

**30th EASDec Annual Meeting, 21st – 23rd May 2020. Barcelona, Spain.**

**Venue: Hotel Alimara**

**THURSDAY, 21th MAY 2020**

**15.00: Satellite Symposium 1**

 ***Symposium Bayer***

**Update and controversies on the treatment of DR and DME**

Welcome and Introduction (Chair) *Prof. Rafael Simó*

Aflibercept: Optimizing Anti-VEGF Therapy in Retinal Disease *Dr. Patricia Udaondo*

Controversies in DR and DME: Importance of Early, Intensive Treatment *Dr. Olga Simó-Servat*

EURETINA Guidelines and RWE *Dr. Lluís Arias*

**16.30: Break**

**16.45: Satellite Symposium 2**

 **Diabetic Retinopathy as biomarker of cardiovascular disease**

 ***Symposium Novo Nordisk***

Welcome and introduction (Chair)

*Prof. Javier Escalada*

The influence of microangiopathy on macroangiopathy in diabetes

*Prof. Dídac Mauricio*

Diabetic retinopathy as a risk factor of cardiovascular disease

*Prof. Rafael Simó*

The role of microangiopathy in heart failure

*Prof. Vivencio Barrios*

**18.30:** **Official opening of EASDec and the Annual Meeting Welcome Reception**

VENUE: Hotel Can Travi Nou

18.30 - 20.30 Drinks reception, tapas and canapés

**FRIDAY, 22th MAY 2020**

**08:00 Registration**

**09:00 INTRODUCTION AND WELCOME**

**Prof. Rafael Simó**

**9:15 Oral communications: Basic and translational research in diabetic eye complications**

 ***(Supported by Mundipharma)***

**Chair: Prof. Reinier O. Schlingemann and Prof. Alan Stitt**

**9:15-9:30 Patrice Fort (Michigan, US)**

Regional changes of retinal physiology in humans: diabetes vs retinopathy

**9:30-9:45 Esmeralda Bosma (Netherlands)**

The role of eNOS in VEGF-induced vascular permeability

**9:45-10:00 Olga Simó-Servat (Spain)**

ERM complex, a therapeutic target for vascular leakage induced by diabetes

**10:00-10:15 Hugo Ramos (Spain)**

DPP-IV inhibitors for treating early stages of diabetic retinopathy in an experimental model: a dose-efficacy study

**10:15-10:30 Tine Van Bergen (Belgium)**

Targeting plasma kallikrein with a novel bicyclic peptide inhibitor (THR-149) reduces retinal thickening in a diabetic rat model

**10:30-10:45 Eleni Beli (UK)**

Diurnal rhythms of myeloid cell infiltration into the retina in type 1 diabetes (T1D)

**10:45 Coffee break**

**11:00 SESSION: Screening of diabetic retinopathy in Europe: current status and new challenges**

**Chair: Prof. Peter Scanlon and Prof. Tunde Peto**

**11:00-11:12 Katie Hazelgrove (UK)**

Incidence of referable diabetic retinopathy at patient’s first screening

**11:12-11:24 Jacob Grauslund (Denmark)**

Identification and characterization of patients with rapid progression of diabetic retinopathy in the Danish national screening program

**11:24-11:36 Anne Suhr Thykjær (Denmark)**

Non-attendance at diabetic eye screening in the Danish nationwide screening program

**11:36-11:48 Deborah M. Broadbent (UK)**

Safety, efficacy and cost effectiveness of individual screening for diabetic retinopathy: the Individualized Screening for Diabetic Retinopathy (ISDR) single centre, open label, equivalence randomized controlled trial

**11:48-12:00 Rajiv Pandey (Ireland)**

Irish National Diabetic RetinaScreen programme: 5 rounds of screening and referrals

