



DOG

Deutsche Ophthalmologische
Gesellschaft

German Ophthalmological Society

Final program

Age-Related Macular Degeneration

VII. International DOG-Symposium on AMD

Understanding
Pathogenetic
Mechanisms of Disease

September 20 - 21, 2019

Baden-Baden, Germany

www.AMD2019.org

Dear Colleague,



during recent years there have been major advances in understanding pathogenetic factors in multifactorial complex age-related macular degeneration (AMD). The recent revolution in genetic and molecular biological studies as well as imaging and artificial intelligence has contributed significantly to our understanding of AMD. However, many open questions are still to be addressed.

We are approaching an era of new targets for therapy based on better differentiation, refined phenotyping and predictive markers of age-related macular disease. Four years after the last international Baden-Baden AMD meeting it appears timely to review emerging concepts.

We invite you again to beautiful Baden-Baden in the heart of the Blackwood Forest to the

VII. International DOG-Symposium on AMD Age-related Macular Degeneration - Understanding Pathogenetic Mechanisms of Disease -

We look forward to welcoming you in Baden-Baden!


Daniel Pauleikhoff


Frank G. Holz

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Sponsors

We thank the Dr. Werner Jackstädt-Foundation for the generous support of the Classification of Atrophy Meeting 6 - CAM-6
www.jackstaedt-stiftung.de



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General information

Date

Friday, September 20th, 2019 08.30 → 18.00

Saturday, September 21st, 2019 08.30 → 17.30

Venue

Kongresshaus Baden-Baden

Augustaplatz 10

76530 Baden-Baden

Germany

www.kongresshaus.de



Homepage

www.AMD2019.org

Scientific program

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Information Hotline

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Opening hours congress office

Friday, September 20th, 2019 07.30 → 18.00

Saturday, September 21st, 2019 08.00 → 17.30

Official Language

English

Deadline for early registration

August 1st, 2019

Fees

Booking	until August 1 st , 2019	after August 1 st , 2019
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Regular	€ 340	€ 370
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Resident*, Fellow*	€ 190	€ 220
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Student*, unemployed person*	€ 140	€ 170
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incl. VAT and excl. foreign transfer fees

* presentation of appropriate proof of status is required at the time of online-registration or may also be faxed to +49 (0)2 11 / 59 35 60; otherwise the regular fee will be charged.

Payment

by bank transfer (bank details are quoted on your confirmation) or by credit card:
VISA, American Express, Mastercard, Paypal

CME credits

The symposium will be certified as further education according to the guidelines of the German Medical Association.

Important notes for participants

Reduced participation fees only apply upon appropriate proof of status.

Registration fees include lunches (Friday & Saturday), several coffee breaks and the summary of the abstracts.

If you register late or on-site we cannot guarantee for lunch and/or participation in the social program.

You are encouraged to apply for the meeting either online, by mail or by fax. Cancellation for the symposium has to be made via e-mail (info@congresse.de) or via fax (+49 (0)2 11 59 35 60) by September 15th, 2019 and is subject to an administration fee of € 22. No refunds can be granted for cancellations received after September 15th, 2019. Changes, errors and misprints excepted.

Hotels

See list of hotels on www.amd2019.org

Presentations

L = Lectures: 10 min presentation

P = Papers: 5 min presentation

Rapid Fire Presentations 2 min presentation

Poster: Pinboard 1.60 m height x 1.30 m width

Projection

PowerPoint and Keynote Presentation on USB-Stick, DVD or CD-R



Gala dinner

Friday, September 20th, 2019

19.30 Reception

20.00 Gala dinner

Orangerie at Brenner's Parkhotel

Schillerstraße 4-6, Baden-Baden

Musical entertainment by the Tommy Wetzel Combo

Price per person (incl. dinner and drinks):

