EASDec 2015

25th ANNUAL MEETING

26th - 27th - 28th JUNE 2015

TORINO
Cavallerizza Reale
Via Giuseppe Verdi, 9
Dear Friends,

This is a special occasion because we celebrate 25 years of EASDec. Time flies! The study group on Eye Complications of the EASD was established by some enthusiastic pioneers of the fight against diabetes-related blindness: Eva Kohner, José Cunha-Vaz, Gaetano Crepaldi, Carl-David and Elisabet Agardh, Anne Kathrin Sjoelie, Einar Stefansson, and others. Although, sadly, some of them are no longer physically among us, we feel that all of them are here to celebrate progress achieved over one quarter of century. So much and yet so little has been done: laser treatment was being standardised 25 years ago and little could be done for macular edema. Cataract extraction was still a somewhat adventurous procedure and vitrectomies were bordering on science fiction. Screening was almost a dirty word in some circles!

But so much is left to do: establish what closes capillaries and makes them leak and grow, structured screening is far from being a must in nearly all countries, vision can be improved but not yet restored ... the list could go on.

As a little homage to the 25th anniversary of EASDec, we have collected all material from previous annual meetings: scientific programmes, board composition at different times, etc. You can see that all in our website: www.easdec.org. Anybody with any material that could fill the remaining gaps, particularly those relevant to the first years of activity, please let us have them.

We received a record number of free communications this year. Most of them were of excellent quality and the Scientific Board made all possible efforts to give each of them right prominence within the programme, either as oral or poster presentations. A little guide to interpreting scientific conferences is also included in this booklet, a light contribution that I hope will not apply too literally to our meeting!

Finally, I wish to give special thanks to the EASDec team, which I had the honour of leading these past three years: Tunde Peto, Simon Harding, Rafael Simô and Reinier Schlingemann. Thanks are due to the sponsors, without whom the meeting would definitely have other dimensions, and to Mrs. Bersezio and her friendly team in the Organising Secretariat. Not only I hope that you will enjoy the scientific and social programme. Being fully aware of their capabilities, I am sure it cannot be otherwise!

Massimo Porta
President of EASDec and Chairman of the Local Organising Committee
EASDec - EUROPEAN ASSOCIATION FOR THE STUDY OF DIABETES
Eye Complications Study Group (EASDec)

EASDec is a Study Group of the European Association for the Study of Diabetes (EASD) with special responsibility for the study of the eye complications of diabetes.

Its aim is to promote the advancement of knowledge of all aspects of diabetic retinopathy, including epidemiology, pathology, pathophysiology, investigation and treatment through active collaboration between ophthalmologists and diabetologists.

The ultimate goal of the Group is to prevent the development of diabetic retinopathy and to search for the best treatment of this condition in diabetic patients.

EASDec Board

Professor Massimo Porta, Turin, Italy - President
Professor Simon Harding, Liverpool, UK - President Elect
Professor Rafael Simò, Barcelona, Spain - Treasurer
Professor Tunde Peto, London, UK - Secretary
Professor Reiner O. Schlingemann, Amsterdam, NL - Adjunct
26TH JUNE 2015, FRIDAY

Symposium 1
Diabetic retinopathy: from treating diabetes mellitus to diabetic eye screening
Chair: Professor Ugo Menchini

14.00 Welcome and introduction from Chairs
14.15 Focus on patients: key characteristics and common comorbidities in patients affected by DME and DR
   Edoardo Mannucci
15.05 Two years results from an Italian diabetic retinopathy screening programme
   Francesco Boscia
15.20 Ranibizumab in DME: optimizing clinical outcomes with a flexible and customized approach
   Massimo Nicolò
15.35 Breakthrough therapy: disease modifying effect of Ranibizumab in DR
   Federico Ricci
15.50 Panel Q & A and closing comments
   Ugo Menchini

Symposium 2
Automated image analysis: relieving the burden of screening for diabetic retinopathy
Chair: Professor Reiner Schlingemann

16.30 Welcome and introduction from Chair
16.35 Screening for diabetic retinopathy: background and challenges
   Simon Harding
17.00 Successful recent screening initiatives: Italy
   Massimo Porta
17.15 Successful recent screening initiatives: France
   Ali Erginay
17.30 Retinopathy screening in the Diabetes Care System West-Friesland, test characteristics of an automatic
   risk screening
   Giel Nijpels
17.45 Automated screening for diabetic retinopathy: state of the art
   Tunde Peto
18.15 Panel Q & A and closing comments

