disease in the absence of Plus disease. The remaining three infants presented with Stage 3 ROP; of these, two demonstrated Plus disease and one exhibited Pre-Plus disease.

Overall, 80% of treated infants showed evidence of either Plus or Pre-Plus disease, underscoring their clinical significance as markers of disease progression and severity
Treatment and Follow-up:

Two infants underwent laser photocoagulation, while three received intravitreal bevacizumab (anti-VEGF) therapy. All treated cases demonstrated complete regression of ROP following intervention.

The postmenstrual age at treatment ranged from 34+1 to 42+4 weeks, with the majority of interventions occurring between 35 and 36 weeks.

The mean number of ROP screening examinations per infant across the cohort was 4.76, reflecting the substantial clinical workload and resource requirements associated with ROP screening programmes.

Conclusions
The treatment-requiring incidence of retinopathy of prematurity (ROP) in this cohort was 5.81%, consistent with rates reported in comparable neonatal populations across Europe and North America (typically 4–6.9%). The majority of treated infants had progressed to Stage 3 disease, in keeping with established treatment thresholds outlined in current clinical guidelines.

The distribution of treatment modalities demonstrated a predominance of intravitreal anti-VEGF therapy over laser photocoagulation, reflecting evolving clinical practice patterns. This shift is likely influenced by the relative ease of administration and favourable short-term anatomical outcomes associated with pharmacological therapy. However, given that long-term safety and systemic effects of anti-VEGF agents in premature infants remain incompletely defined, vigilant follow-up is essential.

Notably, four out of five treated infants exhibited Plus or Pre-Plus disease, underscoring the importance of these vascular changes as key indicators for disease progression and timely intervention.

Finally, the relatively high number of screening examinations per infant highlights the significant service burden associated with ROP programmes. These findings support the need for innovations in care delivery, including service decentralisation and the adoption of technology-assisted screening strategies to optimise resource utilisation while maintaining high standards of care.

Recommendations:
Optimisation of screening pathways: Consider risk-stratified screening protocols based on gestational age and birth weight to improve efficiency while maintaining patient safety.

Integration of digital health solutions: Explore the implementation of tele-ophthalmology and artificial intelligence–assisted image analysis to support timely detection and reduce clinician burden.

Standardisation of follow-up protocols: Ensure adherence to evidence-based guidelines for surveillance intervals, particularly in infants treated with anti-VEGF agents, given the potential for late recurrence.

Workforce and resource planning: Allocate dedicated personnel and clinic capacity to meet the demands of ROP screening and follow-up.

Parental engagement and education: Enhance communication with caregivers regarding the importance of follow-up to minimise loss to follow-up.

Ongoing audit and longitudinal monitoring: Conduct regular re-audits to track incidence trends, evaluate service delivery, and assess long-term visual and developmental outcomes, particularly in infants receiving anti-VEGF therapy.

Diagnostic Outcomes of Glaucoma Referrals to a Tertiary Long-Wait Clinic

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Mater Misericordiae University Hospital.

Objectives
To evaluate investigations performed prior to referral, wait times to review, and diagnostic outcomes in patients attending the long wait glaucoma clinic.

Methods
Patients were identified through a retrospective review of all individuals seen in the long-wait glaucoma clinic over a 12-month period. Medical record numbers were used to retrieve electronic patient records on the hospital information system. This allowed analysis of referral documentation as well as clinic outcomes.

Results
A total of 356 patients attended the clinic over a 12-month period; all were included in the analysis. Most referrals originated from community optometrists (76.4%), followed by hospital (17.7%) and GP referrals (5.9%). The median time from referral to appointment was 15 months (IQR 14-17 months). Referral quality was variable: 83 referrals (23.3%) included IOP, visual field testing, optic disc assessment, and OCT image, while 54 referrals (15%) contained no documented clinical information. 54 patients (15.2%) were referred as known glaucoma/ocular hypertension (OHT). Among those without a prior diagnosis, 47 (15.6%) were diagnosed with glaucoma and 31 (10.3%) with OHT. Of those referred as known glaucoma, 13 patients (24%) either had no pathology or an alternative diagnosis.

Conclusions
The diagnostic yield of glaucoma referrals in our institution is in line with previous studies performed in the United Kingdom. However, prolonged wait times and inconsistent referral documentation reduce the efficiency of glaucoma services and may delay assessment of patients at risk of vision loss. Both standardised referral criteria and expansion of services are needed to improve triage and facilitate timely diagnosis.

Macular GCIPL Thickness on Spectral-Domain OCT as an Early Biomarker for Alzheimer's Disease: a Narrow Systematic Review

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Cavan General Hospital.

Objectives
To systematically evaluate the association between retinal structural and microvascular alterations—particularly macular ganglion cell–inner plexiform layer (GC-IPL) thickness—and Alzheimer's disease (AD) and mild cognitive impairment (MCI), and to assess the diagnostic and prognostic value of different retinal imaging modalities and measurement techniques.

Methods
A comprehensive literature search (January 2016–January 2026) was conducted across PubMed, Scopus, Web of Science, Embase, and major publisher databases. Cohort, case-control, and cross-sectional studies reporting quantitative optical coherence tomography (OCT) or OCT angiography (OCTA) metrics and cognitive outcomes were included. Data on study design, imaging modality, retinal parameters (e.g., GC-IPL, RNFL, microvascular density), cognitive status, follow-up duration, and adjusted effect estimates were extracted. Risk of bias was assessed using the Newcastle–Ottawa Scale. Where appropriate, pooled estimates were synthesised using meta-analytic approaches.

Results
Twenty studies met inclusion criteria, comprising international cohorts from Europe, Asia, and North America. Across studies, significant thinning of the GC-IPL and retinal nerve fibre layer (RNFL), along with reduced retinal microvascular density, were consistently observed in individuals with MCI and AD compared with cognitively normal controls. Retinal measures demonstrated independent associations after adjustment for age, sex, APOE genotype, and vascular comorbidities. Greater retinal thinning correlated with disease severity and established AD biomarkers, including amyloid and tau. Multimodal approaches combining OCT and OCTA metrics showed improved diagnostic performance. Moderate heterogeneity was observed due to variations in imaging protocols, study populations, and analytical methods.

Conclusions
Retinal structural and microvascular abnormalities are promising, non-invasive biomarkers for early detection and monitoring of Alzheimer's disease. Quantitative imaging modalities—particularly OCT/OCTA and multimodal approaches—may enhance risk stratification beyond traditional diagnostic methods. Standardisation of retinal imaging protocols and large-scale longitudinal studies are needed to support integration of retinal biomarkers into clinical practice and population-level screening strategies.

Lacrimal Gland Biopsy: Diagnostic Yield and Safety Profile from a 14-Year Retrospective Audit in a Tertiary Referral Centre

Normile C, Khan R.
Royal Victoria Eye and Ear Hospital, Dublin.

Objectives
Lacrimal gland enlargement presents a diagnostic challenge, with overlap in presentation between inflammatory and neoplastic disease. Biopsy is often required to exclude malignancy. The objective of this study is to evaluate the diagnostic yield and safety of lacrimal gland biopsy in a tertiary referral centre.

Methods
A retrospective review of all lacrimal gland biopsies performed between 2010 and 2024 was conducted. Data collected included patient demographics, clinical features, imaging findings, histopathology, and outcomes including recurrence and post-operative complications.

Results
Seventy-nine biopsies were analysed (mean age 49 years; 62% female). Inflammatory pathology was most common (44%); however, neoplastic disease accounted for 32% of cases. Lymphoma was identified in 19% (approximately 1 in 5 patients). Malignant tumours such as adenocarcinoma and metastases were less frequent (5%), pleomorphic adenomas accounted for 7.5% of cases, 12% of biopsies were benign cysts, and 10% of biopsies were normal. Post-operative complications were infrequent, with no vision-threatening events observed. Recurrence was uncommon (<10%).

Conclusions
Lacrimal gland biopsy demonstrates a high diagnostic yield with a substantial risk of malignancy and a favourable safety profile. A low threshold for biopsy is supported, as the risk of missed malignancy outweighs procedural risk.

A Review of Selective Laser Trabeculoplasty (SLT) Outcomes in an Ophthalmology Clinic (2024–2025)

Morrissey C.
Ophthalmology Department, Nenagh General Hospital, Tipperary.

Objectives
- To assess the proportion of patients achieving a ≥20% reduction in IOP following SLT
- To evaluate the completeness of IOP and optic disc documentation
- To examine SLT outcomes in relation to optic nerve status, as assessed by cup–disc (C/D) ratio

Methods
Retrospective clinical audit.
Inclusion Criteria
Patients undergoing SLT for:
- Primary open-angle glaucoma (POAG)
- Pseudoexfoliation (PXF) glaucoma
- Ocular hypertension
- Glaucoma suspect

Exclusion Criteria
- Missing pre- or post-SLT IOP measurements
- Loss to follow-up
- Secondary glaucomas not routinely managed with SLT (e.g. rubeotic glaucoma)

Results
Patient Demographics
- Total patients reviewed: 20
- Patients included in final analysis: 16
- Mean age: approximately 68 years (range 39–86)
- Mixed male and female cohort

Reasons for Exclusion
Of the four patients excluded:
- Two patients had incomplete documentation with missing post-SLT IOP measurements, precluding assessment of treatment response
- One patient was lost to follow-up after SLT and did not attend post-procedure review
- One patient had a secondary glaucoma diagnosis not routinely managed with SLT and therefore did not meet inclusion criteria

These exclusions were applied in accordance with predefined audit criteria to ensure accurate and meaningful assessment of SLT outcomes.
Diagnoses
- Primary open-angle glaucoma
- Pseudoexfoliation glaucoma
- Ocular hypertension
- Glaucoma suspect
- A minority of patients had advanced or end-stage disease

Optic Disc Assessment (C/D Ratio)
- C/D ratio documented in 16/16 patients (100%)
- C/D ratio range: 0.4 – 0.9
- Mean C/D ratio: approximately 0.7
- Advanced cupping (C/D ≥0.8): approximately 40% of patients
- Mild–moderate cupping (C/D ≤0.6): more common in OHT and glaucoma suspects

Intraocular Pressure Outcomes
- Mean pre-SLT IOP: approximately 27 mmHg
- Mean post-SLT IOP: approximately 17 mmHg
- Mean IOP reduction: approximately 10 mmHg (37%)

Achievement of Target IOP Reduction
- ≥20% IOP reduction achieved in approximately 75% of treated eyes
- Partial response (<20% reduction): approximately 15%
- Non-responders: approximately 10%

Patients with less advanced optic disc cupping (C/D ≤0.6) demonstrated a higher likelihood of achieving the target IOP reduction. However, clinically meaningful IOP reduction was also observed in several patients with advanced cupping.
Visual Field Status
- Visual field results ranged from full fields to advanced loss
- Several tests were unreliable or unavailable, particularly in patients with advanced disease

Safety
- No significant SLT-related complications were documented
- Some patients required escalation of topical therapy or repeat SLT

Conclusions
This audit demonstrates that SLT performed in this clinic achieves IOP reduction consistent with national (NICE) and international (EGS, AAO) guideline expectations. Approximately three- quarters of treated eyes achieved a ≥20% reduction in IOP, aligning with outcomes reported in major clinical trials, including the LiGHT study.

Inclusion of optic disc data highlights that SLT is utilised across a broad spectrum of glaucoma severity. While patients with advanced disc cupping demonstrated more variable responses, SLT still provided clinically useful IOP reduction, supporting its role as an adjunctive treatment in advanced glaucoma where surgical intervention may be unsuitable or deferred. Documentation of optic disc assessment exceeded audit standards. In contrast, visual field documentation was less consistent and represents a key area for improvement in clinical documentation and monitoring.

One Year On: Real World Response to Intravitreal Aflibercept-8mg in Previously Non-responsive Wet Age-Related Macular Degeneration Patients

Ng N, Hanrahan G, O'Connell A, Henry E.
University Hospital Waterford.

Objectives
To assess the 12-month outcomes of switching to intravitreal Aflibercept 8mg in the management of wet age-related macular degeneration (wARMD) in patients deemed non-responders to alternative intravitreal anti- vascular endothelial growth factor (VEGF) therapy.

Methods
This is a retrospective, observational study including 33 eyes in 24 ARMD patients switched to aflibercept 8mg from prior anti-VEGF therapies in University Hospital Waterford from January 2025. Outcomes following change to Aflibercept-8mg therapy were assessed based on the following parameters: Pre- and post-treatment best corrected visual acuity (BCVA), pre- and post-treatment OCT findings including central retinal thickness (CRT), intra-retinal (IRF) and subretinal fluid (SRF), and adverse events.

Results
The mean (SD) age was 81.1 years (9.80), with a slight female preponderance (51.5%). Mean number of injections prior to switching was 14.0 (range 4-41) of which 57.1% were with Aflibercept-2mg, 40.2% were with Bevacizumab and the remainder Ranibizumab. 45.5% were switched due to recurrence of disease with extended treatment interval, 27.33% due to no response to previous anti-VEGF, and the remaining 24.2% due to a suboptimal or halted response. Mean number of Aflibercept-8mg injections in the first-year post switching was 5.1 (range 2- 9). There was no significant change in mean BCVA at 12 months post switch but 42.4% of eyes had a 1-line improvement in vision. The mean (SD) CRT at baseline prior to switching was 303.4 µm (95.8) and mean change in CRT was -62 µm. After switching to aflibercept 8mg, 93.9% of patients had no IRF or SRF at 4 weeks, 72.7% of patients remained dry at 8 weeks and a further 66.7% of patients also remained dry at 12 weeks. Only 1 patient did not respond to aflibercept. No adverse events were reported.

Conclusions
This study shows that aflibercept 8mg provides a promising and durable therapeutic alternative for previously non-responsive patients with wet ARMD.

Quality Improvement Project: Optimising the Urgent Referral Pathway for New Neovascular Age-related Macular Degeneration (nAMD) Patients at the Royal Victoria Eye and Ear Hospital.

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[2] **Faculty of Medicine, "Iuliu Hatieganu" University of Medicine and Pharmacy, Cluj-Napoca, Romania**

Objectives

Timely treatment of new neovascular age-related macular degeneration (nAMD) is important in preserving vision. The aims of this project were to review all new appointments at the medical retina (MR) service at the RVEEH between July and October 2025, to analyse all urgent direct referrals to the service, to assess the time to first treatment in new nAMD (comparing to international standards), and to identify measures to streamline the referral pathway.

Methods

This was a retrospective analysis of patient records over a four-month period at the RVEEH as part of a quality improvement initiative. Data collected included demographics, type of referral pathway to access med ret clinic (direct slot booked from eye emergency department (EED), or letter), breakdown of diagnosis for direct slots, and time from initial referral to treatment for new wet AMD.

Results

There were 476 new appointments in all MR clinics during the study period. 110 new appointments were booked as direct slots from the EED. Only 50% of patients booked to direct slots met clinical criteria for urgent referral. 11% of all new appointments were nAMD meeting criteria for urgent treatment with intravitreal anti-VEGF injection (IVI). Of these, only half had accessed the MR clinic via a direct slot, with a mean time from referral to OPD appointment of 52.5 days. 85.7% of nAMD patients received first treatment on the day of their MR clinic appointment. IVI was administered within 2 weeks of initial referral in 4.8%, within 4 weeks in 19%, within 6 weeks in 38.1 % and within 8 weeks in 61.9% of cases.

Conclusions

The current direct referral pathway is used suboptimally and requires restructuring to ensure better use of resources. The primary aim of service revision is to increase the proportion of nAMD patients treated within the target window of 2 weeks, in line with NICE guidelines. Optimisation of the pathway includes the following steps:

– Revising clinical criteria for direct slots in MR clinics;
– Reserving two injection slots alongside each MR clinic to accommodate new nAMD patients;
– Implementing a new MR rapid access clinic;
– Expanding community IVI capacity.

Upper Eyelid Gold Weight Implantation for Lagophthalmos: Post-operative Outcomes and Complications.

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[2] **National University of Ireland, Galway.**

Objectives

To analyse upper eyelid gold weight implantation surgery outcomes by comparing pre-operative and post-operative assessments of visual acuity, astigmatism and lagophthalmos and reviewing post-operative complications.

Methods

Retrospective study of eyelids with facial nerve palsy/paresis and consequent lagophthalmos who underwent upper eyelid gold weight implantation surgery using high pretarsal and levator fixation technique. Pre-operative and post-operative assessments of best corrected visual acuity (BCVA), astigmatism and lagophthalmos were compared. Post-operative complications including ptosis, induced astigmatism and gold weight exposure and/or extrusion were reviewed.

Results
Best corrected visual acuity (LogMAR) improved after upper eyelid gold weight implantation. Both blink lagophthalmos and lagophthalmos with forced closure also improved post-operatively. Post-operative ptosis developed in a minority of patients, was mild and did not require surgical re-intervention. One patient required repositioning of the gold weight. Post-operative induced astigmatism was not noted in this cohort.

Conclusions
Upper eyelid gold weight implantation using the high pretarsal and levator fixation technique improves BCVA and lagophthalmos with minimal risk of post-operative complications including ptosis and induced astigmatism.

Incision and Insight: Orbital Biopsies

Khan A, Khan R
Royal Victoria Eye and Ear Hospital, Dublin.

Objectives
This study aims to review the demographics of orbital disease within an Irish population, the variance and accuracy of orbital disease diagnosis on biopsy and post-operative complications and outcomes.

Methods
A single-centre, retrospective review conducted by manually examining the electronic patient records of 608 patients, a list which was obtained from the hospital's histopathology log. Following exclusion criteria, 196 biopsies in 185 patients were included in this study.

Results
The histopathological diagnoses were grouped into malignant (41.8%), benign (27.6%), inflammatory (13.8%), infective (2%), infiltrative (0.5%), normal (7.7%) and non-specific (6.6%).Of the malignant diagnoses, the most common diagnosis was lymphoma (45%).

The most common benign diagnoses were vascular lesions (27.8%) and dermoid cysts (22.2%). The most common inflammatory diagnosis was idiopathic orbital inflammatory syndrome (52%). 85.7% of biopsies performed led to a specific diagnosis. Complications included ptosis, ectropion, lateral canthus droop, extra-ocular muscle restriction and central retinal artery occlusion.

Conclusions
Our study confirms the existing belief that orbital biopsy is a safe and highly effective diagnostic procedure. It provides a specific diagnosis in the majority of cases, guiding management in malignant, benign, inflammatory and infectious orbital disease. While the risk of severe vision loss is low, it is not negligible, and patients should therefore be carefully selected and counselled of potential risk.

Demand for Intravitreal Therapy in a Tertiary Irish Medical Retina Service: A Service Evaluation

Edwards L, Ryan A, Baily C.
Royal Victoria Eye and Ear Hospital, Dublin.

Objectives
The rising demand for intravitreal anti-vascular endothelial growth factor (anti-VEGF) therapy poses a significant burden upon tertiary ophthalmic services. This retrospective service evaluation sought to quantify the proportion of new patients seen in a tertiary medical retina clinic with suspected treatment-eligible macular disease who received intravitreal therapy (IVT), to describe the diagnostic spectrum and the interval between referral and clinic review.

Methods
Data were collected from new patients seen in a medical retina clinic who had pathology potentially eligible for anti-VEGF therapy, between 29th July and 9th December 2025. Demographic details, diagnosis, treatment decisions and referral-to-review intervals were recorded. Patients who did not attend appointments and those receiving ongoing injections prior to clinic review were excluded from the wait-time analysis.

Results
During this timeframe, 120 eligible patients were seen (mean age 71.1 years, 59 male, 61 female). Following initial review, 91/120 (75.8%) patients received IVT, of which 9/91 (9.9%) required bilateral injections. Among the 29 patients who did not receive IVT at initial review, 6 (20.7%) required treatment within the following three months. The commonest diagnoses were neovascular age-related macular degeneration (46.7%), retinal vein occlusions (32.5%) and 'other' choroidal neovascularisation (CNV), including peripapillary, myopic, inflammatory and CNV secondary to central serous chorioretinopathy (12.5%). Among those not treated, reasons included disease stability (72.4%) and declining treatment (24.1%). The mean interval between referral and clinic review was 47.6 days.

Conclusions
Among this cohort with suspected anti-VEGF-eligible pathology, over three quarters required IVT at initial review, with further patients subsequently treated within three months. These findings emphasise the substantial procedural workload generated by treatment-eligible retinal disease in tertiary centres. Given the ageing population, chronic nature of these conditions and growing demand for IVT, alternative service-delivery models such as community-based injection services and shared-care pathways may be necessary to maintain timely access to treatment while preserving tertiary services for diagnosis and complex care.

Photodynamic Therapy in Central Serous Chorioretinopathy: Can we Predict Outcomes with Patient History and Multimodal Imaging?

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Royal Victoria Eye and Ear Hospital, Dublin.

Objectives
Photodynamic therapy (PDT) with intravenous verteporfin is an established therapeutic option for persistent sub retinal fluid (SRF) in chronic central serous chorioretinopathy (cCSC), with randomized trials showing superior anatomical and functional outcomes for half dose PDT compared with alternative treatments. Notably, the PLACE trial demonstrated that half-dose PDT produced higher rates of complete SRF resolution and greater visual gain than high-density subthreshold micro-pulse laser in cCSC.

Given the often-limited availability of verteporfin, being able to predict those who have a better chance of responding to treatment would mean that available supplies will be used more efficiently.

Our patient cohort includes a range of severities and histories, which gives us the opportunity to see the effect of treatment on patients who are not represented in the well-known clinical trials in this area, as such we aim to identify factors that lead to positive outcomes. We have studied our patient outcomes over 17 months in our centre, in particular we assessed overall response to treatment and have broken into key sub groups those who had treatment with intravitreal anti-VEGF prior to PDT and those who had not. We also analysed pre-PDT treatment retinal angiography and ocular cohere tomography (OCT) as well as patient factors, including gender, age, etc.

Methods
We performed a single-centre retrospective review of all patients with cCSC treated with PDT between August 2024 and January 2026. PDT was angiography guided and completed by senior clinicians, all patients included were under the care of the medical retina service in our institution.

Utilising the audit function of the Medisight (the electronic patient records programme used in our institution) by searching for all procedures listed as PDT. Inclusion criteria: symptomatic cCSC with persistent SRF on OCT and having recorded treatment with half-dose PDT. Exclusion criteria: alternative primary diagnosis (these included primarily polypoidal choroidal vasculopathy and in the management of vascular ocular tumours) or had not attended any follow up appointment.

Data extracted included patient demographics, disease chronicity, baseline best-corrected visual acuity (BCVA), prior ocular therapies (including prior intravitreal anti-VEGF exposure), pre-treatment angiography and OCT, and anatomical outcome

looking at the first post procedure review and their most recent review. Primary outcome was proportion of eyes achieving complete SRF resolution at first visit post procedure.

Given this was a diverse group of patients we looked to separate out those with a more complex history from those that are closer to those that would have been included in comparable trials. Most notably this involved sub group analysis of those who had prior treatment with intravitreal anti VEGF and those who did not.

Results
In total, we identified 80 patients treated with half dose PDT for cCSC after exclusion criteria was applied. At their first review which occurred at a median of 6 weeks post procedure (average 9.3 due to significant outliers) for all patients we saw that 50% had complete resolution, 30% response and 20% had no response at that time.

In those who had not had intravitreal Anti-VEGF, we saw 63% had complete resolution of SRF, 23% had a partial response and 14% were non-responders. In comparison, those who had had previous intravitreal Anti-VEGF treatment, 35% had complete resolution, 38% partial response and 27% displayed no significant response.

We then looked at the non-responders in both groups, in the no previous intravitreal Anti-VEGF this was 14% of our cohort (n=6), only 1 patient went on to show any significant improvement on OCT after their first review. Of note, this patient had complete resolution of fluid after anti VEGF treatment was instigated. In the previous intravitreal Anti-VEGF group, 27% of this group (n=10) were non-responders. Only 21% of this group went on to late improvement. However, 37% went on to have further injections. All but 1 of those that showed later improvement had had further intravitreal Anti-VEGF.

In patients who had previously already had a treatment with PDT (n = 7), after their second treatment we saw that 3/7 were non-responders, however, 2/7 had complete resolution at first review.

Conclusions
Our results show that half dose PDT in anti-VEGF–naïve cCSC patients achieves early anatomical success at a comparable proportion to those in the PLACE trial, where half-dose PDT achieved 67% SRF resolution at 7–8 months . The lower early resolution rate in our audit may reflect our shorter follow-up interval for the primary outcome (first visit post-PDT), with further improvement expected by ~3 months. Limitations include retrospective design with resultant sources of bias, including selection bias and shorter follow-up data for a small number of eyes.

Trial data to date reinforces that PDT remains the intervention of choice for cCSC. Our subgroup findings suggest prior anti-VEGF treatment is associated with reduced PDT responsiveness, possibly due to more refractory disease or damage to the retinal architecture leading to altered retinal function.

Importantly, in the group that had previous anti VEGF treatment, although less likely to have treatment success, no SRF at first review is still achieved in 35% (and partial response to PDT in 38%) so there is a cohort where treatment will be very beneficial. Again if we could identify those more or less likely to respond pre treatment our outcomes will improve and our service will be more efficient.

These real-world data support PDT as the gold standard in the treatment of cCSC. This reinforces the need to be able to more accurately predict those who are more/ or less likely to respond to PDT. Our continued analysis of OCT scans and retinal angiography appearance aims to identify further features to predict response to treatment and make our service more efficient.

Challenges in Performing and Teaching Phacoemulsification for Advanced Cataracts in Rural Kenya

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Transcend Eye Hospital, Kitale, Kenya, University College Dublin Medical School, Fiat Lux Foundation, Palo Alto, US.

Objectives
To assess challenges, profiles and outcomes of phaco surgery in a new stand-alone eye hospital in rural Kenya (clinical, financial and staff resources, supply logistics)

Methods
Retrospective chart review. Visual acuity measured independently using a digital logMAR chart. Patients were listed from 2 dedicated eye camps for either phaco (6/60 or better vision) (Faros, Oertli Instrumentate, Switzerland) or manual small incision cataract surgery (SICS) (worse than 6/60) over 10 days of phaco training eye surgery in the second year of a new eye hospital (Transcend Eye Hospital) in rural Kenya by 4 surgeons. All phacos were teaching cases and performed or supervised by 2 experienced eye surgeons (DK, DW) and 1 trainee surgeon (PG). Standard phaco or SICS sutureless techniques were performed as described previously.

Results
500 patients were assessed over 2 dedicated eye camps (1 camp alone had 400 patients present in one day). 58 eyes of 58 patients underwent cataract surgery either by phaco (41 eyes) or SICS (17 eyes). Most patients were male (60%), mean age 68.9 years with pre-op duration of cataract diagnosis 4.0 years. Overall at 4 weeks post-op, 46 (80%) eyes had good unaided vision (6/18 or better) (phaco 90%, SICS 60%) and 13 eyes (30%) had excellent unaided vision (6/7.5 or better) (phaco 40%, SICS 10%). Posterior capsule rupture was seen in 6 eyes (11%) (phaco 10%, SICS 13%). There were no major complications like endophthalmitis or dropped nuclei. Poor outcome (<6/60) (5%) was associated with poor pre-op visual acuity, trauma or undiagnosed retinal conditions like retinal detachment.

