Welcome

Dear Colleagues and Friends,

It is my true delight to welcome you back in Coimbra, the birth of EAsDEC! Thirty-four years ago, in a meeting that took place in this same city, Prof. Cunha-Vaz and colleagues decided to start a new subgroup of the EASD for the study of Diabetic Retinopathy and other Ocular Complications of Diabetes. As a result, EAsDEC meetings were born and have evolved ever since, focusing on the study of the diabetic eye.

This year, AIBILI has organized the 33rd EAsDEC Meeting where we hope to update you on clinical and fundamental research, sharing knowledge from all parts of the world. We have prepared stimulating talks on pathophysiology, epidemiology, clinical research, and treatment amongst other topics, of diabetic retinopathy and diabetic macular edema.

Coimbra is one of the main cities in Portugal. It hosts the oldest Portuguese University, and one of the oldest in the world, dated 1290.

Also, our meeting venue, “Quinta das Lágrimas” (Estate of Tears), is where one of the most famous love stories took place. Prince Pedro and Ines de Castro lived a love affair outside of his marriage. His father, King Afonso IV, never accepted it. When Prince Pedro became a widower, his father ordered the murder of Ines de Castro. Prince Pedro never forgave his father and, after being crowned king, in 1357, had her murderers arrested and killed, and Ines de Castro body dug up and crowned posthumously as Portugal’s Queen. The legend has it that the blood of Inês de Castro flows in the “Fonte dos Amores” (the Love Fountain), here at “Quinta das Lágrimas”, hence the reddish tinge in the fountain stones.

So, in this city, where stories and history melt together, we look forward to seeing you and to have the opportunity of establishing connections and collaborations for the study of diabetic retinopathy.

Welcome to Coimbra!

Inês Pereira Marques, M.D., Ph.D.
Director of the Clinical Trials Centre
AIBILI, Coimbra, Portugal
Chair, Local Organizing Committee

EAsDEC Board Members
Tunde Peto – President
Ingeborg Klaasen – Vice President
Rafael Simó – Past President
Reinier Schlingemann – Treasurer
Stela Vujosevic – Secretary
PROGRAMME

THURSDAY – 1st JUNE 2023

16:00  Registration

16:30-18:45  Symposium: Treatment of vision threatening complications
Chairs
Inês Marques and João Figueira

16:40-17:00  New treatment strategies in diabetes – is artificial pancreas feasible? –
Daniela Guelho/Sofia Monteiro

17:00-17:15  Biomarkers to determine if steroids vs anti-VEGF agents are more
appropriate to treat DME – Lilianne Duarte

17:15-18:10  What is new in diabetic macular edema treatment?
• Faricimab – Keissy Sousa
• Aflibercept – Sérgio Leal
• Fluocinolone acetonide – Miguel Ruão
• Dexamethasone – Bernardete Pessoa

18:10-18:30  Therapeutic targets in non-proliferative and proliferative diabetic
retinopathy
• sCG activators and neuroprotection – Isabel Pires
• Real World Evidence: Protocol W/ Panorama Study – João Figueira

18:30-18:45  Discussion

18:45  Official Opening of EAsDEC Conference
Inês Marques and Tunde Peto

WELCOME RECEPTION
Fingerfood and soft drinks
FRIDAY – 2nd JUNE 2023

8:30  Registration

8:45  Introduction and Welcome
      Inês Marques and Tunde Peto

9:00-10:15  SESSION 1

The latest in translational research in diabetic eye disease

Moderators: Ying Chen and Noëlle Bakker

9:00–9:09  Elena Beltramo (Italy): Release of pro-inflammatory/angiogenic factors by retinal microvascular cells is mediated by extracellular vesicles derived from M1-activated microglia

9:09–9:18  Francisco Martín-Loro (Spain): A marine bioinspired molecule modulates the diabetic retinopathy progression by M2 response-induction and promote the inflammatory resolution

9:18–9:27  Paola Serrano Martinez (Netherlands): The role of adrenomedullin in the regulation of angiogenesis and endothelial barrier function

9:27–9:36  Daria Fresia (Switzerland): Hypoglycemia induces autophagy in the mouse retina

9:36–9:45  Christopher Kelsall (UK): Examining (i) microvascular responsiveness to locally delivered glucagon-like peptide-1 analogue, liraglutide; and (ii) the glycocalyx in individuals with type 2 diabetes and retinopathy