The official programme of EASDec starts
19.00 Opening ceremony followed by refreshments
   Opened by: Professor Massimo Porta
SESSION 1: EPIDEMIOLOGY AND CLINICAL MANAGEMENT OF DIABETES AND DIABETIC RETINOPATHY

Chairs: Professors Simon Harding and Federico Grignolo

09.15 Patient perspectives of acceptability of risk-based individualised diabetic retinopathy
P. Byrne, C. Thetford, M. Gabbay, A. Wang, D. Broadbent, S.P. Harding (United Kingdom)

09.30 Diabetic retinopathy in Europe initial results of the E3 Consortium Diabetes Group
M. Hansen, T Coolen, T. Peto (United Kingdom, Denmark)

09.45 Incidence and progression of retinopathy and visual impairment in people with diabetes in Sub-Saharan Africa: relationship with population specific variables
P. Burgess, T.J. Allain, G. Msukwa, C. Pindani, O. Mkangadzula, M. Garcia-Finana, S.P. Harding (United Kingdom, Malawi)

10.00 Registry study of diabetic macular edema in Turkey: Turk-dem study
S. Kadayífıçılár (Turkey)

10.15 KEYNOTE SPEAKER:
Professor Stefano Del Prato
Implementing patient-centred approach for treatment of Type 2 diabetes?
Introduced by Professor Massimo Porta

SESSION 2: EXPERIMENTAL AND LABORATORY STUDIES OF DIABETIC RETINOPATHY

Chairs: Professors Rafael Simo and Massimo Porta

11.25 Inhibition of protein tyrosine phosphatase 1B improves IGF-I receptor signalling and protects against inflammation-induced gliosis in the retina
A.M. Valverde, A.I. Arroba (Spain)

11.40 Down-regulation of MIR-126 in human retinal pericytes after exposure to extracellular vesicles in diabetic-like conditions
A. Mazzeo, E. Beltramo, A. Iavello, S. Grimaldi, A. Carpanetto, M. Porta (Italy)

11.55 The regulation of retinal arteriolar diameters in diabetic patients involves NO and COX products
L. Petersen, T. Bek (Denmark)

12.10 Hypoxia and hyperglycaemia-induced pericyte apoptosis: identification of pro-apoptotic markers
E. Beltramo, A.I. Arroba, A. Mazzeo, M. Porta, A.M. Valverde (Italy)

12.25 Modulation of camp signalling prevents TNFα-induced Endothelial Barrier Disruption in an In Vitro Model of the Blood- Retinal Barrier
A. Van Der Wijk, C.J.F. Van Noorden, I. Klaassen, R.O. Schlingemann (The Netherlands)

12.40 Adipose-derived stromal cells contribute to microvascular stabilization in diabetic proliferative retinopathy: to be or notch to be?
V. Terlizzi, H.P. Hammes, M.C. Harmsen (The Netherlands)

Research is what I’m doing when I don’t know what I’m doing.
LUNCH, EXHIBITION VIEWING, POSTERS AND COFFEE/TEA

13.00 Lunch (poster presenters’ priority)
13.30 Poster presenters at poster - moderators will visit
14.30 Poster presenters circulate - Tea/coffee served

SESSION 3:
POSTER SESSION

Moderators: Professors Rafael Simo and Dr. Elena Beltramo, Professors Simon Harding and Sehnaz Karadeniz, Professor Reiner Schlingemann and Ingeborg Klaasen, Professors Massimo Porta and Tunde Peto, Associate Professor Steve Aldington and Dr. Philip Burgess

EXPERIMENTAL LABORATORY SCIENCE

1. The correlation between aqueous and serum level of Apolipoprotein A1 and B and diabetic retinopathy
   I. Timur, K. Ornek, O. Caglayan [Turkey]

2. Aqueous humor and serum levels of Nitric Oxide, malondialdehyde and total antioxidant status in diabetic and nondiabetic senile cataract patients
   A. Karalezli, S. Kulaksizoglu [Turkey]

3. Immunolocalisation of tubulin polymerisation promoter protein/p25 in the diabetic retina
   R. Tripon, L. Csincsik, J. Olah, J. Ovadi, I. Lengyel [Romania]

4. Benfotiamine prevents experimental diabetic retinopathy through regulation of endothelial angiopoietin-2 and protein GlcNac modification
   Y. Feng, D. Zhao, K. Altvater, A. Hegen, U. Fiedler, T. Wieland, H.P. Hammes [Germany]