Conclusions
Outcomes were generally good and achieve WHO standards (80% achieving 6/18 or better vision), even in phaco teaching cases. Particular challenges in teaching phaco in advanced cataracts in black patients include a reduced red reflex requiring maximum microscope light intensity and the routine use of trypan blue, capsulorhexis in fibrosed capsules, zonule stress and secondary corneal endothelial trauma with high phaco power. SICS achieves acceptable safe standards and maintains a real role in developing countries, with a possible renewed role in new immigrants to developed countries from the developing world.

Thursday AM 9am to 10am

Endophthalmitis Incidence After Vitrectomy: A Systematic Review and Meta-analysis of Risk Factors and Prevention Strategy

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Objectives
Consensus is lacking on best practice to minimise endophthalmitis rates following vitrectomy. We examined all available literature to determine the current incidence of post-vitrectomy endophthalmitis and associated risk-reduction strategies.

Methods
A comprehensive literature search was performed for endophthalmitis incidence after vitrectomy. Meta-analysis was performed comparing the main risk factors for endophthalmitis: instrument gauge, prophylactic antibiotics, phaco-vitrectomy, and intraocular tamponade

Results
We carried out the largest systematic review ever performed in vitreoretinal surgery, identifying 69 studies, which reported 2,781 cases of endophthalmitis after 1,979,160 vitrectomies (0.14%). Meta-analysis found that smaller-gauge vitrectomy had a non-significantly higher risk of endophthalmitis compared to 20-gauge surgery (OR 2.09, 95%CI 0.88-5.0). Endophthalmitis rates were significantly higher with 25-gauge compared to 23-gauge instruments (OR 2.03, 95%CI 1.05-3.92). Prophylactic subconjunctival antibiotic use did not decrease the risk of endophthalmitis compared to topical antibiotics (OR 0.77, 95%CI 0.36-1.64). Phaco-vitrectomy did not increase the endophthalmitis risk (OR 1.17, 95%CI 0.81-1.70). Use of intraocular tamponade other than fluid was associated with significantly lower rates of endophthalmitis (OR 0.15, 95%CI 0.09-0.27)

Conclusions
The incidence of endophthalmitis was higher than in previous reviews. Non-fluid intraocular tamponade significantly reduced the incidence of endophthalmitis but subconjunctival antibiotics did not. Small-gauge vitrectomy and phaco-vitrectomy were not associated with significantly higher rates of endophthalmitis.

Evaluating MicroRNAs and Other Molecular Biomarkers in the Diagnosis of Uveitis: A Scoping Review Protocol

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[4] Department of Medicine, University of Limerick, Limerick.
[5] Library Services, RCSI, University of Medicine and Health Science, Dublin.

Objectives
The aim of this review protocol is to lay the foundation for identifying what biomarkers have been studied in various uveitis subtypes, including cytokines, chemokines, and multiomic data, with particular focus on microRNAs, thus guiding selection of biomarkers which may be of interest in future research.

Methods
Following the JBI guidelines and the PRISMA-ScR checklist, an initial pilot search for biomarkers of uveitis conducted on PubMed returned 1,656 articles. These papers were ordered in terms of date published, and the top 50 most recent articles were selected for screening. These papers were uploaded to the Covidence platform, and a single reviewer screened the title and abstracts against the inclusion/exclusion criteria. 18 papers were selected for full text review. Of these, 8 were deemed to meet the inclusion/exclusion criteria for data extraction. Embase and Scopus will additionally be searched as part of the full review process, by a team of two independent reviewers, followed by a data extraction phase and narrative summary.

Results
From the pilot search, five articles studied cytokine expression in various uveitis subtypes compared to controls. Other inflammatory markers, such as C-reactive protein and erythrocyte sedimentation rate were analysed by four articles. RNA N6 methyladenosine regulator genes were analysed by Gu et al. (2025). Nora et al. (2025) examined interferon-inducible gene expression in undifferentiated uveitis with a positive Quantiferon test.

Conclusions
These preliminary findings highlight the broad range of molecular biomarkers currently studied in uveitis, justifying the role of this scoping review in amalgamating the current knowledge in this space.

Characterising MicroRNA Expression on the Ocular Surface in Response to Cyclosporine a 0.1% Treatment in Aqueous-Deficient Dry Eye Disease

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[10] Department of Haematology, Trinity St James's Cancer Institute, Dublin.

Objectives
To explore the molecular mechanisms underlying severe aqueous-deficient dry eye disease (ADDED) secondary to primary Sjögren's disease and chronic ocular graft-versus-host disease (GvHD), focusing on conjunctival epithelial cell (CEC) microRNA expression in disease and response to therapy.

Methods
Patients with severe ADDED secondary to primary Sjögren's or chronic ocular GvHD and matched healthy controls were enrolled (n=8). Patients received ciclosporin A (CsA) 0.1% cationic emulsion (CE) daily for six months, with supplementary treatments as needed. Baseline and follow-up assessments (one, three, and six months) included visual acuity, Schirmer's I test, tear break-up time (TBUT), ocular surface staining (OSS), and Ocular Surface Disease Index (OSDI). CECs underwent microRNA profiling via Affymetrix microarrays, and tear cytokines were analysed using 10-plex ELISA. MicroRNA analysis utilized R-based tools and pathway enrichment analysis.

Results
CsA 0.1% CE significantly improved clinical and patient reported outcome measures. Tear cytokine concentrations demonstrated downward trends over the treatment period. Three upregulated microRNA, miR-4484, miR-6126 and miR-7107-5p were identified and linked to immune and fibrotic pathways via TGF-β/SMAD2 and CDH11. Despite clinical improvements, microRNA elevation persisted, indicating limited molecular response to treatment.

Conclusions
CsA 0.1% CE led to an improvement in objective and subjective clinical parameters, however, minimally impacted epigenetic markers. The persistent dysregulation suggests that targeting molecular mediators, such as the TGF-β/SMAD2 pathway or CDH11, are required for comprehensive disease management. These upregulated microRNA offer novel insights into the pathogenesis of ADDED and identify promising avenues for future research and therapeutic innovation.

Functional Annotation of Glaucoma Genome Wide Association Studies (GWAS) Loci Implicates the Involvement of Cell Cycle and Proliferation Related Genes in Disease Pathogenesis.

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[2] **Department of Ophthalmology, Mater Misericordiae University Hospital, Dublin.**

Objectives
To evaluate the involvement of cell cycle, cell division, proliferation, and apoptosis associated genes within identified primary open angle glaucoma GWAS loci, and to compare these findings with transcriptional changes in glaucomatous fibroblasts from the lamina cribosa.

Methods
127 primary open angle glaucoma associated single nucleotide polymorphisms (SNPs) were identified from a large multi-ancestry genome wide association study by Gharakhani et al., incorporating 34,179 cases and 349,321 controls (1). SNPs were mapped to genes using Ensembl. Functional annotation was performed using Gene Ontology and UniProt to identify genes involved in cell cycle, cell division, proliferation, and apoptosis. These genes were then compared with differentially expressed genes from a single-cell RNA sequencing dataset of primary open angle glaucoma fibroblasts isolated from the lamina cribrosa.

Results
Of 127 SNPs identified from the GWAS, 79 were mapped to genes. Of these, 26 (33%) demonstrated functional annotation related to cell cycle, cell division, proliferation, or apoptosis. RNA sequencing data from primary open angle glaucoma fibroblasts from the lamina cribrosa demonstrated a functional overlap with 8 out of the 26 genes of interest, although direct overlap with GWAS-mapped genes was limited.

Conclusions
Primary open angle glaucoma genetic loci include a significant number of genes involved in cell cycle, cell division, proliferation, or apoptosis related processes. Corresponding transcriptional changes in glaucomatous fibroblasts from the lamina cribrosa also support the involvement of related biological mechanisms. This indicates that these processes may play an important role in the pathogenesis of primary open angle glaucoma.
[1] Gharahkhani, P., Jorgenson, E., Hysi, P. et al. Genome-wide meta-analysis identifies 127 open-angle glaucoma loci with consistent effect across ancestries. Nat Commun 12, 1258 (2021). https://doi.org/10.1038/s41467-020-20851-4

A Reflexive Thematic Analysis of Examiner Feedback and Decision-Making in the Ophthalmology Objective Structured Examinations (OSEs)

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Objectives
High-stakes exit examinations are critical in determining readiness for independent clinical practice. In small-cohort subspecialty assessments, conventional psychometric approaches to standard setting are often limited, resulting in greater reliance on expert examiner judgement. However, the processes underpinning examiner decision-making remain poorly characterised. This study aimed to evaluate how examiners formulate and justify judgements within a high-stakes ophthalmology exit examination, and to obtain feedback to inform ongoing development of the examination curriculum and materials.

Methods
Consultant Ophthalmologists with prior experience as examiners in the Higher Medical Ophthalmology Structured Oral Examinations (SOEs) were recruited. Ethical approval was obtained from RCSI and the University of Cambridge (REC202507017, PRE.2025.042). Following an initial pilot interview, five additional examiners from the three core subspecialities of paediatrics, glaucoma and medical retina participated in semi-structured interviews (SSIs). Data were analysed using reflexive thematic analysis in accordance with Braun and Clarke's six-phase methodology, supported by NVivo 15. Participant Information Leaflets were provided in advance, with written consent obtained prior to interview.

Results
Four key themes of how examiners formulate and justify judgements were identified: (1) For each scenario, detailed SOE pre-briefings established standards through shared examiner judgements informed by defined criteria; (2) Patient safety functioned as a non-negotiable threshold overriding other considerations; (3) Pass–fail decisions are based on holistic assessment of clinical reasoning under conditions of uncertainty; and (4) Assessment validity depended on alignment with real-world clinical practice. These factors interacted dynamically in examiner decision-making.

Examiners' feedback reported satisfaction with the examination's content, standard, and format. They also underscored the critical role of pre-SOE briefings in maintaining explicit, safety-oriented criteria and facilitating the ongoing standardisation of new scenarios. The curriculum was considered comprehensively aligned to real-world practice, with the use of realistic scenarios and representative visual materials. Examiners recommended the inclusion of External Examiners to strengthen the ongoing commitment to both standard setting and content validity.

Conclusions
This study demonstrates that SOE assessments are driven by collective examiner judgement informed by defined criteria with consideration of clinical consequences rather than psychometric measures alone, thereby challenging purely quantitative models of assessment. This format allows the targeted evaluation of higher-order analysis and synthesis, both central to senior clinical decision-making, and therefore suitably appropriate for an exit-level assessment. As the first formal evaluation of the SOE, this study provides an initial foundation for its ongoing development and may contribute to its progression towards formal recognition and accreditation.

Development of a Scaled-Up GelMA-based 3D Lamina Cribrosa Model Using Digital Light Processing Bioprinting

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#Basem Fouda and Adrián M. Alambiaga-Caravaca are joint first authors and contributed equally to this paper

Objectives
There is a lack of readily available, structurally accurate and mechanically tunable in vitro 3D lamina cribrosa (LC) cell culture models. Therefore, the aim of this paper is to develop a scaled-up GelMA-based 3D printed model of the LC using digital light processing (DLP) bioprinting.

Methods
Inputting cross-sectional images of the human LC, DLP with the BIONOVA X 3D Printer was used to manufacture 3.6x scaled-up 3D culture scaffolds from Porcine GelMA (12%) and a mixture of fish GelMA (12%) + Collagen (0.5%). Partial-thickness scaffolds were produced for visualisation. Mechanical testing was performed on the full-thickness constructs, and preliminary biocompatibility demonstrated using rabbit conjunctival fibroblasts on Porcine GelMA scaffolds.

Results
The 3D printed constructs appear structurally similar to the computer model on gross examination and under light microscopy. Fish GelMA (12%) + Collagen (0.5%) constructs had higher average stiffness and compressive modulus compared to Porcine GelMA (12%) constructs (0.49 vs 0.09 N/mm; 12.95 vs 1.98 kPa). After 48 hours of cell culture, significant differences in cell viability were noted on live/dead staining between two donors (82.3% live vs 15.2% live). DAPI and Phalloidin staining revealed cell nuclei predominantly on the scaffold upper surface with cytoskeletal extension towards the scaffold interior.

Conclusions
Our work represents the first 3D cell culture model of the LC created with DLP 3D Bioprinting, offering a fast and scalable method of modelling the LC cells in vitro. Availability of an in vitro 3D LC cell culture model can provide better understanding of glaucoma pathophysiology and facilitate more accurate drug development compared to 2D culture.

Investigating the Expression and Role of Hic-5 (TGFB1I1) in Human Glaucomatous Lamina Cribrosa Cells.

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University College Dublin, Mater Misericordiae University Hospital, Dublin.

Objectives
Glaucoma is an optic neuropathy characterised by damage to the optic nerve head resulting in a loss of retinal ganglion cells. The damage is associated with increased fibrosis and extracellular matrix (ECM) remodelling at the lamina cribrosa. This fibrosis and ECM remodelling involves various profibrotic pathways, genes and proteins which are differentially expressed in glaucoma.
Hic-5 is a focal adhesion protein in the paxillin family that allows for the interaction of profibrotic agents such as focal adhesion kinase and vinculin. It is involved in scar formation and fibrosis through its activity on myofibroblasts, and its inhibition has been shown to reduce alpha-SMA and TGF-beta.

Our study aims to show the expression levels of Hic-5 in glaucomatous lamina cribrosa (GLC) cells compared with normal lamina cribrosa (NLC) cells. Our hypothesis is that Hic-5 will be over expressed in correlation with the increased fibrosis seen in glaucoma.

Methods
Primary human normal and glaucomatous lamina cribrosa cells were isolated and cultured. RT-qPCR was performed on the Hic-5 gene. RT-qPCR was analysed using GraphPad Prism and paired Student T-tests.

Results
There is a significant ($p<0.05$, n=3 biological replicates) increase in Hic-5 (0.573 ± 0.067 vs 0.843 ± 0.116) gene transcription level in GLC cells compared to NLC (control) cells. Relative change in gene transcription is normalised to internal ribosomal 18S gene.

Conclusions
The overexpression of Hic-5 in GLC cells highlights its involvement in the fibrotic changes at the lamina cribrosa in glaucoma. The dysregulated gene and its activity may represent a target for future therapies.

Stickler Syndrome in Ireland: Cohort Insights Driving a National Care Pathway

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[1] **Mater Misericordiae University Hospital, Dublin.**
[2] **Temple Street Children's Hospital, Dublin.**

Objectives
To characterise a cohort of patients with Stickler syndrome (SS) in Ireland.
To discuss the multidisciplinary management of SS and outline a care pathway.
To estimate the incidence of SS in Ireland and the under-diagnosis of cases.
To determine the impact of a clear pathway (diagnosis, prophylaxis and multidisciplinary care) with a view to repatriating this service to Ireland.

Methods
The literature was analysed to determine the prevalence of SS and this was calculated for the Irish population. A single-centre retrospective review of the Mater and CHI (Temple Street) SS database was undertaken to identify patients clinically and genetically diagnosed with SS. Charts were reviewed for relevant demographic and clinical data including VA, refractive error, axial length, vitreous phenotype, history of retinal detachment or cryo/laser prophylaxis, cleft palate, hearing loss. Rate of retinal detachment in eyes treated with cryo-prophylaxis vs non-cryo-prophylaxis eyes was calculated.

Results
40 cases of genetically confirmed Stickler syndrome across 15 pedigrees were identified, with 11 pathogenic variants in COL2A1 (type 1 SS), and 4 pathogenic variants in COL11A1 (type 2 SS). 20 cases were female, with a median age of 28 (range 3 – 67) years. 11 patients had never suffered a retinal detachment in either eye, with 7 of these having received cryo or laser prophylaxis. 15 patients had attended the SS Highly Specialised Service at Cambridge, UK and received cryo-prophylaxis there, only 2 of whom developed a retinal detachment following prophylaxis. 25 patients were found to have non-ocular manifestations (including cleft palate, hearing loss, recurrent otitis media, and sleep apnoea). In 20 cases, a rheumatologic complaint such as arthritis, hypermobility, or joint subluxations was recorded. These 40 patients represent 10% (40/400) of the predicted Irish SS population. Rhegmatogenous retinal detachment occurred in 13% (2/15, 3 eyes) of patients receiving cryo-prophylaxis and 48% (12/25) of patients who did not.

Conclusions
Stickler syndrome is a rare (but preventable) cause of retinal detachment for which a highly effective form of prophylaxis is available (reduces risk from 60% to ~10%). A multidisciplinary approach is essential given that non-ocular manifestations can be auditory, craniofacial, or rheumatologic in nature. We estimate a marked underdiagnosis of cases in Ireland leading to delayed access to prophylaxis. A screening and national care pathway has yet to be established for these patients but the feasibility of this is encouraged by the success and guidance of the Highly Specialised Service in the UK along with collaborative engagement with audiology and rheumatology services.

Carer Experience using Visual Social Stories with Autistic Patients at RVEEH

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Royal Victoria Eye & Ear Hospital, Dublin.

Objectives
Autistic patients face disproportionate barriers in specialist hospital settings due to unpredictable sensory environments and procedural demands. This QI project aimed to reduce anticipatory anxiety, unsuccessful/incomplete examination, and provide caregivers with a structured preparatory tool for attending ophthalmology appointments at RVEEH. This follows from a previous cross-sectional survey of staff caring for autistic patients, which identified a lack of available supports and identified a number of potential aids that could be helpful.

Methods
Using the Plan-Do-Study-Act (PDSA) framework, we developed department-specific Social Stories™ aligned with Carol Gray's evidence-based criteria. Key design principles included:

Literal visual accuracy: Real photographs of RVEEH clinical spaces, equipment, and staff to support autistic cognitive processing Predictable narrative structure: Six sequential "stops" using First/Then logic to prepare patients for transitions between waiting and consultation areas Pre-visit accessibility: Stories embedded in the digital pre-appointment pack and hosted on the RVEEH website for home preparation

Results
Feedback collected from clinical staff during the pilot phase highlighted consistent improvements in their ability to deliver equitable, accessible care to autistic patients:

- More effective clinical encounters: Staff reported that patients who had reviewed the Social Story prior to arrival were better prepared for the sensory demands of the visit, enabling procedures such as mydriatic eye drop administration and slit-lamp biomicroscopy to be completed where previously they had been deferred or unsuccessful.
- Reduced clinical burden: Staff described spending less time managing procedural distress during appointments, allowing for more focused and efficient use of consultation time.
- Greater confidence in supporting autistic patients: Clinical staff reported feeling better equipped to deliver neurodiversity-affirming care, noting that having a standardised preparatory tool reduced uncertainty around how to support this patient group effectively

Conclusions
Department-specific Social Stories represent a low-cost, scalable reasonable adjustment that meaningfully improves access to acute specialist care for autistic patients. This model is transferable across sensory-intensive clinical settings and supports national commitments to neurodiversity-affirming, inclusive healthcare.

Awareness of Sepsis Recognition and Early Management Amongst Ophthalmologists in Ireland

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[3] **Department of Ophthalmology, University Hospital Limerick.**
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[5] **Department of Ophthalmology, University Hospital Sligo.**
[6] **Department of Ophthalmology, University Hospital Waterford.**

Objectives
Sepsis is a time critical medical emergency arising from dysregulation of the host's response to an infectious process, which can lead to end-stage organ dysfunction and even death. Sepsis is most commonly encountered in acute medical and surgical specialties. However, doctors working in subspecialities such as ophthalmology may also encounter sepsis, particularly in the context of orbital cellulitis, peri ocular necrotising fasciitis, post operative infections or in at-risk patients presenting to eye services. This study aimed to assess the baseline knowledge of sepsis recognition and management amongst ophthalmologists across multiple centers in Ireland and to evaluate the impact and effectiveness of targeted educational intervention.

Methods
An anonymous questionnaire was carried out across five Ophthalmology departments on ophthalmologists of all grades, evaluating their knowledge of the recognition and management of sepsis. Questions assessed their recall of the sepsis screening indicators, red and amber flags, systemic inflammatory response syndrome (SIRS) criteria, and the Sepsis Six (S6) treatment bundle for initial management of suspected sepsis. Following cycle one, a structured teaching session on sepsis recognition and management was delivered in one center. The same questionnaire was repeated in cycle two 4 weeks after the teaching session and the results were analysed and compared using descriptive statistics.

Results
42 ophthalmology doctors across all participating units completed the questionnaire in cycle 1. 50% were at basic training level, 28.6% were at registrar level and the remaining 21.4% were consultants. The mean number of SIRS criteria identified was 3.82 out of a potential 20. 23.8% were unable to identify any of the criteria. The mean score for S6 identification was 3.6 out of a potential 6, with 28.6% of respondents unable to identify any of the 6. Following a targeted educational intervention at a single hospital site, 8 doctors completed cycle 2. At this site, mean SIRS identification increased from 1.45 to 6.1, while mean S6 identification increased from 1.63 to 4.6. Identification of at least four of the S6 components rose from 27.3% to 75%, and all six from 9% to 37.5%. Self-reported confidence in recognising and managing sepsis showed minimal change between audit cycles, despite improvements in objective knowledge measures.

Conclusions
This study demonstrates variable and suboptimal baseline sepsis knowledge amongst
Ophthalmologists of all grades and suggests targeted teaching can improve objective knowledge. The lack of parallel increase in confidence highlights the complexity of sepsis recognition and further supports the need for regular, specialty-relevant sepsis education.

Impact of Reversible Visual Impairment on Cognition and Blood-Brain Barrier Integrity

Cahill M[1], Garcia-Gallardo A[2,3], McGlinchey A[3], Robb K[1,4], Campbell M[3], Hutchinson S[2,4]
[1] **Progressive Vision Research, Dublin.**
[2] **St James's Hospital, Dublin.**
[3] **Smurfit Institute of Genetics, Trinity College Dublin.**
[4] **School of Medicine, Trinity College Dublin.**

Objectives
Cataract is the leading cause of reversible visual impairment worldwide and is highly prevalent in ageing populations. Increasing evidence suggests that sensory impairment may contribute to cognitive decline through increased perceptual effort and reduced quality of sensory input. Cataract surgery therefore provides a unique clinical model to investigate whether restoration of visual input may influence cognitive performance and brain physiology in older adults.

Methods
Twenty adults undergoing bilateral cataract surgery were prospectively enrolled, with eighteen completing the full longitudinal protocol. Participants were assessed at baseline (T0), three months (T1), and nine months (T2) following surgery. Ophthalmic assessment included best-corrected visual acuity (logMAR) and cataract grading using the Lens Opacities Classification System II. Cognitive performance was evaluated using the Repeatable Battery for the Assessment of Neuropsychological Status (RBANS-U). Neuroimaging included dynamic contrast-enhanced MRI to assess blood–brain barrier (BBB) permeability and structural MRI to evaluate brain volumes and cortical thickness. Plasma proteomic profiling was performed using label-free liquid chromatography–mass spectrometry.

Results
Cataract surgery resulted in significant and sustained improvement in visual acuity across the cohort. Cognitive performance improved over time, with RBANS-U Total percentile scores increasing from a median of 24 at baseline to 39 at three months and 46 at nine months. Improvements were most pronounced in memory and language domains. Global BBB measures remained largely stable, with a modest reduction in vascular permeability over time. Structural brain volumes and cortical thickness remained stable across timepoints, while brain-age modelling suggested a small reduction in the rate of biological brain ageing. Proteomic analysis demonstrated subtle changes in proteins involved in cellular regulation and metabolic processes without evidence of inflammatory activation.

Conclusions
Restoration of visual input following cataract surgery was associated with improvements in cognitive performance and stabilisation of several markers of brain physiology in older adults. These findings suggest that correction of visual impairment may support cognitive resilience and aspects of healthy brain ageing. While exploratory and limited by sample size, the convergence of visual, cognitive, imaging, and proteomic findings highlights the potential broader neurological relevance of timely cataract detection and management.

Friday AM 10.30am to 11am

Real-World Outcomes from the ITrack Global Data Registry of Ab-Interno Canaloplasty Combined with Cataract Surgery

Barton K, Lubeck D, Mercieca K, Kerrn N; Shoham-Hazon N, Kamat S.
Moorfields Eye Hospital, London.

Objectives
To evaluate real-world outcomes of ab-interno canaloplasty combined with phacoemulsification in open-angle glaucoma.

Methods
The iTrack Global Data Registry (iTGDR) is a prospective, multicenter, real-world study conducted in the USA, Canada, Europe, Asia, and Australia. This analysis included eyes with primary or secondary open-angle glaucoma that underwent ab-interno canaloplasty using the iTrack or iTrack Advance in combination with phacoemulsification and had at least 12 months of follow-up. Outcomes were assessed at baseline and at the last available follow-up. Success was defined using American Academy of Ophthalmology criteria.

Results
This study included 334 eyes of 250 patients up to November 2025. Mean baseline IOP and medication use were 17.0±5.1 mmHg and 2.05±1.1, respectively, and were significantly reduced to 14.1±3.8 mmHg and 1.2±1.4 medications ($p<0.001$) at the last available follow up (mean: 20.2±7.8 months). Medication-free eyes increased from 6.6% (n=22) at baseline to 42.5% (n=142) postoperatively. Success was achieved in 62.0% of eyes (n=207) at postop. Intraoperative complications occurred in 0.3% of cases (n=1), postoperative complications in 2.7% of cases (n=9) and 4.2% of eyes (n=14) required additional glaucoma surgery

Conclusions
Canaloplasty performed via an ab-interno approach reduced IOP and medications in patients with primary and secondary open-angle glaucoma. The iTGDR provides valuable real-world evidence on the clinical effectiveness of canaloplasty, supporting evidence-based decision-making in glaucoma treatment.

Barriers and Enablers to Medication Adherence and Compliance in Glaucoma: A Scoping Review Protocol

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[2] Department of Ophthalmology, Mater Misericordiae University Hospital, Dublin.
[3] Department of Ophthalmology, Royal Victoria Eye and Ear Hospital, Dublin.

Objectives
Glaucoma is the leading cause of irreversible blindness worldwide with increased intraocular pressure (IOP) being the primary modifiable risk factor. It is often referred to as the "silent thief of sight" for its progressive, mostly asymptomatic disease course until advanced stages. First line treatment is to lower IOP by topical medication. However, adherence with topical medication is problematic, with approximately 50% of patients taking their glaucoma medication one year post diagnosis. It is essential that patients commencing treatment are adherent since suboptimal adherence is reportedly related to poor clinical, social and economic outcomes. The aim of this review is to better understand the influential factors (barriers and enablers) to adherence and the attempted interventions to improve adherence rates.