9:45–9:54  Noëlle Bakker (Netherlands): Histopathological changes in the retinal neurovascular unit during progression of diabetic retinopathy

9:54–10:15  Winner of the Anne-Katrin Sjolie Best Abstract Student Prize:

      Mona Albargothy (UK): Investigation of the retinal neurovascular unit in diabetic retinopathy using 3D electron microscopy

10:15–11:15  SESSION 2

Symposium: Imaging retinal ischemia can change the way of monitoring and staging of diabetic retinopathy

Moderators: Simon Harding and Ana Rita Santos

10:15–10:30  Widefield Imaging contributes to re-classification of DR severity – Tunde Peto

10:30–10:45  Multimodal Imaging for detection of DR lesions – Inês Marques

10:45–11:00  New OCT biomarkers of OCTA for staging of DR – Ana Rita Santos
11:00-11:15  Challenges of OCTA utilization in the study of DR: standardization and development of reliable metrics – Stela Vujosevic

11:15–11:45  Coffee break

11:45-12:40  SESSION 3

Aspects of managing patients with diabetic eye disease

Moderators: Stela Vujosevic and Miguel Ruão

11:45-11:54  Patrice Fort (USA): The Mary Tyler Moore Vision Initiative Diabetic Retinal Diseases Biorepository and Resource Center

11:54-12:03  Rafael Simó (Spain): Rapid reduction of HbA1c and early worsening of diabetic retinopathy: A real-world population-based study in subjects with type 2 diabetes

12:03-12:12  Anne Suhr Thykjær (Denmark): Development of diabetic retinopathy in relation to bariatric surgery: a nationwide study

12:12-12:21  Kiran Shah (India): Patients with Type 2 diabetes who have non-alcoholic fatty liver disease are less likely to have diabetic retinopathy

12:21-12:30  James Talks (UK): Early uptake and treatment patterns of Faricimab among Diabetic Macular Edema (DME) patients in the UK

12:30-12:39  Miguel Ruão (Portugal): RIVER Study – registry data on the use of intravitreal fluocinolone acetonide implant for diabetic macular edema in Portugal

12:40  LUNCH (poster presenters have priority for lunch)

12:55  SESSION 4: POSTER SESSION

Basic science and imaging

Moderators: Jakob Grauslund and Kiran Shah

Fátima Cano-Cano (Spain): Associations between serum inflammatory mediators and spectral-domain (SD) OCT parameters in T1 Diabetes Mellitus and Multiple Sclerosis patients

Ying Chen (Germany): MDM2 knockout in pericytes prevents mouse diabetic retinopathy

Jihong Lin (Germany): miRNA-124 prevents rat diabetic retinopathy by inhibiting the microglial inflammatory response

Alessandra Loda (Italy): eparinbinding mediators drive the resistance to anti-VEGF therapies in diabetic retinopathy
Laura Cushley (UK): The NaviSight Study: An investigation into the peripheral retina in diabetes and navigating the built environment

Ali Sharif (Sweden): Inter-observer reliability of counting retinal microaneurysms and haemorrhages in elderly with diabetes

Débora Reste-Ferreira (Portugal): Abnormal retinal fluid in eyes with diabetic macular edema

Marta Lopes (Portugal): Non-invasive characterization of intraretinal microvascular abnormalities with Widefield Swept Source OCTA imaging

Ana Rocha (Portugal): CLARUS (or Wide-Field Fundus Imaging) improves ETDRS grading with classic 7-fields fundus photographs

Clinical studies

Moderators: Anne Suhr Thykjær, Bénédicte Dupas, David Keegan, Sema Tamer Kaderli

Katie Curran (UK): Diabetic retinopathy progression among children and young adults with Type 1 diabetes in India

Mohammed Zayed (UK): The relationship between visual function and severity of diabetic retinopathy

Nicola Parker (UK): Follow-up and management of patients with diabetes with neovascular glaucoma referred from the Northern Ireland Diabetic Eye Screening Programme in 2015-2016

Shweta Pandey (UK): Introduction of Virtual Eye Clinics to reduce delayed follow up waiting times following Covid-19 pandemic

Jeonghoon Ahn (Switzerland): Economic impact of Fenofibrate among the Chinese patients with Diabetic Retinopathy

Davis Preiss (UK): Visual function and quality of life in people with diabetic retinopathy: insights from the LENS trial