Regular € 65

Resident/Fellow/Student € 45

Scientific Program

Friday, 20th September 2019

- 08:30 **Opening remarks and welcome**
Daniel Pauleikhoff (Münster)
Frank G. Holz (Bonn)
- 08:45 **1st session**
↓ **AMD basics**
- 10:15 **Moderators: Srinivas Sadda** (Los Angeles/USA)
 Steffen Schmitz-Valkenberg (Bonn)
- 1 L **Alan C. Bird** (London/GB)
 Why the macula? – Learnings from the MacTel project
- 2 L **Philip J. Luthert** (London/GB)
 Cellular structures - computational biology of the macula
- 3 L **Christine A. Curcio**¹, D. Kar¹, D.M. Dacey², D.M.G. Anderson³,
 A. Kotnala³, K.L. Schey³ (¹Birmingham/USA., ²Seattle/USA, ³Nashville/USA)
 Molecular microarchitecture of macula in health and AMD
- 4 L **Robert Mullins** (Iowa City/USA)
 Addressing choriocapillaris degeneration in AMD:
 Cause, consequences, and potential therapies
- 5 L **Sandra Liakopoulos** (Cologne/D)
 Macular Imaging - Morphology and changes in AMD and aging?
- 6 L **Marius Ueffing** (Tübingen/D)
 Using cell lines - identify, model and validate AMD risk factors and disease drivers
- 7 P **Anita de Breuk**¹, I.E. Acar¹, E. Kersten¹, M.M.V.A.P. Schijvenaars¹,
 M.A. Meester-Smoor², C. Delcourt³, C.C.W. Klaver², J. Monés⁴, D. Pauleikhoff⁵,
 R. Silva⁶, S. Fauser⁷, C.B. Hoyng¹, M.J.H. Coenen¹, A.I. den Hollander¹,
 EYE-RISK Consortium (¹Nijmegen/NL, ²Rotterdam/NL, ³Bordeaux/F, ⁴Barcelona/E,
 ⁵Münster/D, ⁶Coimbra/P, ⁷Cologne/D)
 Development of a Genotyping Assay for AMD:
 The EYE-RISK Consortium
- 8 P **Thomas J. Heesterbeek**¹, E.K. de Jong¹, I.E. Acar¹, J.M.M. Groenewoud¹, B. Liefers¹,
 C.I. Sánchez¹, T. Peto², C.B. Hoyng¹, D. Pauleikhoff³, H.W. Hense³, A.I. den Hollander¹
 (¹Nijmegen/NL, ²Belfast/GB, ³Münster/D)
 Genetic Risk Score has added value over initial clinical grading stage in
 predicting disease progression in patients with non-advanced age-related
 macular degeneration – The Muenster Aging and Retina Study (MARS)
- 10:15 **Coffee break in the industrial exhibition area**
↓
- 10:45

Friday

10:45



2nd session

Genetics and risk factors of AMD

12:30

Moderators: Carel B. Hoyng (Nijmegen/NL)
Bernhard H.F. Weber (Regensburg/D)

9 L

Bernhard H.F. Weber (Regensburg/D)
AMD – Searching for targeted therapies

10 L

Carel B. Hoyng (Nijmegen/NL)
AMD genotype-phenotype correlation?

11 L

Magda A. Meester-Smoor, C.C.W. Klaver (Rotterdam/NL)
EyeRisk Study – risk factors for AMD phenotypes and progression?

12 L

Giovanni Staurengi (Milan/I)
How to differentiate GA phenotypes – the CAM initiative

13 L

Frank G. Holz, S. Schmitz-Valckenberg, M. Schmid, G.S. Rubin,
H. Dunbar, A. Tufail, D.P. Crabb, A. Binns, C.I. Sánchez, P. Margaron, G. Normand,
M.K. Durbin, U.F.O. Luhmann, P. Zamiri, J. Cunha-Vaz, F. Asmus F, R.P. Finger,
on behalf of the MACUSTAR consortium
Intermediate AMD – the Macustar project