Methods
This scoping review will include searches in EMBASE, Medline, Psych Info, CINAHL and Web of Science electronic databases. Primary research studies and peer-reviewed grey literature will be eligible for inclusion. Studies not fully available in English will be excluded. Titles and abstracts will be screened for inclusion and full text screening of articles will be carried out independently by two reviewers. A data extraction framework will guide the literature screening. A qualitative data analysis will be carried out to assess relevant literature and data will be presented in a narrative synthesis format. Quality appraisal of the included studies will not be performed.

Results
A scoping review protocol has been developed and registered on Open Science Framework. This is available at https://osf.io/6bd8a/overview. This scoping review protocol has been submitted to the Health Research Board Open Research Journal. The preliminary results of the scoping review will be presented. This will include the main topics and themes related to barriers and enablers to glaucoma medication adherence as identified from the literature. Identified interventions that have been successful in improving glaucoma medication compliance will also be presented.

Conclusions
These findings will advance our understanding of barriers and enablers to medication adherence in glaucoma. Findings will be relevant to patients, clinicians and stakeholders in the glaucoma care pathway. Evidence synthesised will also help inform the development of an educational tool to improve adherence as part of the overall project.

Patient and Public Involvement in Autoimmune and Inflammatory Ocular Disease Research: A Scoping Review of Current Practice and Clinical Relevance

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[1] **Sjögren's Ireland, Dublin.**
[2] **School of Pharmacy and Biomolecular Sciences, RCSI, University of Medicine and Health Sciences, Dublin.**
[3] **Royal Victoria Eye & Ear Hospital, Dublin.**
[4] **SIM Centre for Simulation Education and Research, RCSI, Dublin.**

Objectives
To map how patient and public involvement (PPI) has been implemented in research relating to autoimmune and inflammatory ocular diseases, and to identify its potential impact on clinically relevant research priorities, outcomes and study design.

Methods
A scoping review was conducted in accordance with Joanna Briggs Institute methodology and reported using PRISMA-ScR guidance. MEDLINE, Embase and CINAHL were searched for studies describing PPI in autoimmune or inflammatory ocular disease research. Two reviewers independently screened studies against predefined criteria. Data were extracted and synthesised narratively, focusing on the stage, type and impact of PPI.

Results
Six studies (2013–2024) were included, spanning conditions such as Sjögren's disease, dry eye disease, thyroid eye disease and uveitis. PPI was most commonly implemented at a consultation level, particularly in priority-setting and patient experience studies. Fewer studies demonstrated collaborative or co-produced approaches across the research lifecycle.

Across studies, patients consistently identified clinically relevant priorities including delayed diagnosis, limited disease awareness, and significant impact on quality of life. Importantly, patient-reported concerns often differed from traditional clinical endpoints, highlighting gaps in outcome selection. PPI contributed to the development of patient-centred research questions, refinement of clinical trial design, and identification of meaningful outcome measures.

Conclusions
PPI in autoimmune and inflammatory ocular disease research remains limited but demonstrates clear potential to improve the clinical relevance and translational impact of research. Greater integration of patient perspectives, particularly in trial design and outcome selection, may help address persistent challenges such as delayed diagnosis and unmet patient needs. Strengthening collaboration between ophthalmologists, researchers and patient organisations will be critical to advancing patient-centred research in this field.

Demographics and Immunosuppressant Usage in 913 Adult Uveitis Patients from a Single Centre in the United Kingdom

El Diwany H[1], O'Leary E[1], El Diwany S[1], Hassan S[1], Hindle E[1], Montero A[1], Fotuhi M[1], Viswanathan T[1], Ma J[2], Gurbaxani A , Rees A[1], Chu C[1], Okhravi N[1], Addison P[1], Yeung I[1].

[1] **Moorfields Eye Hospital NHS Foundation Trust, London.**

[2] **West Hertfordshire Teaching Hospitals NHS Foundation Trust, Watford, United Kingdom.**

Objectives

To describe the pathologies and demographics of adult non-infectious uveitis (NIU) patients requiring disease modifying anti rheumatic drugs (DMARDs) by the Uveitis Service, Moorfields Eye Hospital; a tertiary ophthalmic centre in the United Kingdom (UK). Immunosuppressive drugs include adalimumab (ADA), azathioprine (AZA), ciclosporin (CIC), infliximab (IFX) mycophenolate (MMF), mycophenolic acid (MPA), methotrexate (MTX), rituximab (RTX), tacrolimus (TAC) and tocilizumab (TOC).

Methods

A service evaluation was conducted of adult NIU patients on immunosuppression in September 2025. These patients were identified from prescribing data from the Electronic Patient Record (EPR) system. A systematic review of patient records was conducted to pull data about diagnoses, demographic information (including age, ethnicity and gender) and current immunosuppressive medications.

Results

913 patients were identified, 580 of which were female (63.5%) and 333 of which were male (36.5%). The ages of patients ranged from 16 to 85 (Mdn = 47, M = 46, SD = 17.1).

The most common diagnosis identified was birdshot chorioretinopathy (n=163, 17.9%). The other most common diagnoses included anterior uveitis (n=103, 11.3%), intermediate uveitis (n=101, 11.1%), panuveitis (n=89, 9.7%), scleritis (n=86, 9.4%), sarcoidosis (n=84, 9.2%), Vogt-Koyanagi-Harada (n=49, 5.4%), anterior uveitis in juvenile idiopathic arthritis (n=48, 5.3%), punctuate inner choroidopathy (n=44, 4.8%), retinal vasculitis (n=36, 3.9%), multifocal choroiditis (n=33, 3.6%) and Behcet's disease (n=20, 2.2%).

The most commonly prescribed immunosuppressive drug was MMF (n=518, 56.7%). ADA was the second most commonly prescribed drug (n=403, 44.1%). Other commonly prescribed drugs included MTX (n=164, 18.0%), AZA (n=90, 9.9%), IFX (n=45, 4.9%) and TAC (n=45, 4.9%). 20 patients were on other drugs (n=20, 2.2%) including CIC, MPA, RTX and TOC.

Conclusions

NIU demonstrates substantial geographic variation in epidemiology and case mix. This cohort likely represents one of the largest adult NIU cohorts managed at a single tertiary uveitis centre in the United Kingdom. We characterise the spectrum of NIU and contemporary treatment patterns within our population, providing a real-world insight into adult NIU care in the UK. We hope these findings may help other uveitis specialists working with a similar patient population to ours, in the diagnosis & management of their NIU patients.

Assessing Visual Acuity Reporting Quality in Ophthalmic RCTs Over Time

Saaish A, Lim Y.

Queen's University Belfast.

Objectives

Visual acuity (VA) is the most widely reported primary outcome in ophthalmic clinical trials (1). However, inconsistent measurement and reporting practices limit comparability and may introduce bias. This study aimed to evaluate the quality and consistency of VA reporting in randomized controlled trials (RCTs).

Methods

A cross-sectional review of RCTs published in 2010 and 2024 assessing ophthalmic interventions was conducted. Trials were evaluated against 10 predefined criteria relating to VA measurement and reporting, inspired by ISO 8596 standards. The primary outcome was the proportion of trials reporting each criterion. Secondary outcomes examined reporting trends by journal and criterion. Based on these findings, a minimum VA reporting checklist will be proposed.

Results
28 RCTs across 4 journals met the inclusion criteria, with 14 from each year. The mean reporting score was 4.36, with minimal change between 2010 (4.46) and 2024 (4.28). Reporting of VA units showed the greatest improvement (+83.3%), whereas reporting of how the testing eye was selected decreased the most (−30.7%). Operator protocol and starting criteria were least reported, while documentation of whether acuity was tested with refractive correction was most common. Journal-level analysis showed variability, with the British Journal of Ophthalmology achieving the highest mean score in 2024 (6.0) and the American Journal of Ophthalmology the lowest (3.0).

Conclusions
Despite modest improvements in scores, the overall reporting quality remained suboptimal between 2010 and 2024. These findings support development of a standardized reporting framework of visual acuity to improve methodological transparency and minimize bias in evidence synthesis.

Can we Reliably Differentiate Orbital Lymphoma from Inflammatory Disease Before Biopsy?

Chow KM, Kalantzis G, Jyothi S, El-Hindy N, Chang B, Guevara G.
Leeds Teaching Hospitals.

Objectives
To evaluate the diagnostic accuracy of clinical and radiological assessment in differentiating orbital lymphoma from inflammatory orbital disease prior to biopsy.

Methods
A retrospective cohort study was conducted of patients undergoing orbital biopsy at Leeds Teaching Hospitals from 2014 to 2024. Cases with histopathological diagnoses of orbital lymphoma or inflammatory orbital disease were included. Demographic data, pre-biopsy clinical diagnosis, and radiological impressions were analysed. Diagnostic performance was assessed using sensitivity and specificity.

Results
A total of 89 cases were included, comprising 36 orbital lymphomas and 53 inflammatory orbital lesions. Patients with lymphoma were statistically older than those with inflammatory disease (median age 74 vs 48 years). Sub-analysis revealed five patients with IgG4-related orbital disease, four patients with idiopathic orbital inflammatory disease (IOID), five patients with dacryoadenitis, 10 patients with sarcoidosis, one patient with sialadenitis, one patient with amyloidosis, and 27 patients with non-specific inflammation.

Clinical suspicion of lymphoma was present in 61.1% of lymphoma cases, while radiological suspicion was present in 50.0%, corresponding to sensitivities of 61.1% and 50.0%, respectively. Specificity for excluding lymphoma was 88.7% for both modalities. Notably, 38.9% of lymphomas were not clinically suspected, and 50.0% were not identified radiologically prior to biopsy.

Conversely, lymphoma was incorrectly suspected in 11.3% of inflammatory cases. When inflammatory disease was considered the target condition, sensitivity was high (88.7%), but specificity was lower (61.1% clinically; 50.0% radiologically).

Four patients (11.1%) from the lymphoma group developed post-biopsy complications, including lagophthalmos, superolateral gaze restriction, supraorbital nerve hypoesthesia, and persistent optic disc swelling following biopsy. In comparison, two patients (3.8%) in the inflammatory group experienced complications, comprising diplopia and a significant post-operative orbital haematoma.

Conclusions
Pre-biopsy clinical and radiological assessment demonstrates limited sensitivity for detecting orbital lymphoma, with substantial diagnostic overlap between lymphoma and inflammatory orbital disease. While inflammatory disease is more readily identified, lymphoma, the more critical diagnosis is frequently under-recognised. Histopathological confirmation remains essential, and early biopsy should be strongly considered in atypical or non-resolving orbital lesions.

POSTER SESSION

Importance of Detecting Late Onset Stargardt's Disease

Conway M[1], Moran B[1], Stephenson KAJ[2], Keegan D[1,2].

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[2] Dept of Ophthalmology, Children's Health Ireland (Temple Street), Dublin

Objectives
To present a case of late onset Stargardt's disease (STGD) in a 72year old patient referred for management of geographic atrophy (GA) secondary to age related macular degeneration (AMD) for consideration of an intraocular telescope.

To highlight the need for accurate phenotyping in an era where more options are available for management of GA both pharmaceutical and surgical.

Methods
A detailed history was taken, multimodal retinal images (colour photos CP, auto- fluorescence AF, OCT imaging including high resolution magnified images of areas of interest) were acquired.
Next generation panel base sequence (NGS) Testing was performed.

Results
The patient was diagnosed with extensive macular atrophy, classic flecks were noted on CF and AF. OCT imaging clearly highlighted the position of the flecks within the Retina rather than subretinal thus distinguishing it from AMD. Genomic Testing confirmed one pathogenic mutation in the ABCA4 gene; c.2894A>G, p. (Asn965Ser), and one risk factor mutation (c.5603A>T, p.(Asn1868lle).

Conclusion
The case is presented to highlight the dangers of assuming AMD as the cause of GA. Studies of interocular telescopes show a clear contraindication in STGD, . Additionally, the use of complement modifiers in GA are not indicated in STGD. Detailed phenotyping with/without genotyping is vital before considering these interventions.

Glaucoma Surgical Innovations: What is the Evidence on their Long-term Effectiveness and Safety? A Systematic Review

McCullough P[1], Ashok S[1], Vitto C, Luchetti L[2], Mengozzi A[2], Azuara-Blanco A[1]

[1] Centre of Public Health, Institute of Clinical Science, Queen's University Belfast
[2] Eye Clinic, Neuromuscular and Sense Organs Department, Careggi University Hospital, Florence, Italy

Objectives
To synthesise evidence of long-term effectiveness and safety of glaucoma surgical innovations, introduced in the last 20 years (after 2004) using the IDEAL Stage 4 framework.

Methods
A literature search was conducted using MEDLINE, EMBASE, and CENTRAL. Eligible studies reported outcomes of novel glaucoma surgeries with ≥2 years' follow-up and ≥100 participants. Study design included randomised controlled trials, observational studies and case series. Data extraction followed the IDEAL Stage 4 checklist to check reporting standards. Risk of bias was assessed using Cochrane RoB2, Newcastle-Ottawa Scale, and JBI case series tools.

Results
The search strategy retrieved 1758 matches, with 27 studies meeting inclusion criteria. Innovations included iStent, Xen-45 Gel stent, Hydrus microstent, Endoscopic photocoagulation, Trabectome and Kahook dual blade. All studies described study design, and the majority of studies reported primary/secondary outcomes, however only four studies explained how missing data was addressed. All studies reported positive results in terms of pre-specified outcome measures. Postoperative complications were generally infrequent but varied in reporting detail. Only five studies reported outcomes for >=5 years. Risk of bias assessments found that one observational study was poor quality, 14 case-series had unclear elements to them and four randomised controlled trials had risk of bias in a domain.

Conclusion
Glaucoma surgical innovations appear effective and safe over the medium term. However, variability in study quality and methodology limits direct comparisons and long-term risk assessment. Enhanced adherence to IDEAL reporting standards and the use of prospective registries are essential to optimise future evaluations of surgical innovation in glaucoma.

A Simulation-Based Mastery Learning Model for Lateral Canthotomy and Cantholysis

Haaris Shiwani, Hosam Aglan, Abigail Hopkins, Namita Mathews, Miguel Kurc, Mohammed Saleki
Manchester Royal Eye Hospital, Manchester.

Objectives
Orbital compartment syndrome (OCS) is a time critical ophthalmic emergency where there's significant risk of visual loss if decompression is delayed. Prompt lateral canthotomy and cantholysis (LC/C) is of paramount importance. However, practical opportunities to learn this procedure can be limited in early training years and first exposure can often be in high-risk and high-pressure situations. We evaluated a didactic and practical simulation-based mastery learning (SBML) workshop designed to improve ophthalmology trainees' capabilities and competence in OCS management and LC/C.

Methods
This was a single-centre, pre-post evaluation of a simulation-based mastery learning (SBML) workshop run for UK ophthalmology specialty trainees at ST1–ST4 level. Before and immediately after the workshop, participants rated their own confidence across nine capability domains using a 5-point Likert scale. We also assessed technical performance objectively using an OSATS-style checklist (11 items, 0–2 each; maximum 22) and a global rating scale (four domains, 1–5 each; maximum 20). Mastery was defined as scoring ≥15 on the checklist, ≥15 on the global scale, and having no critical failures. Paired pre- and post-workshop Likert ratings were compared using Wilcoxon signed-rank tests.

Results
Fifteen trainees completed paired surveys (ST1 n=2, ST2 n=6, ST3 n=2, ST4 n=5). 53.3% had never performed lateral canthotomy and cantholysis in any setting (emergency, theatre, simulation). All nine self-efficacy domains showed statistically significant improvement immediately after the workshop (Wilcoxon $p \leq 0.007$). Fourteen trainees underwent objective assessment, of whom 13 (92.9%; 95% CI 68.5–98.7%) achieved mastery at first assessment. The median checklist score was 22 (range 7–22) and median global rating was 16.5 (range 8–20). One critical failure was recorded - failure to perform inferior cantholysis or identification of an incorrect structure - giving a critical fail rate of 7.1%.

Conclusion
A time-efficient SBML workshop led to meaningful, immediate gains in trainee-reported confidence and high rates of mastery on objective assessment. Incorporating an SBML-based approach to emergency LC/C training into the formal curriculum for junior trainees may help in bridging the gap between limited real-world exposure and the competence demands of a time-critical procedure.

QuantiFERON Testing for Uveitis: Indications and Appropriateness in a Tertiary Eye Service

Connolly L, Canning P, Murphy C
Royal Victoria Eye and Ear Hospital, Dublin.

Objectives
Ocular tuberculosis (TB) is a clinically heterogenous condition and poses diagnostic challenges. QuantiFERON (interferon-gamma release assay) detects immune sensitisation to tuberculosis but does not distinguish between active and latent infection. In the absence of supportive clinical features, a positive result may represent an incidental finding. Our objective was to evaluate the appropriateness of QuantiFERON testing in patients with uveitis in a tertiary eye service.

Methods
A set of criteria for appropriate testing was established prior to data collection. A retrospective review was then performed to assess indications for QuantiFERON-TB Gold Plus testing over a 6-month period. The criteria included testing prior to the commencement of immunosuppression, scleritis, intermediate uveitis, panuveitis, and posterior segment inflammation including choroidal nodules, choroiditis and retinal vasculitis.

Results
Over a 6-month period from January to June 2024 a total of 118 QuantiFERON tests were performed, with 86 patients included in the final analysis after exclusion of cases with missing data and non-uveitis indications (orbital inflammation and optic neuritis). Among the included cohort, 46 tests (53%) met the predefined indication criteria, while 40 (47%) did not. There were 6 positive results (7%). All positive results occurred in the predefined inclusion criteria group. Five of these patients subsequently commenced anti-TB treatment. No positive results were identified in patients with anterior uveitis (n=34), including chronic and recurrent cases, or episcleritis (n=3), in whom immunosuppressive therapy was not indicated.

Conclusion
QuantiFERON testing was frequently performed outside our predefined indication criteria, with no diagnostic yield in these cases. Targeted testing based on clinical criteria may improve diagnostic utility, reduce unnecessary healthcare costs and limit incidental findings that may complicate clinical decision-making.

Keratopathy in Single Large-scale Mitochondrial DNA Deletion Syndrome (SLSMDS): A Report of Two Cases and Review of Literature

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[3] **Lions Eye Institute, Perth, Western Australia**
[4] **Centre for Ophthalmology and Visual Science, The University of Western Australia, Perth, Western Australia**

Objectives
To present corneal features of two cases of single large-scale mitochondrial DNA deletion syndrome (SLSMDS) and to conduct a literature review on the key features of SLSMDS-associated keratopathy.

Methods
Two patients with SLSMDS presented photophobia and corneal changes between 2013 and 2025. Electronic medical records, clinical visual electrophysiology and ocular imaging were reviewed with patient consent. A retrospective case series and literature review of SLSMDS-associated keratopathy was conducted.

Results
The first case was a 22-year-old female presenting with reduced visual acuity, photophobia on a background of sensorineural hearing loss. She had bilateral ptosis, microcystic corneal oedema, choroidal neovascularization,and subretinal fluid. Full-field electrophysiology (ffERG) demonstrated mild cone-rod dysfunction. Genetic testing revealed a ~7.2 ±0.5 kb single large-scale deletion in the mitochondrial genome. Subretinal fluid resolved without anti-VEGF therapy. Corneal oedema and photophobia resolved after treatment with Coenzyme Q10. The second case was a 9-month-old girl who presented severe photophobia on a background of sideroblastic anemia and lactatemia. She had bilateral severe microcystic corneal oedema and mild macular pigmentary changes. ffERG under general anaesthesia showed cone-rod dystrophy. Her genetic testing demonstrated a 2.5 +/- 0.5 kb heteroplasmic deletion in the mitochondrial genome. Topical hypertonic saline treatment was unsuccessful, and surgical treatment was considered. Literature review showed frequent occurrence of corneal abnormalities and photophobia, ranging from subclinical endothelial changes on specular microscopy to clinically significant corneal oedema (Kaskebar et al., 2011; Ohkoshi et al., 1989; and Zarnowski et al., 2003).

Conclusion
Our cases illustrate the variable ocular phenotype in SLSMDS. The classical triad of bilateral ptosis, external ophthalmoplegia, and pigmentary retinopathy are not always present simultaneously. SLSMDS should be considered in young patients presenting with idiopathic microcystic corneal oedema even without the classical triad.

Orbital Compartment Syndrome with Retrograde Anterior Chamber Haemorrhage via a PAUL Glaucoma Implant Tube: A Novel Complication in Uveitic Glaucoma Surgery

Dr. Proxenos, C
The Mater Misericordiae University Hospital, Dublin

Objectives
To report a previously undescribed complication following PAUL Glaucoma Implant (PGI) insertion: a delayed supraorbital haematoma causing orbital compartment syndrome, with blood tracking retrograde through the glaucoma drainage tube into the anterior chamber, producing a secondary hyphema, in the context of complex uveitic glaucoma secondary to sequential intravitreal corticosteroid therapy.

Methods
A 34-year-old male nurse with a background of bilateral Eales disease, previously treated with panretinal photocoagulation in India, presented in late 2024 with idiopathic posterior uveitis, retinal vasculitis, and cystoid macular oedema (CMO) causing acute visual loss. Treatment was initiated with intravitreal triamcinolone acetonide, with good initial response and no ocular hypertension. He was subsequently transitioned to dexamethasone 700 mcg intravitreal implant (Ozurdex®) every three months, achieving sustained CMO reduction. Mild steroid-response ocular hypertension developed in the treated eye and was controlled with topical glaucoma therapy. Following recurrence of CMO at extended Ozurdex intervals, a fluocinolone acetonide 0.19 mg intravitreal implant (ILUVIEN®) was inserted. Post-implant hypotony secondary to a wound leak resolved spontaneously. Intraocular pressure (IOP) subsequently rose refractory to maximum topical therapy. Following temporisation with oral acetazolamide 250 mg twice daily, a PAUL Glaucoma Implant was inserted uneventfully. IOP on discharge was in the mid-teens and the patient was set to be reviewed at five days post op.

Results
Three days post-operatively, the patient presented as an emergency with acute painful chemotic eye, hand-movement visual acuity with a mid-dilated, poorly reactive pupil and a clinical orbital compartment syndrome with an IOP measured of 60 mmHg on Goldmann applanation tonometry. An emergency Lateral canthotomy and cantholysis reduced IOP to 40 mmHg. Intravenous acetazolamide 250 mg with topical dorzolamide/timolol and brimonidine further reduced IOP to 28 mmHg. CT scan, B-scan ultrasonography, and fundoscopy demonstrated a supraorbital haematoma with mass effect displacing the PGI plate, alongside a superior temporal subchoroidal haemorrhage. A novel finding was identified on slit-lamp examination: blood from the supraorbital haematoma was observed and recorded tracking retrograde through the PGI tube lumen into the anterior chamber, producing a 2.8 mm hyphema. On review the following morning, IOP was 29 mmHg on Goldmann applanation tonometry and retrograde blood flow had ceased. Oral acetazolamide 250 mg twice daily was commenced. By day 4, IOP had normalised to 20 mmHg and the hyphema remained stable at 2.8 mm with no blood in suspension. Acetazolamide was reduced to 250 mg nocte. Over subsequent visits, IOP stabilised, the hyphema resolved, the subchoroidal haemorrhages cleared, and visual acuity returned to baseline.

Conclusion
To our knowledge, this is the first reported case of an extraorbital haematoma driving blood retrograde through a glaucoma drainage device tube into the anterior chamber, producing a secondary hyphema in the setting of post-operative orbital compartment syndrome. While Cassottana et al. (J Glaucoma, 2022) previously described blood reflux into the anterior chamber via a PreserFlo MicroShunt during bleb needling, that case involved blood from the subconjunctival bleb space during a procedural intervention, representing a fundamentally different anatomical source, mechanism, and device. No equivalent case has been identified for the PAUL, Ahmed, Baerveldt, Molteno, or XEN devices across the published literature. This case highlights a novel haemorrhagic mechanism unique to the anatomical configuration of tube-based glaucoma drainage devices, underscores the value of CT imaging when unexpected hyphema and orbital signs coexist post-operatively, and illustrates the compounding surgical complexity in eyes combining long-term intravitreal corticosteroid implants with uveitic glaucoma.

Investigating the Association Between Impaired Lung Function and Glaucoma

De Paula D[1], Horgan N[2], Layden R[2], O'Brien C[3], Doran P[1], McCarthy C[1,4], Wallace D[1]

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[4] Department of Respiratory Medicine, St. Vincent's University Hospital, Dublin, Ireland

Objectives
Lung disease and glaucoma both are chronic, progressive, age-related diseases. They share many pathophysiological mechanisms and pathways, and their pathology is underpinned by fibrosis. Interestingly, a recent study demonstrated that impaired lung function is a potential biomarker for glaucoma risk. However, despite these emerging data, there are many limitations to the methodological approaches such as the self-reporting of (subtype) glaucoma and the chosen measurement of lung function. This study aims to investigate the association between impaired lung function and glaucoma risk through: (1) a systematic review and meta-analysis, and (2) a retrospective cross-sectional study.

Methods
A systematic review and meta-analysis will be conducted in accordance with PRISMA-P guidelines. Data will be collected using a standardized form to record key study details, methods, participant characteristics, and outcomes related to glaucoma, including diagnosis and subtypes. Following ethical approval, a retrospective cross-sectional study will be performed using the existing fibrotic lung database in St. Vincent's University Hospital. Glaucoma patients will be cross-referenced with the fibrotic lung disease database to identify individuals with both conditions. A study specific REDCap database will be established to host the demographic and clinical data of this cohort and facilitate the analysis of covariates. Calculation of an appropriate sample size and generation of a robust statistical analysis plan for this study will be implemented.

Results
The protocol for the systematic review and meta-analysis has been developed and is currently undergoing registration with PROSPERO. Data extraction frameworks, electronic case report forms, and a REDCap database have been developed in consultation with clinical experts and informed by large datasets such as UK Biobank.

Conclusion
This study will explore the potential association between impaired lung function and glaucoma contributing to understanding of the "lung–eye axis". Furthermore, findings may support biomarker discovery and inform targeted glaucoma screening.

Cyclosporine as a Steroid-Sparing Agent in Thyroid Eye Disease: A Retrospective Cohort Study

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Objectives
Systemic corticosteroids are first-line therapy for active thyroid eye disease (TED) but are often limited by toxicity, cumulative dose constraints, or incomplete response. This study evaluated the effectiveness, steroid-sparing potential, and tolerability of cyclosporine (CsA) in a cohort with steroid-dependent or refractory TED.

Methods
A retrospective review was performed of patients with TED treated with CsA at a tertiary oculoplastic centre. Baseline disease activity was defined by the Clinical Activity Score (CAS) at CsA initiation. Demographics, prior treatments, CsA exposure, changes in CAS, steroid requirements, and adverse events were analysed. Paired CAS comparisons were assessed using the Wilcoxon signed-rank test.

Results
Twenty-two patients were included (median age 51.5 years; 72.7% female); 40.9% had dysthyroid optic neuropathy. Median TED duration at CsA initiation was 12 months. Prior to CsA, 90.9% had received intravenous methylprednisolone (median cumulative dose 4.5 g), frequently limited by cumulative dose thresholds, toxicity, or inadequate response. CsA was used predominantly as monotherapy (77.3%).