Ellen Steffenssen Sauesund (Norway): A pilot study of implementing diabetic retinopathy screening in the region of Oslo, Norway: baseline results

Frederik Pedersen (Denmark): Associations between metabolic and structural retinal parameters and depression score in individuals with type 2 diabetes

Jonathan Nairn (UK): Performance of “treat and extend” anti-VEGF therapies (Afibercept, Ranibizumab) used for diabetic macular oedema in West of Scotland at 1 year

James Brodie (UK): Is diabetic retinopathy screening worthwhile among people first diagnosed with diabetes at older ages? Cohort study of Norfolk Diabetic Retinopathy Screening Programme
Aditi Chaturvedi (Ireland): The effects of reminder and information letters on non-attendance to a Diabetic Retinopathy Screening Clinic for pregnant patients

Catherine Jamison (UK): Prevalence and severity of retinopathy and maculopathy in people with diabetes mellitus before and after hospital admission due to COVID-19 in the first wave of the pandemic (March–June 2020)

Lika Tsutskiridze (Georgia): The role of regular screening program and the involvement of international organizations for the successful implementation of the project

Florian Toti (Albania): Prevalence of diabetic retinopathy and related risk factors in patients with diabetes in Tirana district, Albania

Natalia Palarie (Moldova): Lipid metabolism biomarkers in diabetic retinopathy in patients with Type 1 diabetes mellitus

Romano Vrabec (Croatia): Association between ganglion cell-inner plexiform layer in Type 2 Diabetes with and without retinopathy and its correlated systemic risk factors

Alexandr Khudyakov (Russia): Optimal choice of gas or silicone tamponade for surgical treatment advanced stages of proliferative diabetic retinopathy patients

Natalia Pomytkina (Russia): Detection of early worsening of diabetic retinopathy in pregnant patients with diabetes using OCT angiography

Dmitry Lipatov (Russia): Long-term results of drainage surgery of neovascular glaucoma in patients with diabetes mellitus

14:40-15:55  
**SESSION 5**

**Results from clinical research around Europe**

**Moderators:** Ben Charmer and Noemi Lois

14:40-14:49  Martina Tomic (Croatia): High prevalence of vision-threatening diabetic retinopathy at the first fundus examination in Croatia

14:49-14:58  Jakob Grauslund (Denmark): Onset and progression of diabetic retinopathy within eight years in type 1 diabetes in the Danish Registry of Diabetic Retinopathy


15:07-15:16  David Keegan (Ireland): Results of the two-year screening interval initiative within the Irish National Diabetic Retinopathy Screening Programme (RetinaScreen)

15:16-15:25  Tunde Peto (UK): 5-Year outcomes for DME following anti-VEGF treatment: Multicentre analysis in the UK
Ben Charmer (UK): 10-year outcomes of patients referred with proliferative diabetic retinopathy from the United Kingdom diabetic retinopathy screening service

Simon Harding (UK): Impact on blindness of organized diabetic retinopathy screening including artificial intelligence (AI) and optical coherence tomography (OCT) in urban China – a lifetime cost effectiveness analysis

EVA KOHNER Lecture

Professor Rafael Simó, Vall d’Hebron Research Institute, Barcelona, Spain: Neurovascular Unit impairment in Diabetic Retinopathy: Clinical and therapeutic implications

Introduced by: Tunde Peto

ANNUAL GENERAL MEETING

CONFERENCE DINNER

Quinta das Lágrimas Hotel with Live Music: Fado

SATURDAY – 3rd JUNE 2023

Registration

SESSION 6

Imaging diabetic eye diseases

Moderators: Torcato Santos and Reinier Schlingemann

Recivall Salongcay (UK): Accuracy of point of care artificial intelligence grading using handheld retinal imaging in a community-based Diabetic Eye Screening Programme

Bénédicte Dupas (France): Screening for TelCaps by OCT thickness mapping in patient with diabetic macular edema

Torcato Santos (Portugal): Abnormal fluid accumulation in the diabetic retina quantified by OCT-Leakage

Sema Tamer Kaderli (Turkey): Sensitivity and specificity of the optical coherence tomography angiography for detection of neovascularization and evaluation of peripheral ischemia in diabetic retinopathy

Inês Marques (Portugal): Swept-source OCTA discriminates severity staging of NPDR: The CHART Study
Ana Almeida (Portugal): Combination of ultra-widefield colour fundus photography and Optical Coherence Tomography Angiography identify different subtypes of non-proliferative diabetic retinopathy