**12:00-12:12 Caroline Styles (UK)**

Use of dilating drops in the Scottish diabetic retinopathy screening programme

**12:12-12:24 Petri Huhtinen (Finland)**

Establishing a diabetic retinopathy screening service in Eswatini

**12:30 EVA KOHNER LECTURE**

**Chair: Prof. Tunde Peto. Awarded: Simon Harding - Future challenges in detecting treatable diabetic retinopathy**

**13:15 Lunch**

*(Poster presenters have priority for lunch)*

**13:30 POSTER SESSION**

**Experimental research**

**Moderators: Dr. Cristina Hernández**

**1 – Aurora Mazzeo (Italy)**

Effects of melanocortin receptor agonism in cell models of the inner blood-retinal barrier cultured in diabetic-like conditions

**2 – Natasha Varsney (UK)**

Fluctuating hyperglycaemia has the same effect as sustained hyperglycaemia in an in vitro model of diabetic retinopathy

**3 – Ana I. Arroba (Spain)**

Anti-inflammatory (m2) response is induced by a synthetic glycolipid-type molecule ((1r)-1-dodecylsulfinyl-5N,6O-oxomethylidenenojirimycin): a new possible treatment in diabetic retinopathy

**4 – Ingeborg Klaassen (Netherlands)**

Involvement of PDGF in neurite outgrowth leading to fibrovascular membranes in PDR

**Screening and epidemiology**

**Moderators: Dr. Anne Suhr Thykjær and Dr. Deborah M. Broadbent**

**1 – Steve Aldington (UK)**

International students undertaking UK University-validated distance-learning courses in Diabetic Retinopathy Screening (DRS)

**2 – Rosalind Creer (UK)**

Assessing virtual clinic quality and safety for patients with diabetic eye disease at Manchester Royal Eye Hospital

**3 – Angela Dale (UK)**

The use of virtual clinics to manage diabetic retinopathy patients with delayed follow up appointments in an English hospital eye service

**4 – Jayashree Sahni (California, US)**

Insights into progression of diabetic retinopathy (DR) severity among primary care patients with diabetes in the United States

**5 – Iona Minty (UK)**

Incidental vascular findings in diabetic eye screening: do patients benefit from referral?

**6 – Robert Rehak (UK)**

Profile, visual and maculopathy outcomes of patients referred for the first time with pre-proliferative diabetic retinopathy from screening into a hospital eye service

**7 – Martina Tomić (Croatia)**

Association between homocysteine and the risk of retinopathy in type 2 diabetes

**8 – Donal McCullagh (UK)**

Audit of referral of patients graded as R3 (proliferative retinopathy) by diabetic eye screening programme Northern Ireland (DESPNI)

**9 – Catherine Jamison (UK)**

Diabetic eye disease in patients with diabetes mellitus secondary to chronic pancreatitis (DMsCP)

**10 – Laura Cushley (UK)**

Certification of Visual Impairment in Patients with Diabetes Mellitus in Northern Ireland over a 5 year period

**11 – Laura Kennelly (Ireland)**

Irish Diabetic Retinopathy Screening Programme: An analysis of grade R2 screened patients in 2015

**12 – Alan Sproule (UK)**

Grading data are only as good as the graders – and all data depends on good quality questions

**13 – Henrik Lund-Andersen (Denmark)**

Prevalence of diabetic retinopathy in Greenland

**14 – Tunde Peto (UK)**

Young people's view of Diabetic Retinopathy Screening in Northern Ireland

**Retinal imaging and artificial intelligence**

**Moderators: Prof. Frank D. Verbraak and Dr. Inês Pereira Marques**

**1 – Georgios Bontzos (Greece)**

Retinal neurodegeneration, macular circulation and morphology of the foveal avascular zone in diabetic patients. Quantitative cross-sectional study using OCT-A

**2 – Giuseppe Querques (Italy)**

Nonmydriatic widefield retinal imaging with an automatic white LED confocal imaging system compared with dilated ophthalmoscopy in screening for diabetic retinopathy

**3 – Maria Luisa Ribeiro (Portugal)**

Baseline characterization of retinal vascular disease in eyes with mild to moderate non proliferative diabetic retinopathy (NPDR) in diabetes type 2, using novel non-invasive Imaging methods, in a longitudinal, prospective and interventional 2-year clinical study (CORDIS)