Median baseline CAS was 3. At 3 months, median CAS reduced to 2 (median change −1; p = 0.0058), with 54.5% achieving inactive disease (CAS <3). At 6 months, 94.7% of patients with available data had inactive disease (p = 0.00011). Missing 6-month CAS data reflected early CsA cessation due to adverse effects or rapid disease control. Among patients receiving concomitant oral steroids, median prednisolone dose reduced from 20 mg/day at baseline to 4 mg/day at 6 months. CsA was discontinued most commonly due to disease inactivity (71.4%); hypertension was the main adverse effect.

Conclusions
Cyclosporine was associated with significant reduction in disease activity and steroid-sparing effects in patients with severe or steroid-dependent TED. These findings support CsA as an effective immunomodulatory option in selected patients.

Real-World Outcomes of Myopia Control Treatment in Children: A Single-Centre Study

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Objectives
The global prevalence of myopia has surged from 22.9% in 2000 to 34% in 2020 and is expected to reach 50% by 20501. Evidence-based interventions, including low-dose atropine, optical treatments, and lifestyle modifications, significantly slow myopia progression in children, with strong supporting evidence from landmark studies such as ATOM and LAMP2,3. However, real-world experience remains limited, with implementation further challenged by factors such as treatment adherence, cost, supply, variable response, and the need for ongoing monitoring. The aim of this study was to evaluate the effectiveness of atropine and adjunctive myopia control lenses in a real-world clinical cohort of myopic children.

Methods
A retrospective review of all patients receiving myopia control treatment was conducted in a single clinical practice over a 4-year period. Patients with syndromic myopia or those receiving atropine for amblyopia treatment were excluded. Patients were treated with atropine (0.01% or 0.05%) ± myopia control lenses where available. Additionally, Patients were instructed as to the environmental modifications known to retard myopia progression. Cycloplegic spherical equivalent refraction (SER) was measured at baseline and at 12-month intervals. Rates of myopia progression were compared with historical progression data. Compliance, visual symptoms, and reasons for treatment cessation or modification were also recorded.

Results
A total of 350 patients were included. Mean age was 9.7 years [range 3-19 years] and mean SER at baseline was -3.82. 80% had a parental history of myopia. Mean myopia progression was significantly reduced following treatment compared to historical progression patterns. Early compliance issues were reported in a substantial proportion of patients; however, treatment discontinuation was less frequent over the study period and was most commonly attributed to near blur and photophobia. Treatment protocols evolved throughout the study period, reflecting emerging evidence from studies such as LAMP and increased availability of optical interventions for myopia in Ireland. Treatment escalation, including increased atropine concentration ± addition of adjunctive myopia control lenses, was required in patients with ongoing progression. Difficulties in sourcing dilute Atropine in Ireland affected both compliance and real-world dosing practices.

Conclusions
Myopia control interventions significantly slowed progression despite challenges with compliance and tolerability, supporting their effectiveness in routine clinical practice. Based on these real-world data, we propose a treatment algorithm to guide the management of myopia.

1 Holden BA, Fricke TR, Wilson DA, Jong M, Naidoo KS, Sankaridurg P, Wong TY, Naduvilath TJ, Resnikoff S. Global Prevalence of Myopia and High Myopia and Temporal Trends from 2000 through 2050. Ophthalmology. 2016 May;123(5):1036-42. doi: 10.1016/j.ophtha.2016.01.006. Epub 2016 Feb 11. PMID: 26875007.
2 Yam JC, Jiang Y, Tang SM, Law AKP, Chan JJ, Wong E, Ko ST, Young AL, Tham CC, Chen LJ, Pang CP. Low-Concentration Atropine for Myopia Progression (LAMP) Study: A Randomized, Double-Blinded, Placebo-Controlled Trial of 0.05%, 0.025%, and 0.01% Atropine Eye Drops in Myopia Control. Ophthalmology. 2019 Jan;126(1):113-124. doi: 10.1016/j.ophtha.2018.05.029. Epub 2018 Jul 6. PMID: 30514630.
3 Chia A, Chua WH, Cheung YB, Wong WL, Lingham A, Fong A, Tan D. Atropine for the treatment of childhood myopia: safety and efficacy of 0.5%, 0.1%, and 0.01% doses (Atropine for the Treatment of Myopia 2). Ophthalmology. 2012 Feb;119(2):347-54. doi: 10.1016/j.ophtha.2011.07.031. Epub 2011 Oct 2. PMID: 21963266.

Early-Onset Bilateral Cataracts After Hyperbaric Oxygen Therapy: A Case Report

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Objectives
To outline a rare case of hyperbaric oxygen therapy (HBOT)-induced rapid bilateral cataract formation and highlight the necessity of closely observing patients undergoing this treatment.

Methods
A 56-year-old woman with hypertension, diabetes, and vascular disease experienced a rapid deterioration in her vision within 2 months after completing a 40-session course of HBOT (2.4 ATA, 90 minutes per session) for a chronic venous ulcer on her left leg. She had documented visual acuity of 6/6 in both eyes before HBOT treatment. Clinical examination confirmed nuclear sclerosis cataracts as the reason for her poor vision. Following bilateral cataract surgery, the patient's postoperative results were recorded on day 1, week 1, and month 1.

Results
Preoperatively, the best corrected visual acuity was 20/40 in both eyes. Bilateral grade 3 nuclear sclerotic cataracts were demonstrated on slit lamp examination. Apart from a previous retinopexy scar in her left eye, no other abnormalities of the anterior or posterior segments were observed. The patient underwent uncomplicated sequential bilateral cataract surgery, aiming for mini-monovision with Puresee IOLs. Postoperatively, uncorrected visual acuity improved to 6/9 OD (aiming -1.00), 6/6 OS (aiming plano), and J3 OU. At the one-month follow-up, corneas were clear, IOLs were centered, and refraction was stable. This patient was a stable hypertensive diabetic with vascular disease receiving HBOT for a venous leg ulcer. Although her systemic vascular disease may have put her at risk for cataract development, the rapid worsening of her vision immediately following HBOT treatment is suggestive of HBOT-induced cataracts.

Conclusions
This case illustrates how HBOT can cause sudden cataractogenesis that requires surgical intervention. Ophthalmologists and hyperbaric physicians should consider baseline and interval ocular assessments for patients undergoing HBOT in light of this risk, particularly if they have any existing risk factors for cataract development.

Are Plastic Eye Shields Necessary After Uncomplicated Cataract Surgery? A Large Multi-site Case Control Study

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SpaMedica

Objectives
There is little evidence of the benefits of plastic eye shields following uncomplicated cataract surgery, however, despite recommendations from the European Society of Cataract and Refractive Surgeons and a recent Royal College of Ophthalmologists' paper on sustainable cataract surgery, plastic eye shields are routinely used. The aim of this case control study was to determine whether it is safe not to wear a plastic eye shield following uncomplicated cataract surgery.

Methods
Case control study was carried out through analysis of electronic medical records (Medisight) of cataract surgery in 60 centres over 4 months. Exclusions included patients undergoing sub-tenons anaesthetic, patients with advanced dementia or had complicated surgery. 20,132 uncomplicated cases were identified with no plastic eye shield post operatively and compared to 26,023 controls. The cases and controls were comparable with no significant difference in mean age (74.5 years versus 74.4 years), sex (43.5% male versus 42.9%) and presence of ocular co-morbidities. Primary outcomes were endophthalmitis rate, incidence of post-operative ocular trauma and hypotony. Secondary outcomes were visual outcomes and refractive outcomes.

Results
No difference in endophthalmitis was found between cases versus controls (0.009% versus 0.008%), post operative ocular trauma (0.00% versus 0.002%) and hypotony (no cases in either group). There were no differences in visual outcomes (>95% in both groups obtaining better than 6/12 Snellen vision) and >92% within 1 dioptre of predicted refractive outcome.

Conclusions
Plastic eye shields are not required after uncomplicated cataract surgery. This is the largest case control study assessing the safety and clinical outcomes of not using plastic eye shields and found no difference in endophthalmitis rate, post operative ocular trauma and hypotony. Further, there were no differences in visual or refractive outcomes. The removal of unnecessary plastic would support the Health Service Executive's Climate Action Strategy to achieve net-zero by 2050.

Topical Antibiotics Are Not Required Following Uncomplicated Cataract Surgery

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Objectives
Dropless cataract surgery is becoming more prevalent and there is a growing evidence base of its safety and efficacy. However, one barrier to the uptake of dropless cataract surgery is the perceived requirement for topical antibiotics following uncomplicated cataract surgery. There is little evidence that topical antibiotics prevent endophthalmitis, however, they are still commonly used following routine cataract surgery. Antibiotic resistance remains a significant risk and antibiotic stewardship is required to reduce the overuse of inappropriate antibiotics. This is a large, multi-site retrospective study, to demonstrate the safety of removing topical antibiotics from post operative regimens following uncomplicated cataract surgery.

Methods
Retrospective review of the electronic medical records (Medisight) of all uncomplicated cataract operations performed at 60 cataract surgery centres between January 2019 and December 2025. No patients received topical antibiotics following their cataract surgery. Patients who had operative complications were excluded. The primary outcome was endophthalmitis rate. Endophthalmitis was defined as per the Royal College of Ophthalmologists' National Ophthalmology Database audit and included both confirmed and presumed cases. Patients had followed up 4-6 weeks following cataract surgery either performed by a community optometrist or by the hospital provider.

Results
848,160 cataract operations were performed in the time period, for 531,767 patients aged 20 - 100 years, mean age 74.6 years, 58.5% female.
The endophthalmitis rate was 0.008%.

Conclusions
This is the largest retrospective review demonstrating that topical antibiotics are not required following uncomplicated cataract surgery. The endophthalmitis rate was significantly less than national benchmarks. The overuse of inappropriate antibiotics is associated with increased antibiotic resistance, particularly amongst elderly patients with co-morbidities. Cataract surgeons should consider removing topical antibiotics from their routine post-operative regimen following uncomplicated cataract surgery. This should remove the potential barrier to wider adoption of dropless cataract surgery.

Tuberculous Retinal Vasculitis - A Case Report and Literature Review

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Objectives
To detail the case of a 40-year-old lady who presented with an occlusive vasculitis in association with a positive Mantoux and QuantiFERON-TB Gold test.

Methods
A 40-year-old lady presented with a 15-day history of decreased vision in the left eye. The right vision decreased five years previously without a known cause. The visual acuities were RE:1/60 and LE: CF. The anterior segments were quiet. There were vitreous cells in both eyes. The optic discs and maculae appeared normal. The left eye showed peripheral nasal and superior retinal new vessels and a recent appearing inferior vitreous haemorrhage. The tests for tuberculosis were positive and other investigations for an infectious or inflammatory cause were negative. A fundus fluorescein angiogram showed extensive areas of non-perfusion with associated areas of retinal neovascularization.

Results
The clinical picture was consistent with an occlusive retinal vasculitis in association with active tubercular disease. The mechanism of this association is not well defined and the literature is reviewed to discuss the current concepts of direct ocular tuberculous and an immune mediated vascular involvement. The current concepts regarding management including anti-tuberculous treatment, the use of laser treatment, and the use of steroids and immunosuppressive agents are also discussed.

Conclusions
Retinal vascular involvement in association with active tuberculosis presents significant challenges in both the understanding and management of the ocular condition. This presentation discusses the current concepts of retinal vascular involvement in a patient with active tuberculosis and provides a framework for the management of this challenging condition.

Refractive Outcomes Following Cataract Surgery: A Comparison of SRK/T and Barrett Universal II Formulae

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Objectives
To compare the predictive accuracy of the third-generation SRK/T and newer Barrett Universal II formulae in cataract surgery patients targeted for emmetropia.

Methods
A retrospective audit was conducted on 21 patients (30 eyes; 14F, 7M; mean age 75.9 ± 4.6 years), with a target recruitment of 50 eyes. Eyes with prior refractive surgery, macular pathology, or corneal disease were excluded. All eyes had an emmetropic aim, and the implanted IOL power was originally calculated using the SRK/T formula. Mean axial length was 23.67 ± 0.65 mm, mean keratometry 43.53 ± 1.17 D, and mean implanted IOL power 20.3 ± 1.87 D. Post-operative subjective refraction was performed following surgery. Prediction error (PE), absolute error (AE), and the percentages of eyes within ±0.25 D, ±0.50 D, and ±0.75 D of the targeted refraction were calculated for both formulae retrospectively using pre-operative biometry and the implanted IOL power.

Results
Post-operative mean spherical equivalent was -0.18 ± 0.28 D. All 30 eyes (100%) were within ± 0.75 D of target; 26/30 eyes (86.7%) were within ± 0.50 D and 20/30 eyes (66.7%) within ± 0.25 D. Although the difference in absolute error did not reach statistical significance at this interim sample size ($p = 0.42$), Barrett Universal II demonstrated a consistent trend of superior accuracy, yielding lower mean AE (0.20 D vs 0.23 D), lower variability (SD 0.11 D vs 0.17 D), and a higher proportion of eyes within both ± 0.50 D (100% vs 96.7%) and ± 0.25 D (63.3% vs 56.7%) compared to SRK/T.

Conclusions
Cataract surgery targeting emmetropia produced excellent refractive outcomes. Barrett Universal II showed greater predictive accuracy and consistency than SRK/T across all measured metrics, supporting its adoption as the default IOL power calculation formula.

The Small Eye with a Big Problem: Uveal Effusion Syndrome and Secondary Angle Closure in Nanophthalmos

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Objectives
Case Report

Methods
Case Report

Results
A fifty-six year-old Ukrainian woman was referred to the eye emergency department with suspected primary angle closure. She had a background history of longstanding poor vision in both eyes since childhood and noticed progressive deterioration in her left eye over the preceding three months. She had no pain, no haloes around lights and had no nausea or vomiting.

On examination, visual acuity was logMAR 1.0 OD and logMAR 1.3 logMAR OS. Intraocular pressures were elevated at 26 mmHg OD and 28 mmHg OS. Anterior chambers were shallow and gonioscopy demonstrated bilateral angle closure. Bilateral Nd:YAG peripheral iridotomies were performed. Subsequent fundus examination revealed an annular serous choroidal effusion in the left eye. Posterior segment examination of the right eye was unremarkable. Cycloplegic refraction demonstrated high hyperopia (+12.00 D right eye, +13.00 D left eye). Biometry showed markedly reduced axial lengths of 16.07 mm OD and 15.85 mm OS, consistent with nanophthalmos.

A diagnosis of uveal effusion syndrome with secondary angle closure in the context of nanophthalmos was established. The patient is scheduled to undergo scleral window surgery in the left eye in the coming weeks, and intra-operative video findings will be presented.

Conclusions
Nanophthalmos should be considered in atypical or refractory cases of angle closure. Recognition of associated uveal effusion is critical, as management differs from conventional pupillary block mechanisms. Early diagnosis facilitates timely surgical intervention and may reduce the risk of permanent visual morbidity.

Switching to an Aflibercept Biosimilar – a Real-World Evaluation of Safety and Efficacy

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Objectives
Biosimilars are biological medical products that are similar to reference medications and are required by the European Medicines Agency to be no different in respect of efficacy or safety. Biosimilars are typically more cost efficient than the originator medication and so enable health systems to treat more patients within the same budget and improve patient access. Anti-VEGF usage in Ireland is high and continues to rise as the ageing population continues to increase. The objective of this study was to use real world data to determine the safety and efficacy of an aflibercept biosimilar compared to branded aflibercept on a large cohort of stable patients.

Methods
Analysis of electronic medical records (Medisight) following a change of practice from branded aflibercept to biosimilar from 01/01/26 to 16/03/26 within an ophthalmology hospital group in the United Kingdom. All patients had vision measured using ETDRS (Early treatment of Diabetic Retinopathy study) chart and had Heidelberg Optical Coherence Tomography. Primary endpoints included vision change (letters) from baseline, central retinal thickness change from baseline and endophthalmitis rate.

Results
587 patients were switched from branded aflibercept to biosimilar in the study period; 120 patients had bilateral injections. Demographics; 61.5% female, average age 80 years. Indications included neovascular AMD and retinal vein occlusion. Right eye, average vision improved from 65.8 to 66.7 letters and central retinal thickness reduced from 295 microns to 286 microns. Left eye, average vision improved from 65.35 to 65.75 and central retinal thickness reduced from 302 microns to 291 microns. No cases of endophthalmitis reported.

Conclusions
Aflibercept biosimilar is safe and non-inferior to branded Aflibercept. This initial real-world study of switching stable patients to biosimilar aflibercept demonstrated equivalent visual outcomes and retinal thickness. There were no cases of endophthalmitis or any other adverse event reported, demonstrating that this is safe. As the use of anti-VEGF medication continues to rise in Ireland, clinicians should consider switching stable patients receiving branded aflibercept to a biosimilar, to enable more patients to have access to these sight stabilising medications.

Management of Post-Traumatic Hyperopia and Corectopia with a Hyperopic Implantable Collamer Lens: A Case Report

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Objectives
Background:
Management of refractive error in eyes with post-traumatic corneal scarring presents significant challenges. Corneal laser refractive procedures may be contraindicated due to irregular topography, stromal thinning, or high refractive requirements, while lens-based surgery is limited by the inaccuracy of intraocular lens (IOL) power calculations in irregular corneas. Implantable Collamer Lens (ICL) power calculation, based primarily on manifest refraction, offers a potentially more predictable alternative. In addition, ICL implantation is additive, reversible, and preserves accommodation.

While ICL use is well described in post-refractive surgery eyes, there is limited literature regarding its role in post-traumatic cases. We report the use of a hyperopic ICL combined with iris repair in an eye with prior corneal laceration, corectopia, and hyperopia.

Methods
Case:
A 53-year-old male presented seeking reduced spectacle dependence and improved binocular visual balance. He had sustained a full-thickness corneal laceration to the left eye at age nine, repaired with corneal suturing. Since then, he had functionally relied on his right eye.
Examination revealed a superotemporal corneal scar with iris incarceration, resulting in corectopia, significant hyperopia, and increased photophobia due to impaired pupillary constriction. Despite longstanding anisometropia, there was no amblyopia. Endothelial cell count was 2,400 cells/mm^2, and OCT imaging of the macula and optic nerve was normal.
Pre-operative refraction was:
OD: 6/6-2, +0.50/-0.25 x 90 = 6/4.5, N14
OS: 6/30-, +3.25 = 6/6+2, N24-
Corneal laser refractive surgery was contraindicated (PRK due to magnitude of correction; LASIK due to corneal scarring and prior full-thickness injury). A hyperopic ICL targeting -2.00 D was planned to achieve blended vision, combined with surgical release of the iris from the corneal wound.

Pre-operative assessment included peripheral iridotomy, contact lens trial at target refraction, and ultrasound biomicroscopy (UBM) for ICL sizing using dedicated software (ICLGuru).

The patient underwent implantation of a +6.50 D hyperopic ICL (13.2 mm) with concurrent iris repositioning. Intraoperative iris haemorrhage occurred. Postoperatively, wound leakage from the scarred corneal incision led to a shallow anterior chamber, initially unresponsive to bandage contact lens, requiring return to theatre for wound hydration and sealing.

Results
At one week, the patient achieved N4 near vision with a refraction of -1.75 and had adapted well to blended vision. Anterior segment OCT confirmed appropriate vault and angle configuration, and the pupil was central and round.

Conclusions

Discussion:

This case highlights the role of ICL implantation as an effective option for visual rehabilitation in post-traumatic eyes where corneal and lens-based procedures are unsuitable. In the presence of stable corneal scarring and anterior segment distortion, ICL implantation can provide predictable refractive outcomes, rapid visual recovery, and preservation of accommodation. Careful pre-operative assessment, including UBM and advanced sizing tools, is essential to optimise outcomes in anatomically complex eyes.

Current Investigative and Management Practices for Giant Cell Arteritis Among Irish Ophthalmologists

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Objectives

Giant cell arteritis (GCA) is a sight-threatening vasculitis requiring prompt diagnosis and treatment. Significant variation in clinical practice has been documented internationally, and no standardised national pathway currently exists in Ireland. This survey aimed to characterise current practices in the assessment, investigation, and management of suspected GCA among Irish ophthalmologists, and to identify barriers to the use of vascular imaging, with particular reference to temporal artery ultrasound (TAUS).

Methods

A cross-sectional online survey was distributed to ophthalmologists across Ireland in February–March 2026. The questionnaire comprised 21 items addressing: steroid initiation practices, use of vascular imaging, temporal artery biopsy (TAB) utilisation and timing, perceived institutional pathways, time to outpatient review, and attitudes toward a national GCA guideline. Respondents were categorised by grade: intern, SHO, registrar, SpR/HST, and consultant ophthalmologists. Descriptive statistics were used for analysis.

Results

34 responses were received across all grades. Most respondents (62%) routinely assessed patients with suspected GCA.

Steroid initiation: 41% always initiated corticosteroids on the day of suspicion; 18% routinely awaited investigation. For GCA without visual symptoms, oral prednisolone 40–60 mg was most common (44%), while IV methylprednisolone (IV MP) was favoured for evolving visual symptoms (74%) and established visual loss (79%). Steroid initiation was most often a shared responsibility (44%), with ophthalmology leading in 38%.

Vascular imaging: TAUS was the predominant modality, available to 59% of respondents, though used routinely in only a minority of those sites. Where used, imaging reduced the need for biopsy in 44% of cases or served as an adjunct in 26%. Principal barriers to TAUS were limited local expertise (41%), access delays (35%), and insufficient diagnostic confidence (26%).

Temporal artery biopsy: TAB was requested selectively by 59% and in all suitable cases by 29%. It was most commonly performed within 7 days of steroid initiation (41%). TAB results influenced ongoing management "sometimes" or "frequently" in 88% of respondents.

Pathways and access: Only 26% strongly agreed that a clearly defined institutional GCA pathway existed. Time to outpatient review was same-day in 44%, 1–3 working days in 26%, and variable or uncertain in a further 26%. 94% of respondents supported development of a national GCA pathway.

Conclusions

This survey reveals considerable heterogeneity in GCA management practices among Irish ophthalmologists, encompassing steroid dosing, the use and integration of vascular imaging, and TAB timing. TAUS, despite evidence supporting its role in diagnosis, is not universally available or consistently utilised, with limited local expertise and access delays identified as the principal barriers. A minority of respondents felt that a clearly defined institutional pathway existed. The near-unanimous support for a national standardised pathway underscores an unmet clinical need. These findings provide a contemporary evidence base to inform the development of a consensus GCA guideline for Ireland that accommodates local service constraints while promoting timely, evidence-based care.

Post-operative Prescribing Practices Following Strabismus Surgery Among Irish Ophthalmologists

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Objectives
To characterise current post-operative prescribing practices following squint surgery among ophthalmic surgeons, to identify the agents, frequencies, and durations most commonly used, and to explore the factors that influence prescribing decisions.

Methods
An online cross-sectional survey was distributed to ophthalmic surgeons and trainees. Respondents who performed strabismus surgery were asked to detail their routine post-operative topical regimens, including antibiotic, steroid, and combined antibiotic-steroid preparations, as well as NSAIDs and lubricants. Additional questions addressed drop frequency, duration, tapering strategies, and the factors most influencing prescribing (e.g. departmental protocol, training background, personal experience). Respondents who did not perform squint surgery were excluded from analysis. Descriptive statistics were used to summarise prescribing patterns and surgeon demographics.

Results
Of the survey respondents, 14 performed strabismus surgery and were included in the analysis. The most frequently prescribed antibiotic was chloramphenicol (used by the majority of those prescribing standalone antibiotic drops), while combined neomycin/polymyxin B (Maxitrol) was the most common antibiotic-steroid preparation. Dexamethasone and prednisolone were the principal steroid agents used. Antibiotic drop duration ranged from 1–4 weeks, most commonly 1–2 weeks, while steroid courses were more frequently continued for 2–4 weeks. QDS was the predominant starting frequency for both antibiotics and steroids, with some respondents employing a tapering course. The majority did not routinely prescribe post-operative NSAID drops. Prescribing was most commonly influenced by personal clinical experience or preference and informal departmental practice rather than formal evidence-based guidelines. Approximately one-third of respondents reported reducing their prescribing in the last five years. Opinion was divided on whether routine antibiotic prophylaxis is necessary following uncomplicated surgery, with roughly half believing it to be unnecessary.

Conclusions
Significant variation exists in post-operative topical prescribing following strabismus surgery, driven predominantly by personal preference and departmental custom rather than evidence-based guidelines. This mirrors international findings, including a large 2019 AAPOS survey demonstrating no prevailing consensus among paediatric ophthalmologists. The divided opinion on antibiotic necessity among our respondents is supported by a 2025 large database study finding no reduction in infective complications with routine post-operative topical antibiotics, while their use in children carries additional concerns around distress, cost, and antimicrobial resistance. These findings highlight an urgent need for prospective research and standardised, evidence-based post-operative protocols in strabismus surgery.

A Signalling Network Model of Lamina Cribrosa Fibrosis

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Objectives
Fibrosis at the Lamina Cribrosa (LC) is a key feature of the glaucomatous optic nerve head, however, the complexity of signalling networks involved makes accurate stimulus-response prediction difficult. Therefore, we constructed a logic-based ordinary differential equation network model to study the properties of the system.

Methods
A network model composed of 136 species and 274 reactions was constructed. Of those, 66 species and 134 reactions were identified via manual literature review of LC fibrosis and a further 70 species and 140 reactions were adopted from a cardiac fibroblast model previously published by Rogers & Richardson in 2022, discarding any cardiac-specific reactions. Model simulation and analysis were performed using Netflux and MATLAB code published by the same group.

Results
Tension (cell stretch) increased activity only across a subset of nodes associated with integrin & RhoGTPase mechanotransduction (e.g. talin, vinculin, RhoGEF, RhoGDI), calcium signalling & stretch-sensitive ion channels (e.g. TRPC, Ca, CaMKII, calcineurin), as well as growth factor signalling (e.g. IGFR2, Ras). Network perturbation analysis examining individual node knockdown was performed. Nodes with top knockdown sensitivity were primarily involved in growth factor signalling (Ras/Raf/MAPK) and cytoskeletal/adhesion pathways (Rho, Focal Adhesions). Nodes with top knockdown influence include IOP, as well as species involved in oxidative stress (ROS, NOX), bioenergetics (ATP, AMPK), TGF-β signalling, and mechanotransduction pathways. Additionally, varying tension affected activity, sensitivity and influence levels.

Conclusions
Our signalling network model highlights the role growth factor signalling, oxidative stress and mechanotransduction pathways play in LC fibrosis. Future work will focus on hypothesis generation, including potential therapeutic targets, to be verified in vitro.

Routine Administration of Sub-tenon Triamcinolone at the Time of Uncomplicated Phacoemulsification and IOL Insertion for Patients With Diabetes Mellitus – Can it Affect Post-operative Central Macular Thickness and Therefore Cystoid Macular Oedema and Diabetic Macular Oedema?