5. The role of lipoprotein phospholipase A2 in pathogenesis of diabetic retinopathy
   P. Canning, V. Prise, V. Wong, K. McAllister, P. Adamson, A.W. Stitt [UK]

6. Retinal gene expression shows compartment specific differences in health and disease
   C. Weinold, M. Kolibabka, G. Molema, D. Margerie, H. Hammes [The Netherlands]

7. Hyperglycemic memory - mechanisms relevant to the diabetic retina
   P. Friedrichs, A. Dietrich, G. Molema, H.P. Hammes [Germany]

8. MicroRNA signature in diabetic retinopathy
   J. Friedrich, C. Sticht, H. Hammes, G. Krenning [Germany]

9. Ocular distribution of fenofibrate and its active metabolite fenofibric acid after ocular and oral administration in rabbits

10. Intravitreal delivery of IgG aggregates induces immune cell activation in the healthy retina
    C. McVicar, D. Solomon, A. Stitt [UK]

11. Modulation of microglia polarity is a new target against Diabetic Retinopathy: an experimental approach in db/db mice

12. Mechanisms of action of calcium dobesilate in the early stages of diabetic retinopathy
    C. Hernández, P. Bogdanov, C. Solà, L. Corraliza, R. Simó [Spain]
13. ADSC therapy for treatment of diabetic retinopathy: the best or last resource?  
G. Hajmousa, A. Elorza, M. Harmsen (Netherlands)

14. Fetal metabolic reprogramming: Fetal placental gestational diabetes mellitus vascular progenitor cells resemble adult Type 2 proliferative diabetic retinopathy  
R. Samuel, C. Premkumar, S. Rajendran, K. Ramanathan, S. Benjamin, J. Mathews, M. Seshadri (India)

**EARLY RETINOPATHY**

15. Vasoreparative potential of a unique population of stromal stem cells (SSCS) in ischaemic retina  
V. Wong, L. Allen, R. Medina, S. Elliman, P. Loftus, L. O’Flynn, A.W. Stitt (UK)

16. Functional evaluation of the retina using multifocal electroretinography in the early stages of diabetic eye disease in the setting of a multicenter clinical trial  
S. Simão (Portugal)

17. Inner retinal layer changes in diabetes mellitus Type 1 without clinical diabetic retinopathy  
F. Akay, S. Toyran, E. Çağîtay (Turkey)

**IMAGING**

18. Retinal vascular geometry and its association to 16-year development of microvascular complications in patients with type 1 diabetes  
M.L. Rasmussen, R. Brøe, U. Frydkjaer-Olsen, T. Petø, J. Grauslund (Denmark)

19. Assessment of corneal epithelial thickness in diabetes mellitus patients  

20. Diabetic retinopathy with a picture of Leber’s hereditary microaneurysms  
F. Yulek, N. Ugurlu, B. Polat, H.B. Baser, R. Ersoy, B. Cakir (Turkey)

**GRADING**

21. Intra- and intergrader reliability of semiautomatic measurements of fundus fluorescein angiography leakage in proliferative diabetic retinopathy  
T. Torp, U. Frydkjaer-Olsen, R. Hansen, T. Petø, J. Grauslund (Denmark)

22. Real-world workflow effects of automated diabetic retinopathy screening in a primary diabetes care setting with the IDx-DR device  
G. Nijpels, M. Abramoff, M. Niemeijer, E. Talmage, A. Van Der Heijden (The Netherlands)

23. Using both Optos wide-field and standard Topcon 7-field images in a clinical trial setting: advantages and challenges  
T. Mansour, M. Michaelides, T. Petø (UK)

**SCREENING**

24. Introducing personalised risk based intervals in screening for diabetic retinopathy: the ISDR study  
D. Broadbent, S. Harding, M. García-Fiñana, A. Fisher, A. Bennett, D. Appelbe, A. Wang (UK)

25. Barriers and motivators for attendance at diabetic retinopathy screening  
J. Mackenzie, S. Aldington, P. Scanlon (UK)

26. Four years results of diabetic retinopathy screening system in Institute for clinical and experimental medicine in Prague  
T. Sosna, M. Kahle, R. Pekna (Czech Republic)

27. A baseline situation analysis of diabetic retinopathy (DR) services (DRS) in 11 Commonwealth countries  
P. Blows, M. Zondervan, C. Walker, A. Foster, T. Petø (UK)