**4 – Maribel Lopez (Spain)**

Automated diabetic retinopathy quality image assessment: diagnostic accuracy in clinical practice

**5 – Lars Díaz (Denmark)**

Neural networks and left/right classification of retinal images

**6 – Fethallah Benmansour (Switzerland)**

Machine Learning to Predict Diabetic Retinopathy Improvement in Patients with Mild NPDR Using Systemic and Retinal Imaging Features

**7 – Jacob Andersen (Denmark)**

Using Semantic Segmentation for Detection of Microaneurysms in Retinal Images

**8 – Rosangela Lattanzio (Italy)**

MultiColor imaging to detect different subtypes of retinal microaneurysms in diabetic retinopathy

**9 – Andreea Ciudin (Spain)**

Retinal sensitivity and gaze fixation: two independent and valuable measurments that could be obtained by using microperimetry

**10 – Thomas Lee Torp (Denmark)**

Validation of the SIVA-plus deep-learning algorithm on retinal vascular calibre in patients with treatment-naïve proliferative diabetic retinopathy before and after panretinal photocoagulation

**11 – Kim Gooding (UK)**

Examining the impact of type 2 diabetes on longitudinal changes in fovea thickness

**12 – Andrzej Grzybowski (Poland)**

Pilot artificial intelligence based diabetic retinopathy screening programme in Poland

**13 – Marie Torm (Denmark)**

Hyperreflective dots on optical coherence tomography scans of diabetic retinopathy – can some of them represent non-perfused capillaries?

**14 – Romano Vrabec (Croatia)**

Association between retinal nerve fiber layer, ganglion cell layer with inner plexiform layer and diabetic retinopathy in type 2 diabetes

**15 – Mariacristina Parravano (Italy)**

Deep capillary plexus impairment as a biomarker of diabetic retinopathy progression in the long-term follow up in type 1 diabetes

**DR treatment**

**Moderators: Dr . Olga Simó-Servat and Dr. Rosangela Lattanzio**

**1 – Valeriya A. Biletskaya (Russia)**

Neovascular glaucoma drainage surgery, remote results for diabetic patients.

**2 – Eylem Cagiltay (Turkey)**

Optical coherence tomography biomarkers to predict anti-VEGF response in diabetic macular edema

**3 – Emine Doğan (Turkey)**

Short term effects of intravitreal Bevacizumab injection on retinal nerve fiber layer thickness

**4 – Mehmet Murat (Turkey)**

Prognostic value of subretinal fluid volume in patients with Ranibizumab-resistant diabetic macular edema treated with intravitreal Dexamethasone

**5 – Anna Stage Vergmann (Denmark)**

Retinal vascular oxygen saturation in response to panretinal photocoagulation in proliferative diabetic retinopathy: detection of a dose-response relationship?

**6 – Søren Leer Blindbæk (Denmark)**

Changes in retinal microvasculature parameters after low-carbohydrate, high-fat diet in type 2 diabetes: a randomized-controlled trial of Danish type 2 diabetic patients

**7 – Stela Vujosevic (Italy)**

Subthreshold micropulse laser in diabetic macular edema: OCT and OCT-Angiography biomarkers of treatment response

**8 – Irina Bashina (Russia)**

The use of prolonged corticosteroids for the prevention of macular edema after cataract surgery in patients with diabetes mellitus

**9 – Mehmed Uğur Işik (Turkey)**

Investigation of choroidal thickness changes after intravitreal Bevacizumab treatment in the treatment of diabetic macular edema

**10 – Irene Stratton (UK)**

Outcomes in patients with diabetic macula oedema treated with Aflibercept for up to three years

**11 – Diana Minasyan (Ireland)**

Evaluation of real-life clinical outcomes of intravitreal anti-VEGF injections for diabetic maculopathy in Diabetic Retina Treatment Unit, Mater Misericordiae University Hospital, Dublin, Ireland

**12 – Lazaros Konstantinidis**

Outcomes of hybrid mixed-gauge by bimanual vitrectomy for diabetic tractional retinal detachment