SESSION 7

Laboratory and translational research in diabetic eye disease

Moderators: Francisco Ambrósio and Ingeborg Klaassen

10:00-10:15 Non-canonical anti-inflammatory effects of sitagliptin on (retinal) microglia – Francisco Ambrósio

10:15-10:24 Rosa Fernandes (Portugal): Tear fluid proteins analysis from donors with diabetes and diabetic retinopathy (DR)

10:24-10:33 Ingeborg Klaassen (Netherland): Variations in genetic profile as predictors of anti-VEGF treatment response in conditions with macular oedema

10:33-10:48 The non-coding genome in human disease and why it matters to understand the genetics of diabetic retinopathy – José Bessa

10:50-11:20 Coffee break

SESSION 8

Biomarkers and artificial intelligence

Moderators: José Cunha-Vaz and Maria Vittoria Cicinelli

11:20-11:40 Phenotypes and biomarkers of retinopathy progression type 2 diabetes – José Cunha-Vaz

11:40-11:49 Ana I. Arroba (Spain): Differential pattern of biomarkers between early and advance stage in patients with Type 1 diabetes with diabetic retinopathy

11:49-11:58 Luis Mendes (Portugal): Automated discrimination between eyes with mild and moderate non-proliferative diabetic retinopathy

11:58-12:07 Maria Vittoria Cicinelli (Italy): Rate and predictors of misclassification of diabetic macular edema as detected by the artificial intelligence EyeArt system

12:07-12:16 David Wong (UK): Adaptive Comparative Judgement as a basis for a machine learning algorithm for diabetic retinopathy screening

12:16-12:46 Cardiovascular disease in diabetes - Pedro Monteiro

12.50-13.00 BEST POSTER PRIZE CEREMONY and CLOSING REMARKS

Inês Marques and Tunde Peto
We see more, together™

Alimera Sciences is a global pharmaceutical company whose mission is to be invaluable to patients, physicians and partners concerned with retinal health and maintaining better vision longer.

Come and visit us at our booth, we would love to see you...

alimerasciences.eu

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Where Two Worlds Meet

Shift the paradigm in nAMD and DME with dual pathway inhibition

nAMD - Neovascular Age-related Macular Degeneration
DME - Diabetic Macular Edema
Ang-2 - Angiopoietin-2
VEGF - Vascular endothelial growth factor

VABYSMO® (vabixma) is an O bystander effect FXa inhibitor for the treatment of nAMD, DME and diabetic retinopathy. Please see full Instructions for Use for full prescribing information. Indications: VABYSMO is indicated for the treatment of nAMD associated with exudation from fenestrated capillaries in patients 75 years of age and older or who are at least 65 years of age with additional risk factors for nAMD. VABYSMO is indicated for the treatment of DME associated with exudation from fenestrated capillaries, and diabetic retinopathy with vision-threatening diabetic macular edema (DTM). Patients should be monitored for possible progression of diabetic retinopathy and should be referred to an ophthalmologist if signs or symptoms of diabetic retinopathy worsen. The dose of VABYSMO should be reduced to 7.5 mg if renal function impairment is severe. The dose of VABYSMO should be reduced to 5 mg if renal function impairment is severe. The dose of VABYSMO should be reduced to 5 mg if creatinine clearance is less than 30 mL/min.

VABYSMO is contraindicated in patients with severe or irreversible visual loss, and in patients with a known history of serious allergic reactions to VABYSMO. VABYSMO is also contraindicated in patients with renal impairment, including patients with severe or irreversible visual loss, and patients with active serious infections. VABYSMO should be used with caution in patients with a history of thrombosis or thrombosis-related events, including deep vein thrombosis or pulmonary embolism. Patients with a known history of thrombosis may have an increased risk of thrombosis when taking VABYSMO.

VABYSMO may cause serious side effects. These include: death due to infection; serious bleeding; gastrointestinal perforation; severe liver injury; and severe skin reactions. Patients should be monitored for serious skin reactions and to detect early signs of serious bleeding, such as increasing bruising, severe headache, or sudden severe pain or shortness of breath. Patients should be monitored for possible progression of diabetic retinopathy and should be referred to an ophthalmologist if signs or symptoms of diabetic retinopathy worsen.

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We are grateful to all organizations who have generously supported the EAsDEC 2023 Coimbra Meeting.
ORGANIZING INSTITUTION

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