14 L

Steffen Schmitz-Valkenberg (Bonn/D)
Challenges in phenotyping geographic atrophy

15 L

Andrew Lotery¹, J.R. Sutton¹, S. Khandhadia¹, G. Menon²,
C. Bailey³, S. Sivasprasad⁴, Q. Mohamed⁵, P. Bishop⁶, P. Charbel Issa⁷, D. Steel⁸,
T. Peto³, W. Amoaku⁹, R. Arora¹⁰, P. Prakash¹¹, W. Innes¹², R. Maclaren⁷, D. Kavanagh¹²
(¹ Southampton/GB, ² Camberley/GB, ³ Bristol/GB, ⁴ London/GB, ⁵ Cheltenham/GB,
⁶ Manchester/GB, ⁷ Oxford/GB, ⁸ Sunderland/GB, ⁹ Nottingham/GB, ¹⁰ Salisbury/GB,
¹¹ Harlow/GB, ¹² Newcastle/GB)
Rare genetic variants in geographic atrophy

16 L

Sobha Sivaprasad (London/GB)
Early loss of color vision on drusen and reticular pseudodrusen

12:30



13:45

Lunch

13:45



3rd session

Complement, inflammation and cellular energetics in AMD

15:45

Moderators: Philip J. Luthert (London/GB)
Marius Ueffing (Tübingen/D)

17 L

Gregory S. Hageman, C.M. Pappas, R.A. Anstadt, J.Liu, B.L. Williams, N.A. Seager,
J.L. Hageman, M. Zouache, K. Curtin, B.T. Richards (Salt Lake City/USA)
Complement-directed AMD is a distinct, genotype-driven subset of the disease

Friday

- 18 L **Bradley D. Gelfand**, J. Ambati (Charlottesville/USA)
Inflammasome in AMD
- 19 L **Tim U. Krohne**¹, L. Wang¹, S. Schmidt¹, J. Rossa¹, P.P. Larsen¹, J.H. Meyer¹, W.R. Roush², E. Latz^{1,2}, F.G. Holz¹ (¹Bonn/D, ²Boston/USA)
NLRP3 inflammasome as a therapeutic target in AMD
- 20 L **Glen Jeffery** (London/GB)
Mitochondrial decline precedes phenotype development in the complement factor H mouse model of retinal degeneration but can be corrected by near infrared light
- 21 L **Imre Lengyel** (Belfast/IRL)
Is mineralization a major factor in drusen pathogenesis?
- 22 P **Martin Zinkernagel**, D. Zysset, I. Keller, L. Berger, B. Yilmaz, S. Wolf (Bern/CH)
Associations of the intestinal microbiome with AMD
- 23 P **Ilhan Erkin Acar**¹, L. Lores de Motta¹, M.A. Meester², S. Ajana³, D. Pauleikhoff⁴, S. Fauser⁵, C.B. Hoyng¹, C. Delcourt³, C.C.W. Klaver², T.E. Galesloot¹, A.I. den Hollander¹ (¹Nijmegen/NL, ²Rotterdam/NL, ³Bordeaux/F, ⁴Münster/D, ⁵Cologne/D)
Metabolomics identifies lipoprotein subclasses and dietary metabolites that are associated with AMD: The EYE-RISK Consortium
- 24 P **Yara Lechanteur**¹, T. Heesterbeek¹, L. Lorés-Motta¹, T. Schick², M. Daha³, L. Altay², S. Liakopoulos², D. Smailhodzic¹, A. den Hollander¹, C. Hoyng¹, E. de Jong¹, B. Klevering¹ (¹Nijmegen/NL, ²Cologne/D, ³Leiden/NL)
Complement activation levels are related to disease stage in AMD
- 25 P **Laura Lorés de Motta**¹, V. Cipriani², F. He³, D. Fathalla⁴, S. McHarg³, N. Bayatti³, I.E. Acar¹, C.C.B. Hoyng¹, S. Fauser^{5,6}, A. Moore^{2,7}, J.R.W. Yates^{2,8}, P. Morgan⁴, E.K. de Jong¹, A.I. den Hollander¹, P.N. Bishop³, S.J. Clark³ (¹Nijmegen/NL, ²London/GB, ³Manchester/GB, ⁴Cardiff/GB, ⁵Cologne/D, ⁶Basel/CH, ⁷San Francisco/USA, ⁸Cambridge/GB)
Factor H-Related Protein 4 (FHR-4) drives complement dysregulation in AMD
- 26 P **Anja Schlecht**¹, P. Wieghofer^{1,2}, P. Zhang¹, S. Bonvea¹, M. Gruber¹, R. Sankowski¹, G. Schlunck¹, H. Agostini¹, M. Prinz¹, C. Lange¹ (¹Freiburg i.Br./D, ²Leipzig/D)
Identification of myeloid cell populations at sites of laser-induced choroidal neovascularization by single-cell profiling
- 27 P **Alexa Klettner**, K. Winkelmann, A. Brinkmann, T. Käckenmeister, J. Roeder (Kiel/D)
Effect of long-term inflammation on viability and function of RPE cells