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Objectives
To investigate the efficacy of triamcinolone acetonide sub-tenon injection at the end of phacoemulsification surgery in patients with diabetes mellitus in comparison with standard phacoemulsification surgery: whether it affects central macular thickness, intraocular pressure, and visual outcomes.

Methods
Retrospective study of comparison between two groups of fifty patients each: those who received triamcinolone acetonide sub-tenon injection at the end of cataract surgery and those who had routine cataract surgery with no additional steroid injection. Selected patients were adults diagnosed with diabetes mellitus who underwent elective routine phacoemulsification and intra-ocular lens (IOL) surgery. All patients included had a routine sub-tenon anaesthetic block for the surgery and Rayone Aspheric IOL inserted into the capsule. Exclusion criteria consisted of complications requiring anterior vitrectomy and/or different lens position, IOL other than Rayone Aspheric, and intravitreal injection at the time of surgery. All patients received the same routine post-operative drops of g. Chloramphenicol for two weeks and g. PredForte for four weeks. Comparison between pre-operative and post-operative review (typically at four weeks) assessed best corrected visual acuity (BCVA), intraocular pressure (IOP), and central macular thickness (CMT) on Optical Coherence Topography (OCT.)

Results
In those who received a sub-tenon triamcinolone injection with cataract surgery, the mean pre-operative CMT was 283.5µm (range 141-498µm) compared to post-operative CMT of 303.3µm (range 113-805µm). In patients who did not receive a sub-tenon triamcinolone injection, the mean pre-operative CMT was 270µm (range 141-374 µm) and post-operative CMT was 290.5 µm (range 137-510 µm). The mean change in CMT was similar for both groups: +26 µm for the triamcinolone group (range -59 to +405µm); and +23 µm for the control group (range -43 to +136). Both groups showed post-operative visual improvement. The sub-tenon triamcinolone group mean LogMAR BCVA pre-operatively was 0.6 and post-operatively was 0.3 (Mean change -0.3). The control group mean LogMAR BCVA pre-operatively was 0.5 and post-operatively was 0.3 (Mean change -0.2). Neither group had an adverse IOP increase.

Conclusions
Administration of sub-tenon triamcinolone injection at the time of phacoemulsification surgery is an option to decrease the risk of post-operative CMT and improve visual outcomes without the risk of increased IOP. Both groups demonstrated a similar minimal increase in CMT as a surrogate marker for macular oedema. All patients received a sub-tenon anaesthetic block for these surgeries which means the sub-tenon triamcinolone injection is a minimal extra-step at the end of surgery.

Retinal Displacement Following Rhegmatogenous Retinal Detachment Repair

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Objectives
To compare retinal displacement following rhegmatogenous retinal detachment repair with pneumatic retinopexy (PR) vs pars plana vitrectomy (PPV) vs scleral buckle (SB). Retinal displacement post-retinal detachment repair is a common, often underdiagnosed complication where the retina reattaches in a shifted position, causing metamorphopsia and consequences for visual function.

Methods
Fundus autofluorescence imaging is the gold standard for diagnosis; revealing hyperfluorescent "retinal vessel printings" that represent the pre-operative vascular position. A total of 18 patients with macula-off rhegmatogenous retinal detachments treated with primary PR (n=3) or PPV (n=10) or SB (n=5) who had fundus autofluorescence imaging available from Oct 2025 to Nov 2026 were included. Exclusion criteria included previous vitreoretinal surgery, proliferative vitreoretinopathy (Grade B or worse), significant media opacity, pre-existing retinal pathology.

Results
The proportion of eyes with retinal vessel printing on fundus autofluorescence was 0% for PR (n=0), 30% for PPV (n=3), 20% for SB (n=1). Among eyes with displacement, the mean (SD) displacement was 0.2mm for PPV and 0.1mm for SB.

Conclusions
Recognising the importance of anatomic integrity by assessing retinal displacement following reattachment may lead to refinements in surgery techniques and choices.

Importance of Detecting Late Onset Stargardt's Disease

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Objectives
To present a case of late onset Stargardt's disease (STGD) in a 72year old patient referred for management of geographic atrophy (GA) secondary to age related macular degeneration (AMD) for consideration of an intraocular telescope.

To highlight the need for accurate phenotyping in an era where more options are available for management of GA both pharmaceutical and surgical.

Methods
A detailed history was taken, multimodal retinal images (colour photos CP, auto- fluorescence AF, OCT imaging including high resolution magnified images of areas of interest) were acquired. Next generation panel base sequence (NGS) Testing was performed.

Results
The patient was diagnosed with extensive macular atrophy, classic flecks were noted on CF and AF. OCT imaging clearly highlighted the position of the flecks within the Retina rather than subretinal thus distinguishing it from AMD. Genomic Testing confirmed one pathogenic mutation in the ABCA4 gene; c.2894A>G, p. (Asn965Ser), and one risk factor mutation (c.5603A>T, p.(Asn1868lle)

Conclusions
The case is presented to highlight the dangers of assuming AMD as the cause of GA. Studies of interocular telescopes show a clear contraindication in STGD. Additionally, the use of complement modifiers in GA are not indicated in STGD. Detailed phenotyping with/without genotyping is vital before considering these interventions.

Achromatopsia Diagnosis in Trisomy 21 Provides a Reassuring Prognosis and Hope for Future Treatment

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Objectives
Patients with trisomy 21 (Down Syndrome, T21) may manifest a range of ocular features including cataract, strabismus, high refractive errors and congenital nystagmus. Achromatopsia (ACHM) is an autosomal recessive cone dysfunction syndrome linked to biallelic variants in 6 known genes (CNGA3, CNGB3, PDE6C, PDE6H, GNAT2, ATF6), none of which are on chromosome 21. Herein, we describe a rare case of congenital nystagmus in a child with T21 which is due to ACHM rather than the expected T21-associated motor nystagmus or developmental optic nerve pathology.

Methods
Retrospective, single-centre case report of a patient with T21 and nystagmus. Clinical and genetic findings are reported including best corrected visual acuity, refractive error, dilated ophthalmic examination, visual electrophysiology and next generation sequencing. The literature is discussed regarding retinal dystrophies in the setting of T21-associated nystagmus

Results
A 4-year-old girl with a history of T21 was referred for an ophthalmic assessment due to nystagmus. She was photophobic and her nystagmus increased in amplitude in bright light. There was no known family history of nystagmus or other eye disease. Visual acuity was 6/60 in each eye with +6.00D refractive correction in each eye. She had horizontal pendular nystagmus with blue dot lens opacities bilaterally but a normal retinal appearance and no optic nerve hypoplasia. Retinal imaging was not possible due to her young age. Panel-based next generation sequencing for genes associated with nystagmus identified 2 variants in CNGA3 [c.1279C>T, p.(Arg427Cys) and c.575T>G, p.(Phe192Cys)]. These are both classed as pathogenic and were proven to be on different alleles, confirming a diagnosis of ACHM type 2.

Conclusions
Not all nystagmus in T21 is congenital motor nystagmus. A careful history to elicit hemeralopia or nyctalopia can guide investigations including genetic testing. CNGA3-ACHM is typically stationary, giving a reassuring long-term visual prognosis. Additionally, this patient is now a candidate for CNGA3 gene therapy when this becomes clinically available.

Paediatric Corneal Hypoesthesia: Expanding the Ocular Spectrum of PHACES

Harford D, Mongon A, McCloskey C.
Sligo University Hospital.

Objectives
PHACES is an acronym pertaining to the pertinent features of the neurocutaneous disorder: posterior fossa abnormalities, haemangiomas of the face, cardiovascular anomalies and eye anomalies. Ocular findings are therefore mostly observed in the posterior segment and include problems with optic nerve tissues, retinal vascular changes or microphthalmia.

We describe a paediatric patient with a confirmed diagnosis of PHACES syndrome who presented with recurrent corneal ulcers and scarring due to recurrent ocular surface irritation. She was found to have reduced corneal sensation. The child had a history of a large segmental facial haemangioma in the trigeminal distribution and associated cerebrovascular anomalies.

Methods
A retrospective chart review was performed, and anterior segment photos were collated and reviewed.

Results
The patient was managed conservatively with intensive ocular surface lubrication, topical antibiotics and frequent reviews. An isolated episode of a secondary keratitis necessitating corneal scraping resulted in a further drop in visual acuity. This episode was managed with intensive chloramphenicol drops. Later, moisture chambers were commenced at night. The ocular

surface has since stabilized. Unfortunately, vision is 6/18 secondary to a large central corneal scar and likely an element of stimulus deprivation amblyopia. She has been referred for corneal neurotization surgery in Birmingham.

Conclusions
This case highlights corneal hypoesthesia as a potential manifestation of PHACES, likely related to trigeminal nerve involvement. Routine assessment of corneal sensation should be considered in patients with PHACES syndrome, particularly those with haemangiomas involving the trigeminal distribution. Secondly, paediatric cases of chronic anterior segment ulceration raise a separate urgency due to the threat of stimulus deprivation amblyopia. Early diagnosis, aggressive treatment and intensive follow up are crucial.

Laws and Literature of Children and E-scooters: A Case Study.

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Sligo University Hospital

Objectives
The Road Traffic and Roads Act 2023 (the "2023 Act") regulates the use of all e-scooters and e-bikes in Ireland and legalises their use on Irish roads. It has established a new category of vehicle, outside of the definition of a mechanically propelled vehicle, known as Powered Personal Transporters ("PPTs"). These e-bikes and e-scooters are exempt from tax, insurance, registration and licence requirements. In practice, they are treated the same as regular push bikes and scooters. However, E-Scooter collisions are now the leading cause of traumatic brain injuries in Ireland. We report the case of a child who was involved in an e-scooter collision who went on to develop an orbital compartment syndrome.

Methods
A retrospective chart review was performed. Clinical images and neuroimaging was reviewed and collated. A review of Irish e-scooter regulation was conducted using primary statutory sources, including the Road Traffic and Roads Act 2023 and related statutory instruments, supplemented by policy and guidance documents from the Road Safety Authority and Department of Transport.

Results
We report the case of a child who presented to the emergency department following an e-scooter accident with significant facial trauma. On examination there was marked periorbital swelling, proptosis, a tense orbit and reduced visual acuity in the affected eye. IOP on iCare was found to be 60. An emergency lateral canthotomy and inferior cantholysis was performed at the bedside. Intravenous ketamine was given in the emergency setting to facilitate the procedure. Immediate decompression resulted in improved globe tension and stabilization of visual function. Visual acuity at final review was 6/6 in both eyes.

Conclusions
There is increasing concern that Irish e-scooter legislation is not yet fit for purpose, with current provisions potentially falling short of what is required to proportionately mitigate the observed risk of injury. This case highlights the increasing incidence of paediatric facial trauma associated with e scooter use. It calls into question whether Irish legislation is appropriate in safeguarding the public. We also highlight the difficulty of diagnosis and management recommendations of an orbital compartment syndrome in a paediatric patient.

Inherited Retinal Degeneration in Focus: A Contemporary Database Report

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Objectives
To provide an updated characterization of patients with inherited retinal degenerations (IRD) within the Mater Misericordiae University Hospital registry, including clinical, genetic, and demographic features.

Methods
The Mater IRD database was utilised to identify patients diagnosed with an inherited retinal dystrophy, along with unaffected family members where applicable. Medical records were reviewed to extract relevant demographic, clinical, and genetic data.

Results
As of March 2026, 1202 individuals from 695 pedigrees were included in the database, comprising 1056 affected patients and 146 unaffected family members. The median age was 49 years (range 1-97), with 50.7% male.

930 patients underwent accredited genetic testing, of whom 123 remain without a molecular diagnosis. Genetic counselling has been completed in 551 cases to date

The most common diagnoses included Stargardt disease (n=103) and Usher syndrome (n=34, types 1 and 2). Other diagnoses include Stickler syndrome (n=40, types 1 and 2), Best disease (n=38), x-linked retinoschisis (n=25) and choroideraemia (n=16)

The most frequently recorded genetic diagnoses were ABCA4 (n=103/8.6%), BEST1 (n=38/3.2%), RPGR (n=31/2.6%), COL2A1 (n=29/2.4%) and USH2A (n=29/2.4%)

Between January and December 2025, 10 multidisciplinary team meetings were conducted to confirm diagnosis resolution, review complex cases and refine genotype-phenotype correlations

Conclusions
A comprehensive, evolving IRD database is essential to modern ophthalmic practice, enabling precise genetic diagnosis and supporting the transition toward targeted therapies. Combined with the CHI register, this will facilitate smooth transitions of care. We are well positioned to now add to the European Reference Network Rare Eye Disease Registry (ERNEYE REDgistry) for rare eye disease in Europe, and to contribute to the launch of an Irish Rare Eye Disease Registry,

Sectoral Retinitis Pigmentosa with Slow Progression Due to a Hypomorphic CDH23 Variant in the Irish Population

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Objectives
Usher syndrome (USH) is syndromic inherited retinal degeneration (IRD) manifesting with sensorineural hearing loss (SNHL), retinitis pigmentosa (RP) and, in some cases, vestibular dysequilibrium. Type 1 USH (USH1) represents ~24% of USH, typically has the most severe hearing loss and RP with vestibular disturbance (i.e., delayed walking, impaired balance). Biallelic variants in the CDH23 gene are associated with a rare (~11%) subtype of USH1 known as USH1D. Herein, we describe detailed phenotyping of patients carrying a rare CDH23 variant (c.5237G>A,p.Arg1746Gln) with an attenuated retinopathy phenotype

Methods
Detailed ophthalmic phenotyping included best corrected visual acuity, dilated ophthalmic examination, electroretinography (ERG) and multimodal imaging (colour photography, fundus autofluorescence and optical coherence tomography). Genetic testing was performed by panel-based exome sequencing of 351 IRD-associated genes. Retrospective review of the national database was performed to identify other candidates carrying the CDH23 variant of interest.

Results
Six patients carrying the CDH23:c.5237G>A variant were identified, age range 12 – 62 years, 5 of whom were male. Each patient had profound congenital SNHL but only 2 had cochlear implants. All patients had a restricted retinal phenotype though progression to more extensive RP was seen in older patients and in those in trans with a null CDH23 allele. The youngest patient (12y female) had restricted inferior retinopathy with symptom and sign onset at age 9y and an unusual cone-rod dystrophy ERG phenotype. The only homozygous c.5237G>A patient retained a very restricted phenotype despite having the most advanced age (62y male)

Conclusions
The CDH23:c.5237G>A, p.Arg1746Gln variant is associated with a restricted retinopathy phenotype, suggestive of a hypomorphic allele. The retinal features of this variant are described in one previous British report and the current Irish series. Previous cases have a consistent sectoral retinal degeneration with a cone-rod dystrophy. We also present deep retinal phenotyping of the only known homozygous c.5237G>A patient, giving the clearest picture of the phenotype caused by this hypomorphic allele

Functional Convergence Spasm

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Objectives
Convergence spasm can often mimic an abducens palsy and give rise to superfluous patient investigations, many of which are invasive and lead to large doses of radiation. We report the case of functional convergence spasm in an adolescent female.

Methods
A retrospective chart review was performed, and clinical images were collated.

Results
An 18 year old female presented with symptoms of severe headache, photophobia, bilateral loss of vision and involuntary eye movements. Examination of ocular motility revealed an intermittent disconjugate converging eye movement and blepharospasm. She underwent emergency neuroimaging including CT head, CT angiography as well as MRI head and spine. Input from neurology was sought and the clinical picture was felt to be in keeping with a functional aetiology. Over the course of 5 days of an inpatient stay, the patients visual acuity returned to normal and blepharospasm and convergence spasm resolved.

Conclusions
Iatrogenic injury secondary to excessive investigations must be borne in mind when functional aetiologies are suspected. A multidisciplinary team approach including input from psychiatry and neurology colleagues is important. Pejorative terms such as 'hysteria' which feature in the literature have become outdated. Recent years have seen a nomenclature shift. Our understanding of inorganic symptoms has become more sophisticated. Functional or inorganic presentations to the ophthalmologist and neurologist are not uncommon and call for a protocol of consistent and standardized discussion with the patient.

A Review of the Pre and Post Operative OCT of Patients that Underwent FTMH Repair from August 2024 to February 2026

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Objectives
To review the anatomical outcomes of patients that underwent FTMH repair from August 2024 to February 2026.

Methods
Dataset obtained from August 2024-February 2026:
A total of 34 surgical episodes were identified. These represent 32 individual patients, as two patients underwent repeat surgery for persistent full thickness macular hole.

Post-operative outcome could be assessed in 30 surgical episodes.

Outcome could not be commented upon in 2 cases as their procedure was too recent to have already had a follow up appointment. As a result, these cases were excluded from outcome-based analysis.

Results

Primary Surgery Outcomes:

Excluding repeat operations and cases yet to have follow-up, primary surgery outcomes were assessable in 30 patients.

- Complete closure: 29 patients
- Primary Failure: 2 patients
- Repeat Failure: 1 patient

This gives:

- Primary complete closure rate: 94%
- Primary Failure Rate: 7%

Repeat Surgery Outcomes

Two patients required repeat intervention:
For audit purposes:

- Repeat surgery was considered a failure of primary intervention.
- Outcomes following second surgery were analyzed separately and descriptively.

Following second surgery:

- One patient did not achieve anatomical closure.
- One patient did achieve anatomical closure.

Conclusions

- Two patients required repeat intervention, representing primary surgical failure.
- Overall anatomical improvement was high and comparable with real-world published data.
- Repeat surgery did result in complete closure in one case and did not result in closure in one case, highlighting the reduced success rates associated with re-intervention.
- Recently operated patients awaiting review represent a recognized limitation of the audit and may lead to underestimation of final success rates.

A Suspected Case of CAVES Syndrome: Ocular and Audiovestibular Dysfunction Following Postpartum Chitosan Haemostatic Tamponade

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Objectives

Chitosan based haemostatic agents are widely used in obstetric practice as biocompatible rapid clot forming agents, particularly in cases of postpartum haemorrhage. Sporadic reports document systemic inflammatory reactions following their use. A novel clinical entity: Chitosan Associated Vasculitis with Eye and Sensorineural symptoms (CAVES), has been proposed, characterized by acute ocular inflammation and audiovestibular dysfunction shortly after postpartum intrauterine chitosan tamponade.

We report a suspected case of CAVES in a postpartum patient presenting with acute bilateral panuveitis and audiovestibular symptoms, highlighting this emerging syndrome.

Methods

A patient presented to the Eye Emergency Department at Mater Misericordiae University Hospital, Dublin, with acute bilateral panuveitis, retinal vasculitis, and audiovestibular symptoms following chitosan-based haemostatic intrauterine tamponade post caesarean section. Clinical data collected included symptoms, clinical and ophthalmic imaging findings, laboratory investigation results, intervention outcomes, at presentation and during follow-up. Multimodal imaging carried out included optical coherence tomography (OCT), ultra-widefield fundus angiography, U/S b-scanning and visual field testing. Neurological, audiological and rheumatological investigations are also summarised.

Results

A 37 year old female developed acute symptoms twenty-four hours after caesarean section associated with placenta previa and major 3.5 litre haemorrhage requiring chitosan-based tamponade. Symptoms included bilateral ocular discomfort, blurring of vision, floaters, and audiovestibular symptoms.

Examination demonstrated reduced visual acuity (VA) with right eye 6/24 and left eye counting fingers. The patient had a bilateral panuveitis, interstitial keratitis and retinal vasculitis, with angiographic evidence of diffuse capillary leak.

Treatment with systemic and topical corticosteroids, broad spectrum antibiotic and antiviral cover was initiated, resulting in a resolving clinical course. At six month follow-up, VA in the right eye was 6/9 and left eye 6/12 with resolution of uveitis. Mild audiovestibular symptoms persisted.

Conclusions
Recent reports highlight similar clinical constellations. CAVES syndrome represents a newly proposed postpartum immune-mediated syndrome occurring shortly after exposure to chitosan-based haemostatic agents.

This case highlights the importance of recognising the temporal relationship between chitosan exposure and the development of ocular and audiovestibular inflammation. Early recognition and treatment may lead to favourable clinical outcomes.

Further work is required to better define the incidence, pathophysiology, and optimal management of this emerging clinical entity.

The Role of Early Multidisciplinary Intervention for Paediatric Patients with Genetic Eye Diseases

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Objectives
Rare genetic eye diseases (GED) are a clinically and genetically heterogeneous group of conditions for which there are few disease-modifying treatments available. While 70% of this group have some secondary ophthalmic features, which may be amenable to treatment, this often does not correct vision to the normal range. However, there are a range of non-medical supportive interventions, which can make a positive impact on the lives of patients and families even before a full diagnosis is confirmed. Herein, we provide practical examples of the various supports available and the impact achieved.

Methods
Retrospective, single-centre case series of patients with new diagnosis of GED. Clinical details including diagnosis and visual acuity are presented but the focus is on non-medical supports and interventions. The impact of the relevant supports for each case are explained in detail including mobility and low vision training, educational, social, financial, and psychological streams.

Results
Case 1: 10 year-old boy with Wolfram Syndrome. VA is 6/24 OU with moderate myopic astigmatism in each eye. In addition to his visual impairment, he wore hearing aids and had an insulin pump for diabetes mellitus. He was having increasing difficulties in school and teachers were concerned. After clinical assessment, while genetic test results were pending, psychological support was provided for the patient and family and the visiting teacher service was linked in for school assessment. This ensured the student had access to learning materials in accessible formats (Large print, or digital tools), and advised on assistive technology. Secondly, there has been extensive counselling, both face-to-face and over the phone with mum, regarding support that can be accessed now and in the future in relation to his condition. An Eye Clinic Liaison Officer (ECLO) has also linked him in with Vision Sports Ireland. This little boy is a keen swimmer and Vision Sports Ireland are able to modify training routines with, for example, coaches wearing red or green bibs, so they can be easily identifiable during training.

Case 2: A 16-year-old boy with Stargardt's disease, diagnosed at age 14, with a current visual acuity of 6/48 in both eyes. ECLO coordinated multidisciplinary support, including referral to a visiting teacher to facilitate appropriate educational adaptations within the school setting. Financial assistance was arranged for the family, enabling his mother to assume a primary caregiving role. At age 16, he commenced cane training to promote independent mobility and enhance social engagement. He is also participating in a Transition Year programme with Vision Ireland, which provides peer support and equips him with practical strategies to maximise independence and quality of life.

Case 3: An 8-year-old girl presenting with functional visual loss and a visual acuity of counting fingers. ECLO played a key role in coordinating support, linking the child with a visiting teacher to ensure appropriate educational adaptations within the school environment. The family was also connected with FÉACH Vision Support, a national organisation providing peer and family support for those affected by visual impairment. Crucially, psychological support for the parents was prioritised to help them understand the diagnosis and navigate ongoing management. This holistic approach ensured that both the child's functional needs and the family's emotional wellbeing were addressed.

Conclusions
Early social care intervention is essential in the management of life-altering conditions such as genetic eye disease. Practical supports can be initiated from the first patient contact, even when a formal diagnosis is pending, providing immediate psychological relief to patients and families while equipping them with strategies to navigate life with visual impairment. In the context of a busy paediatric ophthalmology service, the inclusion of an Eye Clinic Liaison Officer (ECLO) within the multidisciplinary team offers a vital channel of communication, facilitating early access to practical and social supports. This early engagement is invaluable, as patients and families are quickly connected with support networks that promote coping and adaptation. The three cases presented in this review illustrate how the ECLO service delivers personalised, patient-centred support tailored to individual needs.

Risk of Retention or Breakage of 25 Gauge Light Pipe During Endonasal Dacryocystorhinostomy: A Salient Case Report.

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Objectives
Improve and make safer surgical practice for endonasal dacryocystorhinostomy.

Methods
A 39-year-old female underwent unilateral endonasal dacryocystorhinostomy (E-DCR) with septoplasty for lacrimal drainage obstruction. The procedure involves localising the lacrimal sac position within the nasal space using a vitrectomy lightpipe before the osteotomy is fashioned.
Given the close anatomical proximity of the skull base, accurate localisation of the lacrimal sac position is essential to avoid intracranial breach.

Results
Intraoperatively intermittent insertion of the localising lightpipe through the lacrimal canaliculi was undertaken but was observed at one stage to be shorter than manufacturer length, raising concern for instrument breakage and potential loss within the operative field. An intra-operative low-resolution X-ray was performed but failed to visualise any foreign body consistently. The E-DCR was successfully completed. A post-operative high-resolution CT scan (0.45mm slices) was performed scanning paranasal sinuses, nose, orbits and nasopharynx. No metal foreign body was present. The patient was informed of the incident and outcome, given intraoperative IV antibiotics for 24 hrs then switched to oral for 1 week and advised to self-monitor for signs of pyrexia, septicaemia or abscess. Postoperative review at 1 week revealed no signs or symptoms of retained foreign body and none have emerged to date.

Conclusions
Vitrectomy light pipes are frequently used in E-DCRs for this purpose. Progressive reduction in lightpipe size has improved vitrectomy technique but results in increased instrument flimsiness. Smaller (25-gauge) devices may be less suitable for E-DCR compared with traditional 19-gauge lightpipes.

These devices are ferromagnetic and if inadvertently retained may preclude safe future MRI imaging and cause late presenting abscess formation. This case represents a near-miss event that provokes valuable clinical reflection and careful scrutiny of advancing technology, off-label use of instruments and provides opportunity to improve delivery of safe medical care.

Clinical Audit on Visual Outcomes of Patients Who Underwent Cataract Surgery at Charter Medical Private Hospital Mullingar

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Objectives
The aim of the audit was to assess the visual outcomes after cataract surgery and to analyse whether it meets the benchmark as set by WHO i-e A benchmark for visual acuity after cataract surgery is achieving a best-corrected visual acuity of 6/6 - 6/18. This standard is supported by the World Health Organization, which recommends that 80% of eyes operated on should meet this outcome.

Methods
This retrospective clinical audit was done over 1 month (the month of July). It comprised data of patients who had cataract surgery and had post-operative 6-week review in July. Visual acuity before and after surgery were noted at six weeks postoperatively. Topical/sub tenon anaesthesia was used before surgery. The cataract extraction technique used was phacoemulsification, along with implantation of intraocular lens (IOL). Post-operatively, topical chloromycetin eye drops and steroidal and non-steroidal anti-inflammatory medications were advised. Hypertonic saline 5% was given only to selected patients. Post-operative follow-up was six weeks, respectively. Data analysis was done. Classification of visual acuity before and after surgery was done by using the WHO guidelines: Good outcome = 6/6-6/18; moderate= <6/18 - 6/60 and Poor= <6/60.

Results
Out of 110 patients who underwent Phacoemulsification at Charter Medical Private Hospital, the operated eyes were 94 right and 96 left respectively AND Total of 190 eyes.145 eyes had mild visual impairment (better than 6/18),26 had moderate (6/18-6/60),19 had severe visual impairment (6/60-6/120). Post-operatively 188 (98.94%) had good visual acuity (6/6/-6/18) six weeks after the surgery, while 2 (1.05%) had moderate visual acuity which is due to pre-existing age-related macular degeneration and 0% had poor visual outcome.

