

Programme for the EASDec Conference 2019

Thursday, 16th May 2019

VENUE: Church "De Duif"; at Prinsengracht 756 in Amsterdam City Centre

15:00 Registration

15.30: Satellite Symposium 1: ARTIFICIAL INTELLIGENCE IN OPHTHALMOLOGY: AUTOMATED SCREENING FOR DIABETIC RETINOPATHY

Sponsors: IDx, Eyenuk and Retmarker

Chair: Frank D. Verbraak

15:30-15:35 Introduction by Chair

15:35-15:50 Ursula Schmidt Erfurth: Standardization of the choice for AI in DR screening.

15:50-16:00 Practical implementation of EyeArt in DR-screening today

16:00-16:10 Practical implementation of IDx-DR in DR-screening today

16:10-16:20 Practical implementation of Retmarker in DR-screening today

16:20-16:30 Q&A and closure

16:30 BREAK

16:45 SATELLITE SYMPOSIUM 2: ANTI-VEGF IN DME AND PROLIFERATIVE DIABETIC RETINOPATHY: NEW DEVELOPMENTS

Sponsor: Novartis

Chair: Hans Vingerling

16.45-17.00 Nigel Davies (UK): Practical implementation of comparative RCT's in proliferative DR: Clarity and Protocol S study results

17.00-17.15 Janneke van Lith (Netherlands): Comparing the efficacy of bevacizumab to ranibizumab in patients with diabetic macular oedema: The BRDME study

17.15-17.30 Reinier Schlingemann (Netherlands): Practical implementation of comparative RCT's in DME: Protocol T and BRDME results

17.30-17.45 Ursula Schmidt-Erfurth (Austria): Automated analysis of OCT images in the treatment of diabetic retinopathy

17.45-18.00 Panel discussion

18.00: Official opening of EASDec and the Annual Meeting Welcome Reception

VENUE: Church "De Duif" in the Amsterdam City Centre

18.00 - 19.30 Drinks reception and canapés

FRIDAY, 17th MAY 2019

VENUE: Amsterdam UMC, location Academic Medical Center (AMC), at Meibergdreef 9, Amsterdam

08.00 Registration

09.00 INTRODUCTION AND WELCOME

Professor Reinier Schlingemann and Professor Rafael Simó

09.10 SESSION 1: NEW CLINICAL PERSPECTIVES

Chaired by: Dr. Stela Vujosevic and Professor Jakob Grauslund

09.10 Moderator's introduction of the session

09.15 – 9.27: van der Heijden, A (Netherlands): Retinopathy prediction models in type 2 diabetes: Systematic review and external validation study

09.27 – 9.39: Simó-Servat, O (Spain): Usefulness of gaze fixation assessment for identifying subjects with type 2 diabetes at risk of dementia

09.39 – 9.51: van Romunde, S (Netherlands): Prevalence and severity of diabetic retinopathy in patients with MacTel type 2

09.51 – 10.03: Stratton, I (UK): Aflibercept in the real world – a clinical audit of people with diabetic macular oedema from 21 UK hospitals

10.03 – 10.15: Konstantinidis, L (Switzerland): Evaluation of retinal function assessed with a novel handheld instrument (RETeval) using flicker electroretinography after anti-VEGF treatment in patients with diabetic macular oedema

10.15 Keynote Lecuture: Max Nieuwdorp (Netherlands): The role of microbiome in health and disease

10.50 Coffee/tea break

11.25 SESSION 2: STUDIES ON VITREOUS OR AQUEOUS HUMOUR SAMPLES TO UNDERSTAND DIABETIC EYE DISEASE

Chaired by: Professor Rafael Simó and Professor Alan Stitt

11.25 Moderator's introduction of the session

11.32 – 11.44: Simó, R (Spain): Usefulness of liquid biopsy of aqueous humour biomarkers in predicting anti-VEGF response in diabetic macular oedema: Results of a pilot study

11.44 – 11.56: Friedrich, J (Netherlands): Expression profiles of microRNAs in the vitreous of proliferative diabetic retinopathy patients and differences with patients treated with anti-VEGF therapy

11.56 – 12.08: Klaassen, I (Netherlands): Differential protein levels in vitreous of proliferative diabetic retinopathy patients treated with aflibercept and bevacizumab