15:45



16:15

Coffee break

Friday

- 16:15 4th session
↓
17:40 **Neurobiology of the outer retina I**
Moderators: Deborah A. Ferrington (Minneapolis/USA)
John G. Flannery (Berkley/USA)
- 28 L **Thomas Langmann, A. Wolf** (Cologne/D)
Microglia as important part of the retina: Its role in AMD
- 29 P **Clemens Lange**¹, A. Schlecht¹, S. Boneva¹, J. Wolf¹, P. Zhang¹, G. Prinz¹, R. Horres², F. Bucher¹, C. Auw-Haedrich¹, L. Hansen¹, A. Stahl^{1,3}, I. Hilgendorf¹, H. Agostini¹, P. Wieghofer⁴, G. Schlunck¹ (¹Freiburg i.Br./D, ²Frankfurt/D, ³Greifswald/D, ⁴Leipzig/D)
Transcriptomic characterization of human choroidal neovascular membranes identifies calprotectin as a novel biomarker for patients with AMD
- 30 L **Rajendra S. Apte** (St. Louis/USA)
Animal model for AMD interfering lipid trafficking
- 31 P **Christian Grimm**¹, F. Storti¹, T. Hornemann¹, A. den Hollander², C. Maugeais³
(¹Schlieren/CH, ²Nijmegen/NL, ³Basel/CH)
Impaired function of the lipid transporters ABCA¹ and ABCG¹ in the RPE leads to an AMD-like phenotype in mice
- 32 L **Nicolas Bazan**^{1,2} (¹New Orleans/USA, ²Stockholm/S)
Elovanoids are novel photoreceptor survival signals relevant to AMD
- 33 L **Clare Futter** (London/GB)
Lysosome dysfunction in the RPE and its role in early AMD
- 34 L **Gerard A. Luty**, S. Ogura, R. Baldeosingh, D.S. McLeod, M.M. Edwards, I.A. Bhutto (Baltimore/USA)
Mast cell involvement in geographic atrophy
- 17:40 Lecture in memory of Gerhard Zinser:
↓
18:00 **Moderators: Frank G. Holz**
Daniel Pauleikhoff
- 35 **Josef F. Bille** (Heidelberg/D)
Past, present and new horizons in imaging analysis - The heritage of Gerhard Zinser
- 19:30 **Reception at “Brenner’s Park Hotel”**
- 20:00 **Gala dinner**