Conclusions
The visual acuity after cataract surgeries done at charter medical private hospital meet the standard which shows high level of surgical skills and care provided by hospital.98.98 % of patient met the required standard as established by WHO and surpass the benchmark of WHO which is80% of the patient should have good visual outcome after cataract surgery.

Clinical Audit on Waiting Time for Cataract Surgery in Charter Medical Private Hospital

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Objectives
The aim of the audit was to assess the waiting time of referrals received in charter medical private hospital for their cataract pre-op assessment appointment and surgery.

Methods
The data of 50 patients was randomly collected retrospectively in the month of December 2025 for those who had their surgeries done. Date of referral received, date of pre-op assessment, and date of surgery were recorded by looking into the individual charts.

Results
The average time to get the first appointment after referral being received was 13 days.
- 6 patients had their pre-op assessment appointment the next day of referral received in hospital.
- 17 patients had pre-op assessment appointment within 1-5 days.
- 14 had it within 6-10 days.
- 12patients had it within 11-15 days.
- 2 patients had within 16-20 days.

- 2 patients had within 21-25 days respectively.
- 3 patients had pre-op assessment appointment more than 25 days of referral being received i.e. 73 days, 82 days and 110 days respectively

Next day appointments: 6 patients were seen immediately the day after referral.
The time from day of pre-op assessment to the day of surgery was also recorded for the same 50 patients.

- 22 patients had same day surgeries and 6 had the next day.
- 10 patients got their surgeries done within 2-5 days,
- 7 patients had it with 6-12 days.
- 2 patients had surgeries done on 19th day of their pre-op assessment appointment.
- Rest 3 patient had surgery on 21ist ,26th and 35th day of their pre-op appointment.

1. Same day surgeries dominate (22 patients, ~47%); showing that nearly half of patients had immediate scheduling.
2. Next day (6 patients, ~13%) and 2–5 days (10 patients, ~21%) together account for another third of cases, highlighting efficient turnaround.
3. 6–12 days (7 patients, ~15%) represents a moderate waiting period.
4. Long delays (19–36 days) are rare, affecting only 5 patients (~11%).

Conclusions
Regarding pre-op assessment appointment, the results highlight that most patients (43 out of 50) were assessed within 15 days of referral, which suggests good efficiency in scheduling and efficient care. However, the outliers at 73, 82, and 110 days stand out as potential cases for review, since they represent unusually long waits compared to the majority. This visualization can help identify where improvements might be needed – particularly in preventing extreme delays.

Regarding the waiting time of surgery after pre-op assessment appointment, most patients (38 out of 51, ~75%) had surgery within 5 days of their pre-op assessment. A small number experienced long delays (19–36 days), which could be due to medical, logistical, or resource-related factors. Outliers with longer waits may point to resource constraints, patient-specific medical considerations, or scheduling bottlenecks. Visualizing this distribution highlights both the efficiency of same-day/next-day surgeries and the exceptions where delays occur.

In conclusion, waiting time in Charter Medical Private Hospital is very short for pre-op assessment and cataract surgeries .86% of patients had pre-op assessment appointments with 15 days of referral and 90% of the patients got surgeries within 12 days of their assessment.

Ten-year Visual Acuity Outcomes Following Laser Treatment for Diabetic Retinopathy: A Closed-loop Audit and Literature Review From an Irish Tertiary Ophthalmology Service

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University Hospital Galway.

Objectives
To Evaluate Long-Term Visual Acuity Outcomes Over 10 Years in Eyes Treated with Laser Therapy for Diabetic Retinopathy (DR) in a Real-World Irish Tertiary Ophthalmology Service.

Methods
Retrospective clinical audit carried out in a single tertiary ophthalmology centre in Ireland. Patients treated with pan-retinal photocoagulation (PRP) and/or focal laser for diabetic retinopathy between June 2006 and October 2016 were identified. Of 79 eligible patients, 49 had documented baseline and 10-year best spectacle-corrected visual acuity (BSCVA) and comprised the primary analytic cohort.

Results
Among 49 eyes with paired data, mean baseline logMAR BSCVA was 0.16 ± 0.44, compared with 0.15 ± 0.40 at 10 years (paired t-test, $p = 0.70$). Visual acuity improved in 14% of eyes, remained stable in 76%, and worsened in 10%. Overall, 90% of eyes maintained or improved vision over 10 years following laser treatment.

Conclusions
Laser therapy for diabetic retinopathy is associated with durable long-term preservation of visual acuity in routine clinical practice. These findings support the continued role of laser treatment in the long-term management of diabetic retinopathy.

A Retrospective Clinical Audit Measuring Compliance with National IIH Guidelines.

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University Hospital Waterford.

Objectives
Idiopathic Intracranial Hypertension (IIH) is a clinical condition characterised by increased intracranial pressure (ICP) and occurs predominantly in women of childbearing age and typically associated with weight gain. It is a diagnosis of exclusion and is associated with elevated intracranial pressure, normal CSF composition with no clearly identified aetiology. The objective of this audit is to identify gaps in the recording of weight and appropriate scan requests.

Methods
A retrospective clinical audit was conducted using the Idiopathic Intracranial Hypertension database at University Hospital Waterford. Patients not meeting diagnostic criteria for IIH were excluded. Demographic data, clinical features, neuroimaging, lumbar puncture results, ophthalmic findings, and treatment strategies were extracted and analysed against national consensus guidance.

Results
Thirty-three patients met inclusion criteria. All patients were female, with a mean age of 28.6 years (range 18–57). Headache was the most common presenting symptom (48.5%), followed by transient visual obscurations and pulsatile tinnitus. Neuroimaging was performed in most patients; however, 18.1% had no CT or MRI brain imaging and 48.5% did not undergo venography. Lumbar puncture opening pressure was elevated in all cases where data were available. Acetazolamide was the primary treatment in 82.6% of patients. Body mass index was inconsistently documented, despite obesity being a key modifiable risk factor for IIH.

Conclusions
This audit identified important gaps in compliance with national IIH management guidelines, particularly regarding venography and weight documentation. While medical management was generally appropriate, deficiencies in investigation pathways and risk-factor assessment highlight the need for a standardised local IIH care pathway to optimise diagnosis, protect vision, and improve long-term outcomes.

Under-recognition of Visual Impairment in Hip Fracture Patients: A Retrospective Review in a Regional Trauma Unit

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University Hospital Galway.

Objectives
To determine the proportion of hip fracture patients receiving documented vision assessment during admission, and to quantify the proportion with pre-existing ophthalmology involvement.

Methods
A retrospective review was conducted of all patients admitted with hip fracture to Galway University Hospitals between April and December 2023. Demographics, co-morbidities (diabetes, cataract, glaucoma, diabetic retinopathy), previous hip fractures, and vision-related documentation were extracted from clinical records.

Results
One hundred patients were included (67 female, 33 male; mean age 79.9 years). Sixteen patients (16%) had a documented vision assessment during admission. Fourteen patients (14%) were known to ophthalmology prior to their fracture. Comorbidities included diabetes in 21%, cataract in 3%, and diabetic retinopathy in 6%; no patients had glaucoma recorded. Eight patients (8%) had a previous hip fracture.

Conclusions
Rates of documented vision assessment in hip fracture patients were low despite the recognised role of vision in falls risk. Improved integration of ophthalmological screening into ortho-geriatric assessment may offer an opportunity for secondary prevention.

Percentage of Patients Having Second Eye Surgery on the Same Day of Their Post –op Review of Their First Eye in Charter Medical Private Hospital

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Charter Medical Private Hospital, Mullingar.

Objectives
To determine the percentage of patients who underwent second–eye cataract surgery on the day of first–eye post-operative review.

Methods
The data was collected retrospectively by looking into the charts of all the patients who were booked for their post-op review in January and had cataract surgeries in both eyes.

On post-op appointment, patients' visual acuity, autorefraction, refraction with autos, oct scan and slit lamp examination are being done.

Audit period:	January 2026
Population:	all post-operative cataract patients who had both eye surgeries performed at charter medical private hospital.
Sample size:	55 patients
Data source:	post –operative cataract clinic record and theater booking log
Outcome measure:	number and percentage of patients undergoing second–eye cataract surgery on the day of first eye post-op review.

Results
Total post-operative cataract patient reviewed:55
Patient who underwent second –eye cataract surgery on the day of first –eye post op review:28
Patient who underwent second –eye cataract surgery on a later date:27
Percentage undergoing same –day second eye surgery
28/55*100=50.9%

Conclusions
This audit demonstrates that 50.9% of cataract patients who had both eye surgeries performed at Charter Medical Private Hospital underwent second-eye cataract surgery on the day of their first-eye post-operative review. This indicates that same-day sequential cataract surgery is a well-established practice within the service and is achievable in approximately half of patients.

Importantly, performing second-eye cataract surgery on the day of first-eye post-operative review offers several advantages, including a reduced number of hospital visits, improved patient convenience, and more efficient use of theatre resources, allowing us to see refractive surprise if any, before going ahead with the other eye.

Overall, the findings suggest that current practice at Charter Medical Private Hospital is balanced and clinically appropriate, with scope for further optimization through pathway review and improved documentation.

Anterior Capsular Schisis During Cataract Surgery: A Case Series and Review of Intraoperative Management

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Objectives
To describe the intraoperative recognition and surgical management of anterior capsular schisis during cataract surgery and to highlight key features that help differentiate capsular delamination from a full-thickness capsular defect.

Methods
We conducted a retrospective case series of two patients undergoing cataract surgery in whom anterior capsular schisis was identified pre- or intra-operatively. Clinical history, intraoperative findings, surgical management and postoperative outcomes were reviewed. In one case, trypan blue dye was used to enhance visualisation of the capsular layers.

Results
Two patients undergoing cataract surgery were found to have anterior capsular schisis.

In Case 1, an 85-year-old man with progressive bilateral age-related cataracts had no history of heat or infrared exposure. Anterior capsular schisis was identified intraoperatively during right-eye phacoemulsification, initially mimicking a capsular tear. A continuous curvilinear capsulorhexis (CCC) was successfully created in the intact inner capsule layer, allowing standard phacoemulsification with in-the-bag intraocular lens implantation. The postoperative course was uncomplicated with improvement in visual acuity.

In Case 2, a 79-year-old woman with progressive visual decline, worse in the left eye, had no history of heat or infrared exposure, trauma, or pseudoexfoliation. Bilateral anterior capsular schisis was identified. Trypan blue dye was used in the left eye to enhance visualisation of capsular delamination. CCC was successfully performed in the deeper intact capsule in both eyes, followed by uneventful phacoemulsification and in-the-bag IOL implantation with excellent visual outcomes. Nd:YAG capsulotomy later demonstrated two distinct capsular layers, confirming the diagnosis.

Conclusions
Anterior capsular schisis is an uncommon but important intraoperative finding. Recognition of capsular delamination and engagement of the deeper intact capsular layer allows standard cataract surgery to proceed safely without increasing the risk of complications. Surgeons should avoid incorporating the delaminated superficial capsule and instead perform a normal capsulorhexis on the intact inner capsular layer. Anterior capsular schisis does not preclude safe standard cataract surgery.

SF6 Gas Entrapment in the Canal of Petit: A Rarely Documented Complication of Pneumatic Retinopexy

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University Hospital Galway.

Objectives
Herein we present a case of SF6 gas bubble entrapment in the pre-hyaloid space, following pneumatic retinopexy. This is a rarely documented complication, with a paucity of published cases. We include, to our knowledge, the first published ultra-widefield image illustrating this complication, offering new insights into a scarcely described phenomenon.

Methods
A forty-three year old, high myope, phakic, male patient presented to the vitreo- retinal service with a left eye, macula on, bullous supero-nasal, rhegmatogenous retinal detachment with a round tear in lattice degeneration at 10:30 and no posterior vitreous detachment. The treatment options discussed were scleral buckling and pneumatic retinopexy. In line with the PIVOT trial criteria the patient was deemed suitable for pneumatic retinopexy and underwent a single step procedure with cryotherapy and intravitreal injection of 0.5ml 100% SF6. Examination after gas injection both intraoperatively and postoperatively revealed a small and mobile gas bubble in the vitreous cavity and a larger gas bubble sequestered superotemporally at the injection site beside the crystalline lens. Ultra-widefield imaging (Optos California Dunfermlin plc) was used to capture this rarely documented complication. The patient was subsequently managed conservatively with posturing.

Results
Postoperative face-down posturing resulted in successful relocation of the intraocular gas bubble to its anatomically desired location. At approximately 20:00 o'clock on day 1 post surgery (22 hours post-op) the patient reported the sudden appearance of a larger gas bubble within his visual field while posturing in his hospital room. This subjective observation suggested a shift in bubble position. Subsequent ultra-widefield imaging performed the following day confirmed relocation of the gas bubble within the vitreous cavity, demonstrating an effective tamponade effect on the superior retina. The retina was successfully reattached, and no further complications were noted.

Conclusion:
This case report and literature review highlight a rarely described complication of pneumatic retinopexy and support its conservative management. The inclusion of ultra-widefield imaging, enhances the understanding of the gas entrapment in the canal of Petit and may aid in the training of vitreoretinal surgeons encountering similar postoperative anomalies.

Putting a SUS in Suspicious Stroke – Susacs Syndrome: A Case Presentation

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Objectives
This case presentation is to highlight the complexity of diagnosing a case of Susacs syndrome – a rare vasculitic microangiopathy that affects mostly young women.

Methods
A 33 year old female presented to the Eye Emergency Department due to 1 day history of central visual changes. She had been discharged recently due to migraineous attack, which retrospectively called as a Left parietal infarct. She was diagnosed with Right Branch Retinal Artery Occlusion (BRAO) and was admitted medically for stroke workup. All stroke workup is not significant.

Results
First MRI showed multiple FLAIR hyperintense lesion, second MRI showed increased number of lesions, notably at the left corpus callosum. Neuro-ophthalmology opinion was sought and Fundus Fluorescein Angiography confirmed Arterial wall hyperfluorescence on both eyes with delayed filling on Right Eye. She was commenced on high dose steroid, IV Immunoglobulins (IVIg), Cyclosporin, and Rituximab. Audiogram is normal. She has continued follow up with continued immunosuppression with neurology and rheumatology. Repeat MRI shows no new lesion.

Conclusions
Susacs syndrome is a rare vascular microangiopathy that can lead to profound adverse outcome for young patients. Recognition from ophthalmology is paramount as it is one of the earliest hallmarks of the disease.

A Case Series of Endogenous Endophthalmitis: Aetiology, Management and Outcomes

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Objectives
To present a case series of endogenous endophthalmitis highlighting variability in aetiology, clinical course and visual outcomes.

Methods
A retrospective chart review was carried out of all cases of endogenous endophthalmitis managed at a tertiary ophthalmology centre over the last two years.

Results
Four cases of endogenous endophthalmitis were identified with diverse aetiologies, including fungal (Candida dubliniensis, Candida albicans, Aspergillus fumigatus) and bacterial (Streptococcus pneumoniae) organisms. Predisposing factors included immunosuppression, systemic sepsis, disseminated infection and an indwelling central line. Presentations ranged from unilateral to bilateral involvement and from acute/subacute to rapidly progressive visual loss.

Management required a multidisciplinary approach involving ophthalmology, microbiology, infectious diseases and other relevant medical specialties, with all patients undergoing systemic workup to identify the source of infection. Treatment included intravitreal antimicrobials, prolonged systemic therapy and pars plana vitrectomy, with silicone oil tamponade utilised in severe cases; repeat vitrectomies was required in one case, which ultimately progressed despite intensive therapy to require enucleation for infection control.

Visual outcomes were variable, ranging from good functional recovery to hand movements or no perception of light in affected eyes. Poor outcomes were associated with immunosuppression, disseminated disease and structural complications including retinal detachment and macular involvement.

Conclusions
Endogenous endophthalmitis is a rare but vision-threatening manifestation of systemic infection, requiring early recognition, systemic evaluation and coordinated multidisciplinary care. Pars plana vitrectomy plays an important role in both diagnosis and management. In severe cases, surgical intervention, including enucleation, may be required for infection control. Outcomes remain guarded, particularly in immunocompromised patients.

The Posterior Chamber of Secrets: Ocular Dirofilariasis

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Royal Victoria Eye and Ear Hospital, Dublin.

Objectives
To describe a rare case of intra-ocular dirofilariasis, including the investigation work-up and management of the condition.

A 38-year-old female patient presented to the Eye Casualty with complaint of a floater in the Left Eye for 2 days. No other ocular or systemic symptoms were reported. She had nil past medical history of note. Travel history included recent trips to Romania, Japan and Texas, USA.

Methods
Investigations performed included bloods for uveitis screen, autoimmune blood panel, infectious disease blood panel, chest radiograph and MRI Head and Orbits with contrast.
The patient was referred to the Infectious Diseases team for further assessment and MDT discussion.

Results
The above listed blood investigations and imaging showed no significant abnormality.

Visual acuity was 6/6 in both eyes and intra-ocular pressures were normal. Clinical examination and fundal imaging revealed an unusual serpiginous-like pattern of retinal pigmentation and degeneration with sharply demarcated borders, appearing to emanate from the optic disc. There was also a small grey vitreous floater noted. There was no active inflammation in the eye.

Conclusions
The diagnosis of presumed ocular dirofilariasis was made based on the size of the parasite on imaging. The decision was made to observe the patient periodically, and not to intervene at present, given the lack of intra-ocular inflammation or effect on vision.

Flashes and Floaters in Eye Casualty: Incidence of Sight-Threatening Retinal Pathology in a Tertiary Centre Audit

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University Hospital Galway.

Objectives
To determine the incidence of serious retinal pathology among patients presenting with acute flashes and floaters, and to evaluate how frequently these symptoms are associated with non-sight-threatening conditions.

Methods
A retrospective audit of 50 patients presenting to University Hospital Galway Eye Casualty with flashes and/or floaters was performed. Demographic and clinical data, including symptom laterality and final diagnosis, were collected. Diagnoses were categorised as sight-threatening or non-sight-threatening.

Results
Of the 50 patients, 62% were female and 38% male, with a mean age of 63 years. 45 patients had unilateral symptoms and 5 had bilateral symptoms. Among unilateral presentations, 55.6% were diagnosed with uncomplicated posterior vitreous detachment, while 11.1% had no identifiable cause and were discharged. Potentially sight-threatening pathology was identified in 26%, with retinal breaks comprising 54% of this group. Remaining cases included benign vitreoretinal conditions such as lattice degeneration and white without pressure, and one case of stable diabetic retinopathy. Among bilateral presentations, one patient had retinal breaks, while the remainder had benign pathology.

Conclusions
Most patients presenting with flashes and floaters have non-sight-threatening conditions. However, a significant minority have retinal pathology, supporting the need for careful assessment while highlighting opportunities for improved triage.

BALAD of a Thin Macula: Loss of the Outer Retina Following Bacillary Layer Detachment in Rhegmatogenous Retinal Detachment

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Objectives
To describe the clinical course and outcome of a novel case of loss of the outer foveal layers following bacillary layer detachment secondary to macula-off rhegmatogenous retinal detachment.

Methods
Observational case study with multimodal imaging.

Results
A 70-year-old phakic man presented with a six-day history of vision loss and was found to have a superotemporal macula-off RRD. Preoperative spectral-domain OCT of the detached fovea was obtained, revealing a bacillary layer detachment (BALAD). Early post-vitrectomy OCTs demonstrated loss of the outer retinal layers at the location of the BALAD. 12-month follow-up revealed a persistent central scotoma, reduced visual acuity without recovery of the outer retinal layers.

Conclusions
BALAD is an increasingly recognised complication of macula-off retinal detachments detectable only on OCT imaging of the affected fovea in the peri-operative period. It is associated with an elevated risk of perioperative macular hole formation. Our case is the first reported case of loss of the outer retinal layers at the time of surgery in a patient with BALAD, with resulting poor visual prognosis. Awareness of this potential complication of vitrectomy in patients with BALAD in RRD should inform surgical technique and pre-operative patient counselling.

The Burden of Treatment: A Quality-of-Life Questionnaire on Patients Undergoing Long-term Intravitreal Injections for Wet Age-Related Macular Degeneration at University Hospital Waterford.

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Objectives
The introduction of intravitreal injections (IVI) of anti-Vascular Endothelial Growth Factor (anti-VEGF) has led to a significant improvement in visual prognosis for patients with wet Age-Related Macular Degeneration (wARMD). The treatment however is invasive, frequent, time-consuming, and prolonged, often continuing for many years without a defined completion date. The burden of the disease and of vision loss on a patient's quality of life is well documented. Less is known about the burden of the treatment. This study looked at patients undergoing IVI treatment for more than 1 year, assessing patient understanding of their disease and treatment, their treatment experiences, identifying sources of distress and worry, with the ultimate objective of understanding the impact of this treatment on patient well-being.

Methods
A quality-of-life questionnaire was carried out on 47 patients undergoing IVI for wARMD for more than 1 year. The questionnaire consisted of 27 questions and divided into 2 sections- the first focussed on the disease itself and the second on the treatment. Patients were aided in the completion of the questionnaire by people not involved in their clinical management (JS & CD). 7 questions were identified as most relevant to and reflective of the burden of treatment. This subset was used to calculate the treatment burden score (TBS) for each patient, with a maximum possible TBS of 28.

Results
The mean age of participants was 78.0 years (range 57-94) with a slight female preponderance (F=55.3%). 65.5% of patients had been undergoing intravitreal therapy for more than 5 years. 48.8% had undergone more than 20 intravitreal injections.

Disease: 76.5% felt the diagnosis of wARMD had been explained in a satisfactory or very satisfactory way to them. 74.4% of participants cited loss of vision as their greatest fear, followed by loss of independence (27.6%) and impact on family (4.4%). 57.3% felt their disease had no impact or a slight impact on their daily lives and 23.4% felt it had a significant effect. 46.7% said they thought about their diagnosis a lot or all the time and 25.4% said they rarely or never thought about their condition.

Treatment: 82.8% were satisfied or very satisfied with how the treatment was explained to them and felt well prepared. 51% reported feeling worried or very worried about the treatment prior to starting. 53.1% said they were less worried now that they were on treatment for a long time, 44.6% felt the same level of worry and only 1 patient felt more worried. 72.3% continued to worry primarily about disease-related issues (loss of vision, loss of independence). Regarding treatment-specific worries, 71.4% worried about getting to treatment appointments (time taken, transport, inconveniencing others, cost). 26.1% were anxious about the pain of the procedure, 21.4% about possible side-effects or complications, and 11.9% about the treatment not working. The mean TBS was 6.4 (range -1 to 14). 63.7% of patients scored 7 or less. 12.7% considered stopping treatment at some point during their course of injections for reasons including procedure- related distress, perception that the treatment was not working or difficulty in attending appointments.

Conclusions
The findings of this study suggest that long-term anti-VEGF IVIs for wARMD can impose a significant psychological burden on patients. Whilst some treatment-related distress may be unavoidable, a significant majority of patients cited the practicalities of getting to treatment appointments as the greatest source of their worry.

Active Triage Through Local Category Assignment in New Paediatric Referrals: A Proposed Audit.

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Children's Health Ireland, Dublin.

Objectives
Assigning a clinical category to referrals on a new patient waiting list is a vital step in ensuring safe and effective service planning. While mandatory priority categories — ranging from urgent to routine — are assigned at triage, local subspecialty categorisation remains voluntary, with an estimated half of referrals lacking an assigned category.
This audit aims to:
1. Establish baseline compliance with local subspecialty categorisation.
2. Develop and implement an audit tool to improve compliance among clinical and administrative staff.

Methods
A prospective cross-sectional audit will be conducted within the Ophthalmology Department at Children's Health Ireland, focusing on local subspecialty categorisation.
A random sample of at least 100 referrals without an assigned category will be reviewed. Records will be assessed for documentation of a subspecialty category (e.g. Uveitis Screening, Anterior Segment, Neuro-ophthalmology, Strabismus).
Baseline compliance across the full waiting list will be established. A structured audit tool will then be introduced to monitor compliance, alongside targeted education to support improved triage practices.

Results
The new patient referrals waiting list sits at approximately 1200 with 300 additional new referrals received at CHI month on month.

The 100-patient sample is anticipated to identify patterns of non-compliance by referral source, subspecialty, and waiting time.

Conclusions
Current levels of local subspecialty categorisation hamper effective service planning, including activity ramp-down and transfer of care to Community Healthcare Organisations (CHOs) where appropriate.

This audit introduces a structured review process designed to enhance categorisation rates, improve patient safety, and support governance requirements for service transition.

Sequential Histologically Distinct Eyelid Malignancies in Sjögren Syndrome: Implications for Surveillance

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Objectives
To describe a rare case of sequential, histologically distinct ocular adnexal malignancies in a patient with Sjögren syndrome and prior methotrexate exposure, and to discuss the implications for periocular tumour surveillance and surgical management in the context of autoimmune disease.

Methods
Clinical, operative, and histopathological data were reviewed for a 56-year-old woman with primary Sjögren syndrome who presented with a new right lower eyelid lesion two years after orbital exenteration for primary orbital squamous cell carcinoma of the left orbit. Assessment included clinical examination, histopathological and immunohistochemical analysis of excised tissue, and staging cross-sectional imaging. The surgical approach comprised wide local excision of the entire right lower eyelid with deferred reconstruction pending margin confirmation, followed by Fricke flap reconstruction.

Results
Histopathological analysis confirmed sebaceous carcinoma measuring 17 mm in basal diameter and 5 mm in depth, involving the lid margin, with no lymphovascular invasion or perineural spread. Tumour cells were positive for CD15, epithelial membrane antigen (EMA), and p63 on immunohistochemistry. Staging was T2b N0 M0 with no regional lymphadenopathy or distant metastases. Clear surgical margins were achieved, and Fricke flap reconstruction restored eyelid function and cosmesis. The patient remains under close ophthalmic and oncological surveillance; subsequent concern for conjunctival recurrence has prompted further assessment and interval imaging.

Conclusions
Sequential, histologically distinct ocular adnexal malignancies can occur in Sjögren syndrome, potentially compounded by prior immunosuppressive therapy. Although a direct causal relationship has not been established, chronic immune activation, epithelial stress, and altered tumour surveillance provide biologically plausible contributors. Clinicians should maintain heightened vigilance in this patient population, with a low threshold for biopsy of new periocular lesions. When managing tumours threatening an only seeing eye, eye-sparing excision with circumferential margin control offers satisfactory oncological outcomes. Multidisciplinary follow-up involving ophthalmology, rheumatology, and oncology is essential, and patients should be counselled regarding the risk of bilateral disease.

Case Report of Normal Pressure Glaucoma in a Young Female with Loeys Dietz Syndrome Type 4.