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The voyage of discovery is not in seeking new landscapes but in having new eyes.  
Marcel Proust
A single fact can spoil a good argument.
45. The Efficiency of Dexamethasone intravitreal implant in the treatment of macular edema secondary to diabetes mellitus
E. Unsal, K. Eltutar, P. Sultan, S.O. Erkul (Turkey)

46. Effectiveness of a single subtenon triamcinolone acetonide injection on macular thickness evaluated by optical coherence tomography in diabetic patients after cataract surgery
M. Yorgun, Y. Toklu, H. Cakmak, D. Dal, N. Cagil (Turkey)

47. Intravitreal ranibizumab injection for diffuse diabetic macular edema unresponsive to modified grid laser photocoagulation
B. Cakir, E. Celik, E. Dogan, E. Turkoglu, G. Erdogan, G. Alagoz (Turkey)

48. Comparison of modified grid laser photocoagulation and intravitreal ranibizumab injection for diffuse diabetic macular edema
E. Celik, B. Caki, E. Turkoglu, E. Dogan, G. Erdogan, G. Alagoz (Turkey)

49. Anti-Vascular Endothelial Growth Factor for a Complication of Panretinal Photocoagulation in Proliferative Diabetic Retinopathy
A. Kukner, Z. Sarman, N. Yis, S. Selim, I. Kocamis (Turkey)

50. Morphologic and functional modifications after anti-VEGF treatment in center involving diabetic macular edema
S. Vujosevic, M. Berton, S. Bini, E. Convento, F. Martini, E. Midena (Italy)

51. Short term follow-up of retinal nerve fibre layer alteration after grid laser photocoagulation
M. Bulut, D. Çelik, Ü. Çalış, K.T. Bulut, Y. Özertürk (Turkey)

52. Outcome of vitreoretinal surgery in cases with diabetic and idiopathic vitreomacular traction syndrome
M.M. Uzel, M. Çitirk, Ç. Ilhan, M.Y. Teke (Turkey)

53. The vitreomacular interface following intravitreal injections of ranibizumab in patients with central involving diabetic macular edema
N. Lois, M. Mikhail, R. Hogg (UK)

54. Treatment of diabetic macular edema with pars plana vitrectomy, peeling of internal limiting membrane and additional triamcinolone and laser coagulation
J. Stefanickova, V. Krasnik, K. Vavrova, P. Strmen (Slovakia)

55. Evaluation of a joint Ophthalmology/Diabetes Nurse Specialist clinic to support patients with sight threatening diabetic retinopathy
M. Morgan, K. Crerand (Ireland)

56. Presence of Diabetes Mellitus on Corneal Thickness Recovery after Uncomplicated Phacoemulsification Surgery
A.K. Altintas, K. Tekin, V. Cankurtaran (Turkey)

57. The Corneal Biomechanical Parameters in Type 1 Diabetes Mellitus
S. Dikci, O. Genc, R. Ekmen, M. Tas, P.G. Firat, S. Demirel (Turkey)

58. Pupil size before and after phacoemulsification in healthy, diabetic and systemic arterial hypertension patients by Combined Scheimpflug-Placido Disk Topographer
A. Şimşek, Ş. Bilak, B. Bilgin, L. Balyen, M. Çapkın, A. Şahin (Turkey)

59. The fixed combination of efficacy assessment in patients with secondary neovascular glaucoma and diabetes mellitus
D. Lipatov, T. Chistyakov, A. Kuzmin, A. Tolkacheva (Russia)

60. The association between metabolic regulation of patients with diabetes and phacoemulsification intraoperative and postoperative complications
L. Balyen (Turkey)

Biology is the only science in which multiplication means the same thing as division.
SESSION 4: AUTOMATED GRADING: REAL LIFE EXPERIENCE

Chairs: Professors Deborah Broadbent and Paolo Prinetto

15.00  Screening for Diabetic Retinopathy in the Central Region of Portugal. Added value of automated “disease / no disease” grading

15.15  Automated high-throughput screening of diabetic retinopathy is safe and effective
K. Solanki, M. Bhaskaranand, S. Bhat, C. Ramachandra (USA)

15.30  Comparison of Screening for Diabetic Retinopathy between Clinical Examination by Ophthalmologists and Automated Detection from Retinal Colour Images
M. Abramoff, J.C. Folk, E. Daniel, M. Maguire (USA)

15.45  The application of machine learning to the automated detection of microaneurysms in different ethnic groups with diabetic retinopathy
T. Peto, G.M. Saleh, Silvestro Caputo, Lutfiah Ismail Al Turk, Su Wang, Yin Hu, Hongying Lilian Tang (UK)

DIABETIC MACULAR EDEMA (OR IS IT OEDEMA?)