Scientific Program

Saturday, 21th September 2019

- 08:30 5th session
↓ **Neurobiology of the outer retina II**
- 10:00 **Moderators: Thomas Langmann (Cologne/D)**
 Anneke den Hollander (Nijmegen/NL)
- 36 L **Janet Sparrow (Boston/USA)**
 Is lipofuscin a relevant factor in the pathogenesis of AMD?
- 37 P **Thomas Ach¹, K. Bermond¹, J. A. Gambri², C. Wobbe¹, A. Berlin¹, R. Heintzmann^{2,3},
K.R. Sloan³, C.A. Curcio³ (¹Würzburg/D, ²Jena/D, ³Birmingham/USA)**
 **Cellular and subcellular changes in the RPE:
 from normal aging to early signs of AMD**
- 38 L **Deborah A. Ferrington (Minneapolis/USA)**
 Primary RPE cultures from donors with AMD
- 39 P **Stephanie C. Joachim¹, N. Wagner¹, M. Gammel¹, A. Greulich¹, S. Reinehr¹,
J. Hurst², H.B. Dick¹, S. Schnichels² (¹Bochum/D, ²Tübingen/D)**
 Novel porcine organ culture model for AMD research
- 40 L **Anneke den Hollander (Nijmegen/NL)**
 **Understanding disease mechanisms in AMD:
 From serum biomarkers to an organ-on-a-chip model for AMD**
- 41 L **John G. Flannery¹, M.H. Berry^{1,2}, A. Holt¹, A. Salari¹, J. Veit¹, M. Visel¹, J. Levitz^{1,3},
K. Aghi¹, B. Gaub^{1,4}, B. Sivyer², E. Isacoff¹, (¹California/USA, ²Oregon/USA,
³New York/USA, ⁴Zürich/CH)**
 Restoration of high-sensitivity and adapting vision with a cone opsin
- 42 L **Volker Busskamp (Bonn/D)**
 Programming human stem cells to cone photoreceptors
- 43 P **Giuliana Gagliardi¹, D.M. Feitosa-Afonso^{1,2}, Y.B. Arik², J. Heesterbeek¹,
C.B. Hoyng¹, A.D. van der Meer², A.I. den Hollander¹ (¹Nijmegen/NL, ²Enschede/NL)**
 **Using human-induced pluripotent stem cells for modelling
 the blood-retinal-barrier on-a-chip**
- 10:00 6th session
↓ **Rapid Fire Presentations**
- 10:45 see poster – pages 25 & 27
- 10:45 Coffee break at the posters
↓
- 11:15

Saturday

- 11:15 7th session
 ↓
 13:00 **Phenotyping AMD: Advances in Imaging**
Moderators: Richard F. Spaide (New York/USA)
Giovanni Staurenghi (Milan/I)
- 44 L **SriniVas Sadda (Los Angeles/USA)**
Choriocapillaris status as a risk factor in AMD
- 45 L **Philip J. Rosenfeld (Miami/USA)**
Choriocapillaris imaging using SS-OCT angiography in AMD
- 46 P **Martin Hammer, R. Schultz, D. Meller (Jena/D)**
Clinicopathologic comparison of fluorescence lifetimes and spectral characteristics in AMD
- 47 L **Sebastian Wolf, C. Dysli, M.S. Zinkernagel (Bern/CH)**
Fluorescence lifetimes in AMD
- 48 P **Lydia Sauer, A.S. Vitale, N.K. Modersitzki, E.D. Hansen, C. B. Komanski, P.S. Bernstein (Salt Lake City/USA)**
Imaging of AMD with FLIO
- 49 L **Adam Dubis (London/GB)**
Adaptive optics photoreceptor imaging, function and survival in AMD
- 50 P **Thomas Theelen, P.P.A. Dhooge, T.W.F. Mulders, C.B. Hoyng (Nijmegen/NL)**
In vivo photoreceptor imaging by non-adaptive optics confocal scanning laser ophthalmoscopy
- 51 P **R. Theodore Smith, K.B. Freund (New York City/USA)**
Quantitative fundus autofluorescence (qAF) of GA secondary to AMD
- 52 L **Daniel F. Martin (Cleveland/USA)**
Why did GA trials fail - how to overcome obstacles?
- 53 P **Victor Chong (Ingelheim/D)**
Neuroprotection as a therapeutic option for GA
- 13:00 Lunch
 ↓
 14:00