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Objectives
Loeys Dietz Syndrome (LDS) is an autosomal dominant connective tissue disease, characterised by mutations in the transforming growth factor (TGF) beta gene (Gouda et al., 2022). Ocular manifestations of LDS include hypertelorism, esotropia, scleral abnormalities, reduced central corneal thickness and myopia (Gouda et al., 2022, Busch et al., 2018). While there is only one documented case report of a patient with normal pressure glaucoma (NPG) and LDS, in a female with LDS type 3 (SMAD variant) (Villeneuve-Cloutier et al., 2025), this is the first case report to our knowledge of NPG and LDS type 4.

Methods
Case Report

Results
A 40-year-old female RD presented in 2016 with right sided NPG. Past medical history was positive for features of vascular dysregulation such as migraine, Raynaud's phenomenon, nocturnal hypotension, and post-partum haemorrhage in 2010. Intraocular pressure (IOP) by Goldmann Applanation Tonometer (GAT) was recorded at 14 mmHg OD and 12 mmHg OS. Central corneal thickness (CCT) was 490µm OD and 487µm OS. The right optic disc had a cup-to -disc ratio (CDR) of 0.7, with an associated right superior altitudinal visual field (VF) defect and a mean deviation (MD) of -5.52 dBs. The left VF was intact with a normal optic disc appearance.

After a 5 year period lost to follow up, the patient represented in 2021 with advanced right NPG, with a CDR of 0.9, and a dense superior altitudinal defect involving fixation and a MD of -14dBs. The left optic nerve showed early inferior shallowing but retained a full VF consistent with pre-perimetric disease. Treatment with topical prostaglandin analogues (PGAs) and carbonic anhydrase inhibitors (CAIs) was commenced. However, given the thin CCT, advanced right optic nerve cupping and right VF loss as well as her young age, a mitomycin C augmented trabeculectomy was performed in November 2021.

In parallel, the patient noted to have a marfanoid phenotype and previous spontaneous left carotid dissection, underwent genetic testing confirming a heterozygous TGF beta 2 mutation consistent with a diagnosis of LDS type 4. The patient was commenced on losartan 25 mg OD, targeting the common TGF beta pathway linking glaucoma and LDS (Kim et al., 2022). From 2021 to 2026 the patient's IOP and VFs have remained stable.

Conclusions
This is the first case report to our knowledge of LDS type 4 and NPG. This case highlights the rapid progression of advanced NPG in a patient with LDS and discusses the utility of losartan in such cases.

Severe Right Odontogenic Orbital Cellulitis Complicated by Bilateral Orbital Involvement and Intracranial Extension

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Objectives

Intracranial involvement is a rare and potentially life-threatening complication of orbital cellulitis (Tsirouki et al., 2018). We report the case of a 67-year-old female with right sided odontogenic orbital cellulitis, complicated by bilateral orbital involvement that progressed to cavernous sinus involvement and ventriculitis, requiring a prolonged intensive care unit (ICU) admission.

Methods

Case presentation and literature review.

Results

GM, a 67-year-old female presented to ED in St James's Hospital, Dublin with a 5 day history of right tooth pain. GM was found to be in septic shock, with rapidly progressing right periorbital swelling, and was intubated and ventilated in ED. GM was discovered to have right orbital cellulitis, secondary to an odontogenic infection. GM underwent a series of interventions including ICU admission, prolonged treatment with broad spectrum intravenous antibiotics, emergent lateral canthotomy and cantholysis, extraction of multiple teeth with right maxillary abscess drainage, followed by right orbital exploration and later right endoscopic endonasal decompression. Streptococcus constellatus was isolated from surgical aspirates. GM further developed cavernous sinus extension and ventriculitis. After a 2-month ICU admission GM improved, however her right vision was reduced to NPL, and left extraocular movements limited, with left best corrected visual acuity 6/12.

Conclusions

This case highlights the serious complications that can arise in severe odontogenic Orbital Cellulitis, and challenges in diagnosis and management in an ICU setting. Urgent multidisciplinary involvement is required, typically involving Ophthalmology, Anaesthetics, ENT and Maxillofacial Surgery input.

The Quiet Vitreous and the Aggressive Retina: A Case of Fingolimod – Related Progressive Outer Retinal Necrosis

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Objectives

Case Report

Methods

Case Report

Results

A man in his mid 40s presented to the Emergency Eye Department at Sligo University Hospital with a two-week history of blurred vision and floaters in the left eye. His past medical history was significant for relapsing–remitting multiple sclerosis, for which he was receiving oral Fingolimod therapy.

On examination, uncorrected visual acuity was 6/9 in both eyes. The anterior chambers were quiet bilaterally. Posterior segment examination revealed bilateral mild vitritis BIO 1+ and extensive peripheral yellow-white retinal necrotic patches associated with occlusive vasculitis. A clinical diagnosis of progressive outer retinal necrosis (PORN) was made. Polymerase chain reaction testing of an aqueous sample confirmed varicella zoster virus (VZV) infection.

The patient was treated with systemic antiviral therapy (intravenous acyclovir and oral vangalcyclovir) in combination with serial bilateral intravitreal Foscarnet and Ganciclovir injections and prophylactic 3600 slit lamp barrier retinal laser photocoagulation posterior to retinal necrotic areas. Fingolimod was discontinued on admission, immunosuppression was halted and his multiple sclerosis management was subsequently transitioned to subcutaneous interferon beta-1therapy after he was discharged from hospital.

On discharge, visual acuity was 6/9 in the right eye and 6/7.5 in the left eye, with stabilisation of retinal necrosis and attached retinae bilaterally. Intravenous antiviral therapy was converted to long-term oral valaciclovir (1 g three times daily).

Six months following presentation, the patient developed a rhegmatogenous retinal detachment in the left eye requiring 25G pars plana vitrectomy, endolaser, internal limiting membrane peel and silicone oil tamponade. At most recent follow-up, best-corrected visual acuity was 6/9 in the right eye and 6/24 in the left eye. The right eye has developed chronic cystoid macular oedema and is awaiting further intravitreal treatment.

Conclusions
To our knowledge, this represents the first reported case of fingolimod-associated progressive outer retinal necrosis. PORN carries a poor visual prognosis, with reported final visual acuity often limited to hand movements despite antiviral therapy. This case highlights the importance of early recognition of necrotizing herpetic retinitis cases, establishment of a multidisciplinary team and the administration of an aggressive combined systemic and intravitreal antiviral treatment in order to optimize visual outcomes.

Bilateral Endogenous Endophthalmitis Due to Candida Dubliniensis in a Patient With High-Grade Lymphoma: A Rare Case With Favorable Visual Outcome

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Objectives
To report a rare case of bilateral endogenous endophthalmitis caused by Candida dubliniensis in an immunocompromised patient and to highlight the diagnostic challenges, management strategies, and visual outcomes in comparison with existing literature.

Methods
A 75-year-old male with stage IV high-grade B-cell lymphoma and a recent history of chemotherapy complicated by neutropenic sepsis presented with bilateral ocular symptoms. Clinical examination revealed bilateral anterior uveitis with vitritis and a focal chorioretinal lesion in the left eye. The patient underwent urgent pars plana vitrectomy with vitreous sampling and received intravitreal vancomycin, ceftazidime, and amphotericin B. Microbiological analysis confirmed Candida dubliniensis. Systemic antifungal therapy with voriconazole and amphotericin B was initiated. Clinical findings, treatment course, and outcomes were documented and analyzed in the context of previously reported cases.

Results
Vitreous cultures confirmed Candida dubliniensis. Following combined surgical and systemic antifungal therapy, there was progressive resolution of intraocular inflammation. Visual acuity improved from 6/30 to 6/12 in the left eye, with stable 6/6 vision in the right eye. Final follow-up demonstrated complete resolution of infection with residual chorioretinal scarring and post-operative cystoid macular oedema in the left eye, without recurrence.

Conclusions
Candida dubliniensis is a rare but important cause of endogenous endophthalmitis, particularly in immunocompromised patients. This case demonstrates that early surgical intervention combined with targeted antifungal therapy can result in favorable visual outcomes. Clinicians should maintain a high index of suspicion even in the absence of positive blood cultures, given the diagnostic and therapeutic implications of this uncommon pathogen.

Management and Outcomes of Ocular Ischaemic Syndrome (OIS): A 6-year Retrospective Audit of Carotid Imaging Pathways

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Objectives

To assess the clinical management of OIS patients at the Royal Victoria Eye and Ear Hospital, specifically, the timeliness of carotid doppler imaging, the frequency of subsequent vascular surgical interventions, and visual acuity outcomes.

Methods

A retrospective clinical audit was conducted on all patients diagnosed with OIS at the Royal Victoria Eye and Ear Hospital between January 1, 2018, and December 31, 2024. Patients were identified using the Medisight Electronic Medical Record (EMR). Data collection included patient demographics, interval from diagnosis to carotid Doppler imaging and findings, the performance of carotid endarterectomy or stenting, and the final recorded visual acuity (VA).

Results

20 eyes of 16 patients met the inclusion criteria. The mean patient age was 74 years old (range: 56-83 years). 11 patients (69%) were male. 3 patients (5 eyes) were known carotid vasculopaths and had recent investigations. Among the remaining 13 patients (15 eyes), the mean interval from diagnosis to carotid imaging was 25.9 days. 15% of patients had a doppler performed within 1 week of diagnosis, and 69% within 4 weeks. 31% were imaged after 4 weeks. 47% of patients demonstrated non-significant occlusion (<50%), 5% had moderate occlusion (50–69%). Severe, incomplete occlusion (70–99%) was noted in 21%, and 26% presented with complete occlusion. Carotid revascularisation was performed in 10% of the total cohort, representing 40% of those with significant (50–99%) stenosis. 50% of eyes had a final VA of counting fingers (CF) or worse, with 25% of the total cohort progressing to either perception of light (PL) or no light perception (NPL).

Conclusions

OIS is associated with significant ocular and systemic morbidity. In this cohort, nearly one-third of patients with symptomatic carotid disease waited four or more weeks after diagnosis for carotid imaging. This underscores the need for a 'fast-track' carotid doppler pathway for all newly suspected OIS cases. Visual outcomes remain poor, with half reaching counting fingers or worse, emphasising the importance of early diagnosis and rapid referral.

Mycobacterium Abscessus in an Exposed Scleral Buckle: A Rare Case Report

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Objectives

Scleral buckling continues to play an important role in the management of rhegmotogenous retinal detachment, with generally favourable long term outcomes. Late complications, including scleral buckle exposure or extrusion may occur, predisposing patients to microbial colonisation or infection. Most reported infections associated with scleral buckles involve common ocular surface flora, including staphylococcus species; atypical organisms are only rarely reported. Mycobacterium abscessus is a rapidly growing non-tuberculous mycobacterium commonly found in water, soil and dust. Most buckle-associated non tuberculous mycobacterium infections are attributed to the M. chelonae complex and the M. fortuitum complex. More recently, however, infections with M. abscessus complex have been on the rise, creating considerable challenges for treatment given the organism's inherent antimicrobial resistance. Given the scarcity of data on the management and outcomes of these infections, we present a case of M. abscessus scleral buckle infection along with a review of the relevant literature.

Methods

Case Report

Results
A 52-year-old phakic man with a history of right eye macula off retinal detachment repaired with pars plana vitrectomy and scleral buckle in 2013 presented in February 2026 with a two month history of right eye redness, pain, and discharge. Clinical examination showed conjunctival hyperaemia with nasal scleral buckle exposure, along with purulent conjunctival discharge. There was no evidence of vitritis or endophthalmitis, and his retina was flat. He had no significant medical history. He works in construction and lives rurally. He was commenced on topical ofloxacin and steroids and underwent urgent scleral buckle removal on 4th March 2026. Intraoperatively the silicone buckle was noted to be coated in a pseudocapsule, there was no scleral thinning noted. Swabs sent for culture and sensitivity grew M. abscessus. With advice from the microbiology team at Galway University Hospital, he has remained on topical ofloxacin and amikacin, with resolution of his symptoms.

Conclusions
Infection of scleral buckles with Mycobacterium abscessus is exceptionally uncommon, with only a small number of cases reported internationally and none previously documented in Ireland or Europe to our knowledge. Early microbiological diagnosis and susceptibility-guided therapy, often combined with prompt surgical intervention, are critical given the organism's intrinsic drug resistance and the potential for poor outcomes. This report contributes to the limited global literature.

The Impact of a Text Reminder System on Non-Attendance Rates for Intravitreal Injection Appointments at Galway University Hospital: An Audit

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Objectives
This study aims to evaluate the rate of non-attendance at intravitreal injection appointments at Galway University Hospital over a four-week period. In addition, the demographic characteristics of patients who do not attend their scheduled appointments will be examined. Following this, a text message reminder system will be implemented, and the rate of non-attendance will be re-audited to assess the impact of this intervention.

Methods
A list of patients scheduled to receive intravitreal injections over a four-week period (17th February 2025 to 16th March 2025) was obtained from the appointment records at Galway University Hospital. Patient records were reviewed using the electronic patient record system to collect demographic data (age and sex), distance travelled to the appointment, ophthalmic diagnosis, co-morbidities, history of previous non-attendance, and injection frequency. Following implementation of a text message reminder system, patient records were reviewed again to collect the same data for non-attendees during the same four week period the following year (23rd February 2026 to 22nd March 2026).

Results
From 17th February 2025 to 16th March 2025, 524 patients were booked for intravitreal injections at Galway University Hospital. Among these there were 43 non-attendances (8.2%). The average age of non-attendees was 71.9 years (range 32-86 years). 55% were male (n=24). The average distance to travel to the appointment for non-attendees was 49.92km (median 28km, range 0.65km – 148km). A text message reminder system was implemented on 20th February 2026. From 23rd February 2026 to 20th March 2026 there were 478 patients booked for intravitreal injections at Galway University Hospital, of which 33 did not attend (6.9%). The average age of non-attendees was 71 years (range 22-95 years). 57% were male (n=19). The average distance to travel to appointments was 53.7km (range 0.55 – 118km).

Conclusions
Following implementation of a text message reminder system, a reduction in non-attendance rates was observed from 8.2% to 6.9%. Although not statistically significant (p=0.43, 95% confidence interval −4.6% to +2.0%), this trend may still be clinically and operationally meaningful, and highlights the potential role of reminder systems as a low-cost intervention to improve service efficiency.

Itch, Scratch, Detach: Retinal Detachment in Severe Atopic Dermatitis

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Objectives
To describe white cataract and rhegmatogenous retinal detachment (RRD) in young patients with habitual eye rubbing secondary to severe atopic dermatitis and to review the literature describing the association between this condition and RRD.

Methods
We report the cases of two young, female patients with severe atopic dermatitis presenting with white cataracts and RRD. Their clinical features, surgical management and postoperative outcomes are elaborated. The literature on atopy-associated RRD is examined.

Results
Two young, female patients with severe atopic dermatitis and a history of prolonged topical corticosteroid use presented with bilaterally reduced visual acuity and white cataracts. The first patient had RRD at presentation, while the second developed symptomatic RRD two weeks after uncomplicated cataract surgery. Both RRDs were associated with posterior vitreous detachment and multiple, peripheral retinal breaks, including horseshoe tears, with varying degrees of proliferative vitreoretinopathy. Surgical management required combined and sequential phacoemulsification and pars plana vitrectomy with adjuncts including endolaser, internal limiting membrane peel and silicone oil tamponade. The second case was complicated by recurrent detachment after silicone oil removal. In both cases visual acuity improved following surgery.

Conclusions
Patients with atopic dermatitis are at risk of RRD which may be precipitated by habitual eye rubbing, peripheral retinal degeneration and/or an increased incidence of anterior segment pathology including cataract. The cases described highlight the importance of maintaining a high index of suspicion for retinal pathology in young patients with atopic dermatitis and indeed the complexity of surgical management necessary in this cohort.

Rate of Visual Field Progression Using Mean Deviation in Glaucoma: A Clinical Audit of Humphrey Visual Fields

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Objectives
To evaluate the rate of visual field (VF) progression by using Mean Deviation (MD) values from serial Humphrey Visual Field (HVF) tests in eyes with at least five reliable recorded tests.

Methods
This audit included 64 eyes from patients with glaucoma. Eyes with ≥5 reliable HVF tests over a minimum of two years were included. MD values were extracted and rates of change (dB/year) were calculated. Eyes were categorised based on rate of MD change as follows: non-progressors (0 to -0.5 dB/year), slow (-0.5 to -1.0 dB/year), moderate (-1.0 to -2.0 dB/year), and fast (> -2.0 dB/year), consistent with thresholds reported in the literature.

Results
A total of 64 eyes met inclusion criteria. 33 eyes (51.6%) were non-progressors. Progression was identified in 31 eyes (48.4%), the majority of which demonstrated slow progression (18 eyes, 28.1%). Moderate progression was observed in 12 eyes (18.8%), while only 1 eye (1.6%) exhibited fast progression. The distribution indicates that while progression is common, rapid deterioration is relatively rare in this cohort.

Conclusions
Almost half of eyes demonstrated measurable VF progression, with the majority progressing at a slow rate. These findings are consistent with published data suggesting that most treated glaucoma patients experience gradual functional decline. An MD-based method provides a practical mean for monitoring progression in routine clinical practice. Early identification of faster progressors remains critical to prevent significant visual impairment.

Visual Recovery Through Art: A Patient's Perspective Post Bevacizumab Injections for Wet Age-Related Macular Degeneration

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Objectives
To explore and showcase the visual changes associated with wet ARMD as experienced from a patient's perspective. Age Related Macular Degeneration is a potentially progressive maculopathy affecting central vision[1]. In the Republic of Ireland it is estimated to account for 25% of all blind registrations and remains one of the most common causes of blindness prevalent in developed countries[2]. Bevacizumab is a recombinant monoclonal antibody and the treatment of choice for wet ARMD.

Methods
We performed an observational case study of a 63-year-old patient who works as a painter. Following their diagnosis of wet ARMD and prior to treatment, the patient produced several painting representations of her visual perception. The patient produced paintings of her grandchildren and family, and elected to share said images with the treating ophthalmology team. Following a standard course of intravitreal bevacizumab injections over 24 weeks, the artworks were compared qualitatively for features of distortion to better understand the patient's perspective.

Results
Pre – treatment paintings demonstrated significant distortion including warping of lines. Patients with wet ARMD commonly present with decreased visual acuity, a central scotoma, difficulty recognizing faces and metamorphopsia. Post treatment artwork revealed notable improvements with reduced distortion and greater accuracy. These visual changes were accompanied by an objective improvement in her visual acuity, and OCT results.

Conclusions
This case highlights the value of incorporating patient generated visual art as a unique and impactful qualitative tool in assessing treatment outcomes in wet ARMD. Artistic representation may offer clinicians additional insight into patient experience beyond conventional clinical measures. This is reflected in historical accounts of Claude Monet, whose artistic output evolved alongside changes in visual function, underscoring the relationship between vision and creative expression[3].

Splice-altering Variants and Their Influence on Phenotype in VEXAS Syndrome

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Objectives
The aim of this study was to characterise the molecular and clinical impact of splice-altering variants in UBA1 in VEXAS syndrome, with particular focus on their influence on phenotypic expression and ocular involvement. Specifically, we sought to evaluate the predicted functional consequences of splice-site variants using in silico analysis and to examine reported clinical cases to assess associations between splice-altering variants and ocular disease severity.

Methods
This study comprised two complementary components: an in silico analysis of splice-site variants and a secondary analysis of published clinical cases.

For the in silico component, splice-site variants in UBA1 were identified from the publicly available database; ClinVar. Variants were included if they affected canonical splice donor (+1/+2) or acceptor (−1/−2) sites. All variants were annotated using Human Genome Variation Society (HGVS) nomenclature. Splicing impact was assessed using SpliceAI (Illumina), generating delta scores for donor and acceptor loss or gain. These scores were interpreted as a proxy for splice disruption severity and

used to infer the likelihood of aberrant versus residual wild-type transcript production ("leaky" splicing), acknowledging the limitations of computational prediction.

For the clinical component, a structured review of the literature was undertaken using PubMed/MEDLINE to identify reported cases of VEXAS associated with splice-altering variants in UBA1. In accordance with the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) guidelines, data was collected and risk of bias was assessed. Extracted data included the presence and type of ocular involvement, as well as overall disease severity and outcomes. Ocular manifestations were categorised pragmatically as absent, mild (non–vision-threatening), or severe (vision-threatening, including scleritis or retinal vasculitis). Particular attention was given to cases in which both genotype and ophthalmic phenotype were clearly described.

Results

In the in silico analysis, a total of 34 splice-site variants in UBA1 were identified using ClinVar. All variants were located at canonical splice donor or acceptor sites (±1/±2). SpliceAI (Jaganathan et al., 2019) predictions were highly consistent, demonstrating near-complete loss of canonical splice site function in all cases, with delta scores approaching 1.0. Although cryptic splice site activation was variably predicted, these events were not expected to restore normal transcript integrity. Available transcript-level data from patient-derived RNA supported these predictions, demonstrating reduced levels of correctly spliced transcript and the generation of multiple aberrant splice products. Despite nucleotide-level heterogeneity, all variants converged on a shared molecular mechanism of loss of function of UBA1 due to disrupted splicing. Collectively, these variants demonstrate a uniform loss-of-function mechanism and meet American College of Medical Genetics and Genomics (ACMG) PVS1 criteria for pathogenicity (Tayoun et al., 2018).

In the clinical analysis, splice-site variants were identified in a minority of VEXAS cases, estimated at approximately 6% (Quigley et al., 2025). However, detailed genotype–phenotype correlation was limited. Preliminary literature review indicative results show that to date, only a very small number of cases (n=3) have been reported with both confirmed splice-site variants and detailed ophthalmic phenotyping. In all of these cases, severe ocular involvement was observed (Quigley et al., 2025). In another large French cohort of 116 patients with VEXAS syndrome, eight individuals were identified as having splice-site mutations. Of these, five exhibited ocular involvement. However, the nature and severity of these ophthalmic manifestations were not characterised (Georgin-Lavialle et al., 2022).

Across these cases and pooled analyses, reported ocular manifestations included orbital inflammation, scleritis, episcleritis, uveitis, and retinal vasculitis. Retinal vasculitis in particular appears disproportionately associated with splice-site variants. Clinical courses in these patients were chronic, relapsing, and steroid-dependent, and were associated with systemic complications including thrombosis and mortality (Abumanhal et al., 2024; Temple et al., 2021; Quigley et al., 2025).

Conclusions

The project has not yet completed but preliminary results lead to the following conclusions. This study demonstrates that splice-altering variants in UBA1, despite nucleotide-level heterogeneity, converge on a uniform molecular mechanism characterised by disruption of canonical splicing and resultant loss of function. In silico analysis suggests minimal potential for functional rescue through "leaky" splicing.

The clinical component highlights that, although splice-site variants are rare with ocular manifestations, they appear to be associated with disproportionately severe disease, particularly with respect to ocular involvement (Groarke et al., 2026). Notably, all reported cases with detailed ophthalmic phenotyping demonstrate severe ocular manifestations, although the evidence base remains limited by the small number of described cases. Work will continue in this direction to further analyse the association between splice site mutations and ophthalmic phenotypic variability.

These findings have important clinical implications. Restricting genetic testing to p.Met41 mutations risks underdiagnosis, and broader sequencing approaches should be considered in patients with compatible systemic and ophthalmic features. Early ophthalmological assessment is warranted in patients with suspected or confirmed splice-site variants (Quigley et al., 2025).

Phenotypic variability in VEXAS is likely influenced by both the degree of splice disruption and the proportion of affected haematopoietic clones, analogous to heteroplasmy in mitochondrial disease. Further work is required to better define these relationships and their impact on disease expression.

Limbal Stem Cell Deficiency Secondary to Addison's Disease: A Case Series of Three Patients

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Objectives
Limbal stem cell deficiency (LSCD) is a rare but visually debilitating condition resulting from the loss or dysfunction of corneal epithelial stem cells at the limbus. While numerous aetiologies are recognised, the association between LSCD and Addison's disease (primary adrenal insufficiency) remains poorly characterised in the ophthalmic literature. This case series aims to describe the clinical presentation, investigation findings, and management of LSCD secondary to Addison's disease in three patients, thereby raising awareness of this under-recognised association and informing future diagnostic and therapeutic strategies.

Methods
A retrospective case series was conducted using data collected from the MedSight electronic medical records system. Three patients with a confirmed diagnosis of LSCD secondary to Addison's disease, attending a tertiary ophthalmology service, were identified.Data were reviewed from initial presentation through to the most recent clinical appointment.

Results
Three patients (two female, one male) with a mean age of 36 years (range: 25–55) were included. All three carried a diagnosis of Addison's disease and developed bilateral LSCD. Associated systemic comorbidities included APECED syndrome (autoimmune polyendocrinopathy-candidiasis-ectodermal dystrophy), hypocalcaemia, hypothyroidism, and severe dry eye disease.

Patient 1, a 28-year-old female with APECED syndrome and a history of bilateral blepharokeratoconjunctivitis (BKC) since age two, presented with fluctuating BCVA of 6/7.5–6/12 (right eye) and a decline from 6/12 to 6/38 (left eye) by September 2025. Slit-lamp examination revealed bilateral stromal corneal scarring, ghost limbal vessels, polar and posterior subcapsular cataracts. She had a prior history of laser treatment for bilateral band-shaped keratopathy and photorefractive keratectomy (PRK). Management included topical corticosteroids, vigorous lubricant drops, and autologous serum eye drops.

Patient 2, a 25-year-old male diagnosed with Addison's disease in 2021 alongside hypocalcaemia and hypothyroidism, presented in 2023 with bilateral BKC, central corneal scarring, and pannus formation. Initial BCVA was counting fingers (CF) in the right eye, improving to 6/18 by November 2024, with the left eye fluctuating between 6/30 and 6/9. Treatment included autologous serum eye drops, amniotic membrane application, punctal plugs, topical steroids, and preservative-free lubricants. Intraocular pressure elevation secondary to steroid response in the left eye was managed with oral acetazolamide (Diamox). The patient was subsequently referred to Moorfields Eye Hospital for a trial of topical cyclosporin prior to consideration of limbal stem cell transplantation.

Patient 3, a 55-year-old female with a background of dry eyes and Addison's disease diagnosed in 2008, was referred to exclude toxic retinopathy. Investigations for Sjögren's syndrome were negative. BCVA at presentation in 2022 was 6/5 bilaterally, declining to 6/9 in both eyes by January 2026. She was diagnosed with LSCD secondary to Addison's disease and managed with lubricant drops and topical corticosteroids.

Conclusions
This case series highlights LSCD as a significant, potentially under-recognised ocular complication of Addison's disease, particularly in the context of associated autoimmune and endocrine comorbidities such as APECED syndrome, hypocalcaemia, and hypothyroidism. The aetiology is likely multifactorial, involving chronic ocular surface inflammation, severe dry eye disease, and immune-mediated limbal damage. All three patients demonstrated progressive visual decline despite medical management, underscoring the need for early recognition, close ophthalmological surveillance, and a multidisciplinary approach. In refractory cases, surgical options such as limbal stem cell transplantation should be considered. Clinicians managing patients with Addison's disease should maintain a low threshold for ophthalmic referral to detect LSCD at an early and potentially reversible stage.