12.08 Introduction to EVA KOHNER LECTURE: Professor Reinier Schlingemann

12.11 EVA KOHNER LECTURE: Professor Alan Stitt

Identifying new therapeutic options for diabetic retinopathy: insights gained from understanding basic pathogenesis

12.50 Lunch

(Poster presenters have priority for lunch)

13.30 SESSION 3: POSTER SESSION

DR Screening: Moderators: Dr. Irene Stratton and Dr. Olga Simo-Servat

1 - Lopez Galvez, MI (Spain): Teleophthalmology screening programme for DR based on a centralised reading centre: Patient and healthcare professionals' satisfaction with the grading

2 – Wharton, H (UK): Should we photograph eyes with perception of light and no perception of light during diabetic eye screening?

3 – Almeida, N (Portugal): Retmarker screening: new image quality algorithm immediately evaluates gradeability of images

4 – Erke, MG (Norway): Screening for diabetic retinopathy at an outpatient diabetes centre in Norway

5 – Hamill, B (UK): The comparison between an automated reading and human grading of images from a handheld wide field imaging device

6 – Changulani, T (UK): Referral to treatment guidelines for proliferative diabetic retinopathy in Scotland: are they possible?

7 – Hamid, A (UK): Why do patients default eye clinic appointments after referral from the screening programme?

8 – Dale, A (UK): Diabetic maculopathy levels in an English county

Clinical aspects and risk factors

Moderators: Dr L. Konstantinidis and dr van der Heijden

1 – Lipatov, D (Russia): Dynamics of diabetic retinopathy in Russia in 2014-2017 years

2 – Stefansson, E (Iceland): Smart phone APP for individual risk assessment for progression of diabetic retinopathy

3 – Pomytkina, N (Russia): Progression of diabetic retinopathy in pregnant women with type 1 diabetes

4 – Grauslund, J (Denmark): DECODE EYE – Ocular and systemic complications in diabetic retinopathy

5 – Tomić, M (Croatia): Adipocytokines and obesity are associated with endothelial dysfunction and retinopathy development in type 1 diabetes

Different aspects of treatment of diabetic retinopathy

Moderators: Professor Chiara Maria Eandi and Reinier Schlingemann

1 – Kotagiri, A (UK): Baseline characteristics from an observational study (DRAKO) investigating outcomes of Intravitreal aflibercept injections for treatment of diabetic macular oedema (DMO) in the UK

2 – Vergmann, AS (Denmark): Effect of panretinal photocoagulation with navigated laser on visual field in patients with treatment-naïve proliferative diabetic retinopathy

3 – Blindbæk, S (Denmark): Aflibercept and navigated versus conventional laser in diabetic macular oedema

4 – Celik, E (Turkey): Efficacy of intravitreal dexamethasone implant treatment in diabetic macular oedema refractory to intravitreal aflibercept treatment

Laboratory and clinical experimental studies

Moderators: Dr Luisa Ribeiro and Dr Nicola Quinn

1 – Bashina, I (Russia): Association between aqueous cytokines and diabetic retinopathy stage

2 – Mazzeo, A (Italy): High glucose and hypoxia-induced damage in the inner blood retinal barrier is counteracted by thiamine supplementation

3 – Balyen, LSD (Turkey): Castanea sativa extract has anti-oxidative properties: an experimental study with retinas of metabolic syndrome-induced rats

4 – Balyen, L (Turkey): Protective effect of *Onosma nigricaula* (Boraginaceae) on retinal oxidative and nitrosative stress in rats with metabolic syndrome

5 - Lund-Andersen, H (Denmark): Dark adaptation in humans leads to reduced oxygen saturation in the nasal peripheral retinal veins as measured with oximetry

6 – Gooding, K (Netherlands): A preliminary study examining albuminuria, macular thickness and glycocalyx shedding in the early stages of diabetic retinopathy in type 2 diabetes

15.20 SESSION 4: AUTOMATED GRADING

Chaired by: Professor Simon Harding and Dr. Frank Verbraak

15.20: Moderators' introduction of the session

15.25 – 15.37: Pratt, H (UK): Learning the features of diabetic retinopathy with convolutional neural networks

15.37 – 15.49: Ramos, J (Portugal): Retmarker screening: alternative deep learning algorithm also increases burden reduction in diabetic retinopathy screening programs