**13 – Ernest Lim (UK)**

Short-term effectiveness of subthreshold laser therapy for predominantly non-centre involving diabetic macular oedema

**14:45 Oral communications: Clinical Management and Treatment of Diabetic Eye Complications**

**Chair: Dr. Stela Vujosevic and Prof. Patrice Fort**

**14:45-15:00 Rafael Simó (Spain)**

Diabetic retinopathy as an independent predictor of subclinical cardiovascular disease: baseline results of the PRECISED study

**15:00-15:15 Kiran Shah (India)**

Diabetic retinopathy grade as predictor of outcomes in patients with type 2 diabetes and lower extremity amputations – multicentric longitudinal seven years study

**15:15-15:30 José Cunha-Vaz (Portugal)**

Ocular and systemic risk markers of diabetic retinopathy progression. A five-year longitudinal study

**15:30-15:45 Inês Pereira Marques (Portugal)**

Different retinopathy phenotypes in diabetes type 2 show different five-year risks for development of DME and PDR

**15:45-16:00 Reinier Schlingemann (Netherlands)**

miRNA levels as a biomarker for anti-VEGF response in patients with diabetic macular edema

**16:00-16:15 Qian Yang (UK)**

Retinal vasculature damage in the deeper plexus is more severe than in the superficial plexus during very early diabetic retinopathy

**16:15 ROUND TABLE: *Looking at retinal neurodegeneration and beyond***

 ***(Supported by OM-VIFOR PHARMA)***

 **Chair: Prof. Jakob Grauslund and Prof. Rafael Simó**

* The neurovascular unit: a key element in the development of vascular leakage

 *Alan Stitt (Belfast)*

* Retinal neurodegeneration in diabetes: clinical and therapeutic implications.

*Rafael Simó (Barcelona)*

* Retinal fingerprint of neurodegenerative diseases

*Frank D. Verbraak (Amsterdam)*

**17:45 ANNUAL GENERAL MEETING**

**18:30 End of the Day**

**20:00 Conference dinner**

**SATURDAY, 23th MAY 2020**

**08:30 Registration**

**9:00 Oral presentations: New technologies in eye imaging**

**Chair: Prof. José Cunha-Vaz and Dr. Steve Aldington**

**9:00-9:15 Naiara Relaño-Barambio (Spain)**

Validation of a deep learning algorithm for diabetic retinopathy

**9:15-9:30 Malin Lundberg Rasmussen (Denmark)**

Comparing SIVA and VAMPIRE for vascular geometric findings in patients with type 1 diabetes

**9:30-9:45 Fethallah Benmansour (Switzerland)**

Deep learning algorithm for predicting diabetic retinopathy (DR) improvement with anti-VEGF therapy in individual patients using baseline color fundus photographs (CFPs)

**9:45-10:00 Frank Verbraak (Netherlands)**

Validation of automated screening for referable diabetic retinopathy with an automatic device (IDxDR) in a Spanish population

**10:00 Keynote Lecture: Prof.Patrice Fort “A journey through multi-omics analysis of diabetic retinopathy”**

**10:45 Coffee Break**

**11:00 SESSION: “Liquid Biopsy: usefulness for personalized treatment in DME”**

 **(Supported by ROCHE)**

 **Chair: Prof. Tunde Peto and Dr. Patricia Udaondo**

* Retinal Disease Phenotyping through Advanced Ocular Omics

 *Andreas D. Christ*

* Personalized medicine by Targeting Pro-inflammatory Cytokines in DR and DME

 *Marina Mezquida*

**12:00 SESSION: “What should know the GP about DR?”**

 **(Supported by AstraZeneca)**

 **Chair: Dr. Maria Cristina Parravano and Dr. Xavier Mundet**

- Relationship with other diabetic complications

 *Manel Mata*

- Can DR influence the management of diabetes?

 *Olga Simó-Servat*

**12:45 Best poster prize ceremony and closing remarks**

**Professor Rafael Simó**