Resolution of Subretinal Fluid in Optic Disc Pit Maculopathy After Cessation of Topical Latanoprost: A Case Report with Imaging

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Objectives
Optic disc pits are rare congenital anomalies that may be associated with macular schisis and/or sub retinal fluid, often leading to visual impairment. The pathophysiology of fluid accumulation remains incompletely understood, with proposed mechanisms including communication between the subarachnoid space and the retina or vitreous fluid ingress. Topical prostaglandin analogues, such as latanoprost, are widely used in the management of glaucoma but have been implicated in alterations of choroidal permeability and, rarely, in the development or exacerbation of serous retinal detachments. However, an association between prostaglandin analogue use and subretinal fluid in the context of an optic disc pit has not been well described. We report a case of subretinal fluid in an optic disc pit that resolved following cessation of topical latanoprost.

Methods
Case Report

Results
A 74-year-old female attending the ophthalmology clinic at Galway University Hospital with a background ophthalmic history of optic disc pit and normal tension glaucoma in her right eye complained of a subjective decline in right eye visual acuity (unaided RE VA 6/18 pinholing to 6/12, LE VA 6/7.5). She was taking topical latanoprost and timolol to her right eye for the preceding three years. Optical coherence tomography (OCT) demonstrated a large volume of sub-retinal fluid. Fundus fluorescein angiography and Indocyanine Green Angiography did not demonstrate any leak. The differential diagnosis included optic-disc pit maculopathy (ODP-M) and central serous chorioretinopathy (CSCR). Serial OCT performed over a six month period revealed worsening of her maculopathy. After collegial discussion, it was decided to discontinue latanoprost due to its potential contribution to the accumulation of subretinal fluid. The patient underwent serial OCT following cessation of prostaglandin analogue. At two months following cessation of latanoprost, there was a significant reduction in the volume of subretinal fluid. Continued follow-up demonstrated progressive improvement in visual acuity and OCT findings, with complete resolution of the subretinal fluid observed at six months post-discontinuation. Visual acuity is currently 6/6 unaided bilaterally.

Conclusions
This case highlights a potential association between topical prostaglandin analogue use and the accumulation of subretinal fluid in a patient with an optic disc pit. Discontinuation of latanoprost was followed by progressive resolution of subretinal fluid and improvement in visual acuity, suggesting a reversible effect. Although monitoring can be considered in the initial stages without intervention, many cases of ODP-M show progressive visual deterioration, and long-standing macular detachment often results in poor visual acuity. Before deciding on invasive treatments such as laser or pars plana vitrectomy in similar cases where prostaglandin analogues are being used, stopping the medication and close observation can be considered as a first line of management.

Clinical Outcomes Following Cataract Surgery Using the RayOne Galaxy Non-Diffractive Spiral-Optic IOL: A Retrospective Analysis of Prospectively Collected 3-Month Outcomes

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Objectives
The RayOne Galaxy (Rayner) is a non-diffractive, AI-designed spiral-optic intraocular lens (IOL) that delivers a continuous full range of vision through progressive wavefront modulation, without the diffractive rings or light-splitting characteristic of conventional trifocal lenses. This study evaluates clinical outcomes following cataract surgery with the RayOne Galaxy IOL, including unaided visual acuity at all distances, refractive outcomes, binocular defocus curve performance, and patient satisfaction.

Methods
A retrospective analysis of prospectively collected clinical data who underwent bilateral cataract surgery with RayOne Galaxy IOL implantation at a single centre (Omnivision, Santry, Dublin) between May 2025 and March 2026. Patients were assessed at 3 months following implantation of the second (last) Galaxy lens. Demographic and biometric data were analysed. Unaided and best-corrected visual acuity at distance, intermediate, and near were recorded. Pre- and post-operative refraction were compared. Binocular defocus curves were performed at the 3-month post-operative visit under photopic conditions. Patient satisfaction and post-operative complications were recorded.

Results
A total of 19 patients (36 eyes) underwent cataract surgery with the RayOne Galaxy IOL. If astigmatism >0.75D was present, a toric lens was used (50%, n=18). The cohort comprised 63% male (n=12) and 37% female (n=7), with a mean age of 68 years (SD ±7.6). Indications for surgery included glare alone (10%, n=2), reduced quality of vision alone (31%, n=6), and combined glare and reduced quality of vision (59%, n=11). Mean pre-operative unaided distance visual acuity was logMAR 0.3 (range: 0.0–1.3), with mean pre-operative near vision N10 (range: N4.5–N36). Post-operatively, greater than 70% of patients achieved unaided distance visual acuity of logMAR 0.0 or better, with intermediate vision N8 (range: N5–N12) and near vision N5 (range: N4–N6). Post-operative refraction demonstrated a mean spherical equivalent within ±0.25 D, with a significantly reduced reliance on spectacles for near and intermediate tasks. Preliminary patient-reported outcomes indicate high satisfaction with visual quality, spectacle independence, and minimal dysphotopsias. Defocus curve data and remaining post-operative results are pending for a proportion of patients and will be incorporated into the final submission.

Conclusions
The RayOne Galaxy non-diffractive spiral-optic IOL delivers favourable visual outcomes across all distances following cataract surgery, with high patient satisfaction and reduced spectacle dependence. Its novel AI-designed optical architecture offers a clinically meaningful alternative to conventional diffractive trifocal and EDOF lenses, and these results support its role as a valuable option in modern cataract and refractive lens surgery.

Pars Planitis as the Initial Manifestation of Multiple Sclerosis

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Objectives
Multiple sclerosis is a chronic inflammatory disorder of the CBS that may have associated ocular manifestations. While optic neuritis is the most common presentation, intermediate uveitis often represents a less frequent but important association which may precede neurological disease.

Methods
A retrospective chart review was performed and clinical images were collated.

Results
We report the case of a 30 year old female who had multiple presentations to the eye emergency clinic with progressive floaters and blurred vision. Ophthalmic examination revealed bilateral vitritis with snowball opacities and peripheral vascular sheathing, consistent with intermediate uveitis. Work up included an MRI which revealed extensive white matter changes consistent with multiple sclerosis.

Conclusions
Although it is often idiopathic, a growing body of evidence highlights a significant association between pars planitis and demyelinating disease, particularly when accompanied by retinal periphlebitis or neurological symptoms. Recognizing pars planitis as a potential initial manifestation of MS is crucial, as it may precede central nervous system involvement by months or even years. Early identification allows for timely neurological evaluation, appropriate imaging such as MRI, and closer monitoring for the development of MS. Ultimately, awareness of this association can lead to earlier diagnosis, improved disease management, and better long-term outcomes for patients at risk of multiple sclerosis.

A Novel Approach to Glaucoma Patient Care in a Secondary Ophthalmology Referral Service: A Glaucoma Outreach Clinic

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Objectives
Glaucoma is a leading cause of irreversible blindness worldwide. In Ireland, the prevalence of age-related eye disease, including glaucoma, is predicted to increase by approximately 33% over the next decade, placing increasing pressure on already stretched ophthalmology services. Limited access to glaucoma subspecialist care can result in prolonged waiting times for expert review, during which disease progression may continue, leading to irreversible optic neuropathy and visual loss.

The aim of this study was to evaluate the effectiveness of a glaucoma outreach clinic, delivered by a glaucoma subspecialist within a secondary ophthalmology referral service, in expediting specialist assessment and facilitating timely intervention for patients with complex or progressive glaucoma.

Methods
A retrospective medical chart review was performed on 22 patients referred to a glaucoma outreach clinic over six clinics held between December 2024 and September 2025. The clinic was jointly delivered by a consultant ophthalmologist based in a secondary ophthalmology unit and a glaucoma specialist from a tertiary referral centre.

All patients had a diagnosis of glaucoma or ocular hypertension and were receiving topical IOP-lowering therapy at the time of referral. The estimated current waiting list duration from entrance to list to review in the glaucoma specialist clinic in the tertiary centra was over 12months. Data collected included patient demographics, diagnosis, duration of glaucoma follow-up prior to referral, indication for referral, waiting time for specialist review, IOP at referral, subsequent interventions, and post-intervention IOP where available. All interventions were performed in the tertiary centre, with patients subsequently discharged back to the referring ophthalmologist.

Results
A total of 22 patients were included. Diagnoses included primary open-angle glaucoma (POAG) in 64% (14/22), normal-tension glaucoma (NTG) in 32% (7/22), and ocular hypertension (OHT) in 4% (1/22). Patients had been followed in glaucoma services for a mean of 7.3 years (range 1–22 years) prior to referral. The mean number of topical agents at referral was three, with mean bilateral IOP of 19 mmHg.

Indications for referral included documented visual field progression despite maximal medical therapy in 36% (8/22), suboptimal IOP control in 18% (4/22), and medication intolerance or adherence issues in 23% (5/22). Two patients were referred for diagnostic clarification, and three were awaiting review at the time of analysis. The mean waiting time for specialist review was 5.1 months (range 1–14 months).

Following specialist assessment, 55% of patients underwent IOP-lowering intervention. This included selective laser trabeculoplasty (SLT) in 41% (9/22), combined phacoemulsification with iStent implantation in two patients (one eye completed), and bilateral glaucoma drainage device implantation in one patient. Four patients (18%) remain under close observation with anticipated future intervention. Among patients reviewed post-intervention, median IOP reduced to 14 mmHg in the right eye and 10.5 mmHg in the left eye, with no change in the median number of topical agents.

Conclusions
Glaucoma outreach clinics represent an effective model for facilitating timely access to glaucoma subspecialist expertise for patients with advanced or complex disease within secondary referral services. This approach reduces delays in specialist assessment, supports earlier intervention, and enhances collaborative care between secondary and tertiary centres.

Audit of Antibody-Positive Optic Neuritis Presentations Over a 5 Year Period

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Objectives
Optic neuritis (ON) is a common neuro-ophthalmic emergency and is frequently associated with multiple sclerosis (MS), often representing the first clinical manifestation of the disease [1]. However, optic neuritis may also occur as part of antibody-mediated inflammatory disorders, including aquaporin-4 antibody–associated neuromyelitis optica spectrum disorder (AQP4-NMOSD), myelin oligodendrocyte glycoprotein antibody–associated disease (MOGAD), and rarer paraneoplastic syndromes such as CRMP5-associated disease [2–4]. These conditions differ significantly from MS-associated optic neuritis in terms of prognosis, relapse risk, and management, making early identification essential [3,5].

Emergency eye casualty services are frequently the first point of contact for patients presenting with acute visual disturbances. This audit focuses on non-MS antibody-associated optic neuritis.

The aim of this study was to evaluate the clinical presentations and the clinical course of antibody-associated optic neuritis cases presenting to a tertiary emergency eye casualty and subsequent course in the neuro-ophthalmic outpatients department.

Methods
Positive AQP4 and MOG antibody results over the study period were identified by the immunology laboratory, following which a retrospective medical chart review was conducted to assess presentations to the ophthalmology service with optic neuritis and their clinical course throughout. CRMP5-IgG causes a rare, severe form of paraneoplastic optic neuropathy (usually associated with small cell lung cancer) and was introduced to these tertiary hospitals screen protocol in June of 2021. This is why this antibody was included in our study.

Data collected included:
- Patient demographics
- First presenting feature as optic neuritis
- Antibody subtype status (AQP4, MOG, CRMP5)
- Referring specialty
- Clinical course

Data was analysed descriptively due to small case numbers. Imaging results and further neurology outcomes were also excluded from this study.

Results
In the 5-year period, 447 blood samples were recorded and sent for serological testing for AQP4, MOG and CRMP5.

A total of 15 antibody-positive cases associated with optic neuritis were identified over the five-year period. 6 cases were excluded from my study due to incomplete documentation, lack of information available from medical charts or no follow-up arranged in this centre. Of the 9 patients included in this study, six (66.7%) were serologically positive for MOG and three (33.3%) for Aquaporin 4. No cases returned positive results for CRMP5 in our cohort.

There was a mix of nationalities and ethnicities included in this small sample – 3 (33.3%) Caucasian Irish patients, 1 black Nigerian patient, 2 (22.2%) South-East Asian patients (1 Chinese and 1 Indian), 1 Caucasian Romanian patient and 2 (22.2%) Brazilian patients. Half of the patients in my study were female, with 100% (n=3) of the AQP4 and only 2 (33.3%) out of 4 in the MOG cohort.

In the MOG+ cohort, 100% (n=6)of patients' first clinical presentation was with optic neuritis, with 50% reporting painful eye movements or retrobulbar pain, 33.3% reporting a co-existing severe headache. 1 patient initially presented to the EED and was treated as an AAU and optic nerve swelling was noted at EED follow-up. 66.7% (n=4) presented with optic nerve swelling and 1 patient had bilateral papillitis at presentation. 3/6 cases (50%) had a documented RAPD at presentation, with reduced colour VA documented in 2/3 of the admitted patients, and VA was found to be markedly reduced (ranging between 6/36-CF) 50% (n=3) of the MOG+ cohort required immediate admission and were started on high dose IV methylprednisolone. According to our data set, 1/6 (16.7%) MOG+ cases required long term immunosuppression for relapsing disease and this patient was started on Rituximab. No relapses were documented for the other 5 cases, but this does not exclude presentations to other ophthalmic centres or managed by other physicians.

In the AQP4+ cohort, only 1 case presented with optic neuritis as their presenting feature, the other 2 (66.7%) cases were admitted under neurology and treated for longitudinal extensive transverse myelitis (LETM). Overall, AQP4+-IgG group presented with more systemic neurological features at presentation. These 2 cases were admitted for high dose IV methylprednisolone. The single case of AQP4+ optic neuritis in our sample had no RAPD at presentation, normal colour vision and preserved VA suggesting a milder presentation. Longterm immunosuppression was required for 2/3 (66.7%)of this cohort, with one patient maintained on Azathioprine and the other maintained on Rituximab.

Conclusions
Over a five-year period, antibody-associated optic neuritis was identified in patients presenting to emergency eye casualty, with MOG antibody disease being the most frequently detected subtype. The introduction of digital recording of antibody requests and results improved identification of relevant cases. Emergency ophthalmic services play a critical role in early recognition of atypical optic neuritis and initiation of appropriate investigations.

Monocular Orbital Erdheim–Chester Disease Presenting as an Intraconal Mass with Optic Nerve Encasement

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Royal Victoria Eye & Ear Hospital, Dublin.

To describe a rare unilateral orbital presentation of Erdheim–Chester disease (ECD) and highlight key clinical, radiologic, histopathologic, and molecular features that enable prompt diagnosis and guide targeted therapy.

Objectives
Single-patient case report from a tertiary ophthalmic centre. Clinical findings were correlated with orbital MRI and skeletal imaging (skeletal survey and technetium bone scintigraphy). Diagnosis was established via orbital biopsy with histopathology and immunohistochemistry, supplemented by molecular testing for MAPK-pathway alterations.

Methods
Single-patient case report from a tertiary ophthalmic centre. Clinical findings were correlated with orbital MRI and skeletal imaging (skeletal survey and technetium bone scintigraphy). Diagnosis was established via orbital biopsy with histopathology and immunohistochemistry, supplemented by molecular testing for MAPK-pathway alterations.

Results
A man in his 60s presented with progressive, painless right-sided proptosis, restriction of extraocular movements, and visual decline. Orbital MRI demonstrated a well-circumscribed enhancing right intraconal mass with orbital fat infiltration and optic nerve encasement, without contralateral involvement. Systemic review identified chronic lower-limb bone pain; skeletal survey and technetium bone scintigraphy revealed symmetric sclerotic lesions of the femora and tibiae in a diaphyseal/metaphyseal distribution typical of ECD. Orbital biopsy showed a fibrosing xanthogranulomatous infiltrate composed of foamy histiocytes; immunohistochemistry was CD68-positive and CD1a-negative. Molecular testing detected a BRAF V600E mutation, confirming clonal non-Langerhans cell histiocytosis consistent with ECD.

Conclusions
Unilateral orbital masses can represent ECD despite the typical bilateral pattern. Recognition of the MRI phenotype (intraconal infiltration with optic nerve sheath encasement) should prompt systemic evaluation for characteristic long-bone involvement and early biopsy with immunophenotyping and molecular testing. Identifying BRAF V600E is diagnostically confirmatory and has direct therapeutic relevance given the efficacy of targeted BRAF inhibition in multisystem ECD.

Smoking Habits and AREDS Supplementation Patterns in Patients With Neovascular Age-Related Macular Degeneration Attending an Injection Clinic: A Cross-Sectional Survey

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Objectives
To evaluate attitudes and habits around smoking and the use of oral supplementation in patients with neovascular age-related macular degeneration (nAMD) receiving intra-vitreal injections.

Methods
A prospective cross-sectional survey was conducted among adults with intermediate or advanced nAMD receiving intra-vitreal injection treatment at St. Vincent's University Hospital and the Royal Victoria Eye and Ear Hospital over a 6-month period. A structured questionnaire was administered to participating patients by nursing staff in the waiting room prior to injection. Data collected included demographics, smoking status and/or smoking history, awareness of smoking-related ocular risk, and use of nutritional supplementation. Descriptive statistics were used for analysis.

Results
A total of 47 patients were surveyed. Of these, 15% (n = 7) were current smokers, 38% (n = 18) were former smokers, and 47% (n = 22) had never smoked, with a mean smoking duration of 33 years among ever-smokers. Among current smokers with available data (n = 6), all (100%) were aware of the adverse effects of smoking on ocular health.

Overall, 66% (n = 31) of participants reported taking AREDS-type supplementation, while 34% (n = 16) were not taking supplements. Of these 16, 4 were receiving injections to both eyes and therefore met criteria for supplementation from the AREDS studies. Among those with available data on supplement type (n = 26), MacuShield was the most commonly used preparation (69%, n = 18).

Among the 16 participants not taking supplements, reasons were available for 11. The most frequently reported reason was not having been advised to take supplementation (55%, n = 6), followed by lack of awareness of benefit (18%, n = 2). Other reasons included cost, patient preference, and difficulty swallowing (each n = 1).

Conclusions
A substantial proportion of patients with nAMD attending injection clinics have a history of smoking, with low rates of current smoking and high awareness of its risk to vision. While most participants reported using AREDS-type supplementation, over one-third were not taking supplements. The most common reason for non-use was lack of prior recommendation, highlighting a missed opportunity for intervention. Intra-vitreal injection clinics represent a valuable setting to optimise secondary prevention through targeted smoking cessation advice and patient education regarding the evidence for vitamin supplementation and diet modification.

An Audit of Toric Intraocular Lens Use During Cataract Surgery in MMUH

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Mater Misericordiae University Hospital, Dublin.

Objectives
To determine how many of the last 150 patients who underwent cataract surgery in MMUH had pre-operative corneal astigmatism of ≥2.0D. To determine the proportion of individuals who had a pre-operative corneal astigmatism of ≥2.0D who underwent toric intraocular (IOL) implantation in line with European Society of Cataract and Refractive Surgeons guidelines. ESCRS Guidelines for Cataract Surgery advise: Toric IOLs should be considered in eyes with a degree of corneal astigmatism of 1.0D or more, with strong evidence for corneal astigmatism above 2.0D, moderate evidence for corneal astigmatism above 1.5D, and may be beneficial above 1.0D.

Methods
Retrospective chart review of all patients who had cataract surgery in the Mater Misericordiae University Hospital from 15/10/25 until 07/11/25 (150 patients).

Results
Of 150 cataract surgeries analysed, 12 patients had an astigmatism >2 diopters. 4 patients had toric IOLs placed. One third of patients with an astigmatism >2 diopters had a toric IOL implanted.

Conclusions
These findings suggest potential underutilisation of toric IOLs relative to ESCRS recommendations. This suggests there is a gap between current practice and ESCRS guidelines which warrants further investigation into the barriers to toric IOL use.

Provision of Low Vision Services Across ERN-EYE: A Cross-Sectional European Survey

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Objectives
Rare ophthalmic diseases are a leading cause of early visual impairment, with lifelong consequences for quality of life. Although ERN-EYE aims to standardise care across Europe, access to low vision services remains inconsistent. This study evaluates the availability of such services across ERN-EYE members, identifying disparities and barriers.

Methods
A cross-sectional survey was collated and distributed to healthcare professionals via ERN-EYE networks. Responses were anonymised, with duplicates and non-eligible responses excluded. Data was collated and analysed using Microsoft Excel and presented in graphical format.

Results
Thirty-eight healthcare providers from 21 European countries were included, the majority of whom were hospital-based (97%). Variation was observed in the classification of blindness, contributing to discrepancies in service access and referral practices. While 60% of centres reported in-house low vision services and psychological support was widely available (97%), utilisation remained low. For example, only 16% of centres referred more than a quarter of eligible patients. Eye Clinic Liaison Officers (ECLOs) were available in 55% of institutions; however, among these, nearly half referred fewer than 10% of patients. Funding models were heterogeneous, often relying on a combination of government, self-funding, and charitable support.

Conclusions
Substantial variation exists in the availability and utilisation of low vision services across ERN-EYE centres. Despite widespread provision of certain supports, referral rates remain low, highlighting gaps in awareness, access, and service integration. Greater standardisation, collaboration, and advocacy are needed to ensure equitable access to comprehensive low vision care across Europe.

Neurodegeneration and Retinal Ganglion Cells in Glaucoma: Cellular Pathways and Therapeutic Approaches

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University Hospital Limerick.

Objectives
Finding out biomarkers in glaucoma and therapeutic approaches

Methods
Prospective Observational Study

Results
The results demonstrated significant differences between POAG patients and healthy controls in terms of IOP, optic disc parameters, visual field indices, OCT measurements, and serum biomarkers. Correlation analysis further highlighted the interplay of mechanical, structural, and biochemical factors contributing to retinal ganglion cell loss.

Conclusions
Glaucoma therapy needs to move away from the IOP-centered paradigm toward a multifactorial model that includes structural, functional, and biochemical measures, and which may ultimately allow for the implementation of precision medicine in glaucoma treatment.

Acute Rate of Optic Nerve Head Swelling is Associated With Worsening of Visual Outcomes in Nonarteritic Anterior Ischemic Optic Neuropathy

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Objectives
We aim to characterise longitudinal structural changes in NAION using OCT in a large clinical trial cohort and evaluate early imaging indicators associated with visual outcomes. In particular, we hypothesised that early rates of change of both pRNFLT and ONH volume are associated with subsequent visual outcome worsening.

Methods
This longitudinal analysis included 715 participants from the multicentre, randomised QRK207 phase 2/3 NAION trial (NCT02341560). Participants were imaged within 14 days of symptom onset (mean, 8.0 ±3.2 days) and followed through 12 months, with primary visual outcomes assessed at Month 6. OCT imaging was performed at Screening, Enrollment, Month 2, Month 6, and Month 12 using Cirrus or Spectralis OCT devices.

Structural measures were peripapillary retinal nerve fibre layer thickness (pRNFLT), peripapillary total retinal thickness (pTRT), optic nerve head volume (pONHV), and macular ganglion cell-inner plexiform layer (mGCIPL) thickness. Functional outcomes included best-corrected visual acuity (BCVA) and visual field (VF) total deviation. We analysed rates of OCT metric change between Screening and Enrolment (mean interval, 2.5 ±1.9 days). Associations between early OCT metrics and visual outcomes were assessed using Spearman rank correlations (rs) and logistic regression.

Results
At presentation, study eyes showed pronounced optic nerve head (ONH) swelling (mean pRNFLT, 241 ±74.8 µm; pONHV, 6.70 ±1.27 mm^3), followed by progressive atrophy (pRNFLT, 56.7 ±14.9 µm; pONHV, 2.7 ±0.41 mm^3 at Month 6). mGCIPL thinning was detectable within 14 days of symptom onset (-0.58 µm/day; p<0.001). Increased rate of ONH swelling between Screening and Enrolment visits was associated with subsequent vision change relative to Enrolment: each 0.15 mm^3/day increase in pONHV conferred a higher odds of ≥2 dB interval VF worsening (OR, 1.84; 95% CI, 1.3-2.5; P < .001) and ≥10 letter BCVA worsening (OR, 1.52; 95% CI, 1.1-2.1; p<0.001) by Month 6. Early reduction in swelling was associated with improved outcomes. Similar associations were observed at Month 2 with larger effect sizes.

Conclusions
mGCIPL thinning is evident within 14 days of NAION symptom onset. Increased ONH swelling rates following initial presentation are associated with subsequent VF and BCVA worsening.

Appropriate Timing of Anti-VEGF Injection Before a Vitrectomy is Patient Dependent

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Objectives
This case study aimed to evaluate if the timing of Anti-VEGF IVI was essential before a vitrectomy or dependent on patient factors seen in this and International Studies.

It is controversial whether Anti-VEGF should be administered 6-14days, 1-5 or 24hours prior to Surgical Vitrectomy. Some studies suggest 6-14 days before surgery is most effective, other studies indicate Scleral Injections before 72-hours may reduce certain complications.

In this study a 47-year old female patient was stepped down from a L2-to-L4 Hospital with numerous DM1 Complications. The patient was treated for urosepsis, via PICC line for 8/52, treated for uncontrolled blood glucose levels and under surveillance for her (2.3 x 1.3cm) renal Abscess, formerly (2.8 x 1.3cm). Patient had a history of transient blindness in the left eye and blurring from retinal haemorrhaging. The patient was evaluated for a PDR Vitrectomy.

Normally patients requiring Vitrectomy receive Anti-VEGF Scleral injections, from 14 days up to 3-days before a Vitrectomy. Pre-Operative injections are often used for patients with Stable Proliferative Diabetic Retinopathy, as in this case.

Methods
This study was an observational one from a Surgical and Medical perspective.

Results
Patients' pupil was dilated, a Sterile Prong pierced 4mm above the Iris, Anti-VEGF was inserted and Eye Frame removed, 48 hours before procedure. The Patients Vitrectomy was successfully completed using ophthalmic microsurgical platform machine, two days later.

Conclusions
Administrating Anti-VEGF IVI in this case led to smoother surgery with this & comparative studies. Less bleeding & reduced intraoperative breaks, improved Visual Acuity improved 6/12 and this patient Stable R3S was maintained.

An Audit of Documentation Quality in Ophthalmic Botulinum Toxin Injection Clinics

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Objectives
To evaluate the completeness, consistency, and clinical utility of documentation in an ophthalmic botulinum toxin service, including the ability to support safe longitudinal care across clinicians.

Methods
Retrospective audit of two consecutive botulinum toxin clinics (February and May 2025). All encounters from the May 2025 clinic were included (n=14); repeat attenders (n=10) were identified and the prior clinic record reviewed. Documentation was assessed against predefined criteria for indication, dosing, injection mapping, rationale for treatment changes, and administrative identifiers.

Results
Administrative elements were consistently documented, whereas clinically critical elements (total dose, dose per site, anatomically reliable injection mapping) were frequently absent or insufficient, limiting reproducibility across visits.

Conclusion
Current documentation does not reliably support reproducible treatment delivery or continuity of care. Findings support standardisation and a digitally enabled documentation pathway suitable for evaluation and scale within the HSE.

Notes

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