15.49 – 16.01: Harding, S (UK): The costs of screening for sight-threatening diabetic retinopathy

16.01 SESSION 5: TREATMENT OF DME

Chaired by: Dr Erke Maja Gran and Professor Lund Andersen

16.01: Moderators' introduction of the session

16.06 – 16.18: Capone, L (Italy): Fluocinolone acetonide 0.2µg/day (Iluvien®) for the treatment of chronic diabetic macular oedema: an Italian real-world experience

16.18 – 16.30: Parker, N (Northern Ireland): Use of Iluvien implant for diabetic macular oedema in the Belfast Health and Social Care Trust, Northern Ireland

16.30 – 16.42: Eandi, CM (Italy): Characteristics of diabetic macular oedema recurrence according to different baseline OCT patterns in patients treated with dexamethasone implant

16.42 – 16.54: Schlingemann, RO (Netherlands): Comparing the efficacy of bevacizumab to ranibizumab in patients with diabetic macular oedema: The BRDME study

16.54 – 17.06: Vader, MJC (Netherlands): Cost-utility of bevacizumab versus ranibizumab in patients with diabetic macular oedema: analysis from the BRDME study

17.06 ANNUAL GENERAL MEETING

Moderators: Professor Reinier Schlingemann/ Dr Stela Vujosevic

Including 17.10 -17.15: Dr Lokman Balyen: Presentation from the winner of the 2017 EASDec skills award

17.30 End of the Day

Conference dinner

Venue: Hermitage, at Amstel 51 in Amsterdam City Center

18.30 Welcome in Hermitage (drinks available)

19.30 Official start Conference dinner

SATURDAY, 18th MAY 2019

VENUE: Amsterdam UMC, location Amsterdam Medical Center (AMC) at 9 Meibergdreef

08.30 Registration

09.00 SESSION 6: Laboratory studies

Chaired by: Dr Ingeborg Klaassen and Professor Reinier Schlingemann

9.00: Moderators' introduction of the session

09.05 – 9.17: Roduit, R (Switzerland): Role of ER stress in hypoglycaemia-induced mouse retina cell death

09.17 – 9.29: Porcu, M (Belgium): Cell-type specific insights into the Akimba model of diabetic retinopathy using single cell transcriptomics analysis

09.29 – 9.41: Cagiltay, E (Turkey): Choroidal thickness significantly changes after oral glucose tolerance test in subjects with prediabetes: a spectral domain optical coherence tomography study

09.41 – 9.53: Ribeiro, L (Portugal): Multimodal imaging of the initial stages of diabetic retinopathy: Different disease pathways in different patients

09.53 – 10.05: Winner of the best student abstract price – Eyre, JJ (UK): Incorporation of endothelial colony forming cells into an *in vitro* human primary co-culture model of diabetic retinopathy

10.05: Keynote Lecture: Dr. Ingeborg Klaassen: Liquid biopsy and diabetic retinopathy

10.35 *Coffee/tea break*

11.10 SESSION 7: Imaging in diabetic eye disease

Chaired by: Dr. Ali Erginay and Dr. Amber van der Heijden

11.10: Moderators' introduction of the session

11.15 – 11.27: Vujosevic, S (Italy): Early detection of microvascular changes in patients with diabetes mellitus without and with diabetic retinopathy: comparison between different swept-source OCT-A instruments

11.27 – 11.39: Erginay, A (France): Rapid macular capillary loss in young patients with uncontrolled type 1 diabetes

11.39 – 11.51: Quinn, N (Northern Ireland): Clinical characteristics of the peripheral retina in people with diabetes

11.51 – 12.03: Byberg, S (Denmark): Optos wide-field imaging versus conventional camera imaging in Danish patients with type 2 diabetes

12.03 – 12.15: Hafner, J (Austria): Presence of peripheral lesions and correlation to macular perfusion, oxygenation and neurodegeneration in early type 2 diabetic retinal disease

12.15 Debate: Fundus fluorescein angiography versus OCT-A and/or widefield imaging in diabetic eye disease

12.15 -12.25: Professor Jakob Grauslund: For Fluorescein angiography

12.25 -12.35: Dr. Stela Vujosevic: For OCT-A and wide field imaging

12.35 -12.45: Discussion

12.45: Best poster prize ceremony and closing remarks

Professor Rafael Simó