16.15  In favour of OCT guided therapy using intravitreal injections
Dr. Stela Vujosevic

16.30  In favour of FFA-guided therapy and laser
Professor Reinier Schlingemann

16.45  Discussion

17.00  Annual General Meeting
Moderator: Tunde Peto

GALA DINNER: 19.30 PM MEETING FOR 20.00 PM DINNER
SESSION 5:
THE ROLE OF EARLY NEURODEGENERATION IN DIABETIC EYE DISEASE

Chairs: Professors Reiner Schlingemann and Jose Cunha-Vaz

09.00  Neuro - Degeneration of Cornea and Retina in patients with Type 1 diabetes without Clinical evidence of diabetic Retinopathy and Neuropathy

09.15  To evaluate the choroidal thickness in type 2 diabetic patients with or without diabetic polyneuropathy
Yazici, A (Turkey)

09.30  Topical administration of GLP-1 receptor agonists prevents retinal neurodegeneration in experimental diabetes

09.45  The Correlation Between Retinal Vascular Fractals and Neurodegeneration in Patients with Type 2 Diabetes Mellitus
U. Frydkjaer-Olsen, R.S. Hansen, K. Pedersen, J. Cunha-Vaz, R. Simó, T. Peto, J. Grauslund (Denmark)

10.00  Correspondence between central mfERG changes and Thinning of Ganglion Cells and Retinal Nerve Fiber layers in the initial stages of Diabetic Retinopathy
A.R. Santos (Portugal)

10.15  EVA KOHNER LECTURE
Professor Peter Scanlon
Diabetic retinopathy and DME/DMO endpoints and outcome measures in clinics, trials and studies
Introduced by Professor Massimo Porta

11.00  Coffee Break

SESSION 6:
CLINICAL INVESTIGATIONS IN DIABETIC RETINOPATHY

Chairs: Professors Tunde Peto and Ugo Menchini

11.30  The winner of Anne-Katrin Sjolie Best Young Investigator Prize:
Retinal layer location of increased retinal thickness in eyes with subclinical and clinical macular edema in diabetes type 2
C. Neves (Portugal)

11.45  Individualised risk-based screening for diabetic retinopathy - the Liverpool risk calculation engine
S.P. Harding, A. Eleuteri, D.M. Broadbent, M. Van Der Hoek, C.P. Cheyne, I.M. Stratton, A.C. Fisher (UK)

12.00  Validation of a risk stratification algorithm for progression to referable diabetic retinopathy
S. Aldington, I.M. Stratton, T. Gazis, S. Sivaprasad, G. Russell, P.H. Scanlon (UK)

12.15  Cost-effectiveness of a risk-based screening programme for diabetic retinopathy: a modelling approach
C. Sampson, M. James, A.C. Fisher, S.P. Harding (UK)

12.30  Cognitive function may be a predictor of retinopathy progression in patients with type 2 diabetes
L. Borio, M. Salassa, A. Baltatescu, L. Charrier, F. Cavallo, M. Porta, M. Trento (Italy)

12.45  Evaluation of depression in type 2 diabetic patients with retinopathy
L. Balyen, L.S.D. Balyen, S. Pasa, O. Satici (Turkey)

13.00  BEST POSTER PRIZE CEREMONY AND CLOSING REMARKS by Professor Simon Harding

13.30  Farewell refreshment
LOCATIONS

SCIENTIFIC SESSIONS

Cavallerizza Reale
Via Giuseppe Verdi 9, Torino

SOCIAL EVENTS

WELCOME COCKTAIL
FRIDAY 26TH JUNE - H. 19.00
Aula Magna Cavallerizza Reale
Via Giuseppe Verdi 9, Torino

GALA DINNER
SATURDAY 27TH JUNE - H. 20.00
Circolo Eridano
Corso Moncalieri 88 - Torino
Innovation and responsibility, at the patient’s service

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LOCAL SCIENTIFIC COMMITTEE

Professor Massimo Porta  
Dr. Elena Beltramo  
Dr. Lorenzo Borio  
Dr. Aurora Mazzeo  
Dr. Marina Trento

Department of Medical Sciences, University of Turin  
Corso Achille Mario Dogliotti 14, 10126 - Turin, Italy

LOCAL ORGANIZING SECRETARIAT

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Arrivederci!

EASDec 2016
Under the patronage of