- 14:00
↓
17:30
- 8th session**
Dissecting AMD: Novel approaches
Moderators: Frank G. Holz (Bonn/D)
Daniel Pauleikhoff (Münster/D)
- 54 L **Adnan Tufail (London/GB)**
Application of deep learning-based automated segmentation in OCT on AMD
- 55 L **Aaron Lee (Washington/USA)**
Deep learning applications with OCT in AMD
- 56 L **Karl Csaky¹, M. Oulette², C. Clark² (¹Dallas/USA, ²Plano/USA)**
Developing human based intuitive deep learning algorithms for analyzing intermediate AMD OCT-Images
- 57 L **Glenn J. Jaffe (Durham/GB)**
Challenges of clinical relevant phenotyping of exudative AMD
- 58 L **Richard F. Spaide (New York/USA)**
OCT-angiography – dissecting neovascular AMD
- 59 L **Giuseppe Querques^{1,2}, R. Sacconi¹, V. Capuano², A. Carnevali^{1,3}, D. Colantuono², M. Battista¹, E. Borrelli¹, A. Miere², M. Parravano⁴, E. Costanzo⁴, L. Querques¹, E.H. Souied², F. Bandello¹ (¹Milan/I, ²Creteil/F, ³Catanzaro/I, ⁴Rome/I)**
„Quiescent“ CNV in AMD – characteristics and consequences
- 60 P **Maximilian Pfau¹, L. von der Emde¹, C. Dysli², P.T. Möller¹, S. Thiele¹, M. Lindner³, M. Schmid¹, S. Schmitz-Valckenberg¹, F.G. Holz¹, M. Fleckenstein¹ (¹Bonn/D, ²Bern/CH, ³Oxford/GB)**
Type-1 choroidal neovascularization reduces the progression of atrophy in eyes with AMD
- 61 L **David Sarraf (Los Angeles/USA)**
Mechanisms and pathways of PED development in neovascular AMD
- 62 L **K. Bailey Freund (New York City/USA)**
Type 3 CNV – a specific phenotype?
- 63 L **John Marshall (London/GB)**
Can a nanosecond beam modulated laser improve transport mechanisms and delaying progression towards late AMD?
- 64 L **Robyn Guymer - LEAD study team (Melbourne/AUS)**
**Natural history and modulation of drusen by laser:
The LEAD randomized controlled trial of sub-threshold nanosecond laser intervention in AMD**

- 65 L **Eric Souied** (Paris/F)
Scarring of CNV – differentiation by multimodal imaging?
- 66 L **Daniel Pauleikhoff**, M.L. Farecki, H. Faatz, K. Rothaus, G. Spital,
A. Lommatzsch (Münster/D)
**Mathematical characterization of CNV before and under
anti-VEGF-therapy**
- 67 L **Usha Chakravarthy**¹, B. Reeves², R. Evans², C. Rogers² (¹Belfast/GB, ²Bristol/GB)
Extended follow up from the IVAN trial
- 68 P **Heinrich Gerding** (Olten/CH)
10 years anti-VEGF treatment outcomes on neovascular AMD
- 69 L **Ricarda G. Schumann**, V. Deiters, S.R. Günther, D. Vogt,
J. Siedlecki, S.G. Priglinger (Munich/D)
**Long-term visual acuity outcomes and anatomic results from
anti-VEGF-therapy in patients with neovascular AMD in a real-life setting**
- 70 P **Jakob Siedlecki**, C. Fischer, B. Schworm, T.C. Kreutzer, K. Kortüm, R. Schumann,
A. Wolf, S.G. Priglinger (Munich/D)
**Long-term incidence of macular atrophy and clinical outcomes in
neovascular AMD managed to sub-retinal fluid only**
- 17:30 **Adjourn**
Frank G. Holz
Daniel Pauleikhoff



Posters

Poster session as Rapid Fire Presentations:

Saturday, 21st September 2019, 10.00 → 10.45

Coffee break at the posters:

Saturday, 21st September 2019, 10.45 → 11.15

- P01 **Susette Lauwen**, D.J. Lefeber, E.K. de Jong, A.I. den Hollander (Nijmegen/NL)
B₃GLCT-catalyzed O-fucose glucosylation is not required for secretion of TSP1 and CTGF from retinal pigment epithelial cells
- P02 **Ana Sofia Falcão**¹, M.H. Cardoso¹, M. Hall², C. Escrevente¹, P. Antas¹, M. Chaves-Ferreira¹, S. Tenreiro¹, C.E. Futter², M.C. Seabra¹ (¹Lisbon/P; ² London/GB)
Dissecting the role of lysosome dysfunction in AMD
- P03 **Angela Armento**, S. Honisch, V. Panagiotakopoulou, I. Sonntag, A. Jacob, M. Deleidi, M. Ueffing (Tübingen/D)
Complement factor H (CFH) loss alters energy metabolism and hinders the antioxidant capacity of RPE cells
- P04 **Corinne Gonzales** (Toulouse/F)
Clinical, morphology-structural, biological biomarkers for AMD and its atrophy and neovascular complications
- P05 **Eric Thee**¹, M. Meester¹, D. Luttikhuisen¹, D. Rizopoulos¹, C. Klaver^{1,2} (¹Rotterdam/NL, ²Nijmegen/NL)
Performance of classification systems for AMD
- P06 **Damian Jaggi**, Y. Solberg, C. Dysli, S. Wolf, M. Zinkernagel (Bern/CH)
Correlations in multmodal macular pigment measurements and fluorescence lifetime imaging ophthalmoscopy in AMD
- P07 **Gereon Hüttmann**¹, P. Koch¹, H. Sudkamp¹, M. Moltmann¹, D. Theisen-Kunde¹, C. Pfäffle¹, D. Hillmann¹, C. von der Burchard², J. Tode², C. Ehlken², T. Kepp¹, H. Handels¹, R. Birngruber¹, J. Roeder² (¹Lübeck/D, ²Kiel/D)
Full-field OCT for imaging AMD progression

- Po8 **Alaadin Abdin, S. Suffo, A. Langenbucher, B. Seitz (Homburg/D)**
Intravitreal ranibizumab versus aflibercept following treat and extend protocol for neovascular AMD (2 years follow up)
- P09 **Martin Ziegler, M. Book, K. Rothaus, P. Wilming, G. Spital, A. Lommatzsch, D. Pauleikhoff (Münster/D)**
Multimodal analysis and phenotypical characterisation of CNV-transformation in exudative AMD after longterm anti-VEGF- therapy
- P10 **Marius Book¹, M. Ziegler¹, K. Rothaus¹, M.L. Farecki¹, G. Spital¹, A. Lommatzsch^{1,2}, D. Pauleikhoff^{1,2} (¹Münster/D, ²Essen/D)**
Analysis of the vascular properties of the choroidal neovascularization (CNV) undergoing fibrovascular transformation in neovascular AMD using optical coherence tomography angiography (OCTA)
- P11 **Matthias Gutfleisch, O. Ester, K. Rothaus, P. Mussinghoff, G. Spital, A. Lommatzsch, H. Kurzhals, D. Pauleikhoff (Münster/D)**
Data science and neural network analysis of real life data of CNV after anti-VEGF -therapy
- P12 **Jan Tode¹, E. Richert¹, C.v d. Burchard¹, R. Brinkmann², R. Lucius¹, A. Klettner¹, J. Roider¹ (¹Kiel/D, ²Lübeck/D)**
Translational evaluation of selective retina therapy and thermal stimulation of the retina as therapeutic means for AMD
- P13 **Andrii Serhiienko¹, O. Pekaryk², N.Dziuba³ (¹Vinnitsa/UA, ²Winnipeg/CDN, ³Kyiv/UA)**
Low-energy light treatment of wet AMD after completion of standard anti-VEGF therapy
- P14 **Jeffrey K. Luttrull¹, S.H. Sinclair², S. Elmann³ (¹Ventura/USA, ²Philadelphia/USA, ³Brooklyn/USA)**
Routine SDM laser adjunctive therapy improves outcomes in the clinical management of AMD
- P15 **Benedikt Schworm, J. Siedlecki, F. Hagenau, K. Kortüm, N. Luft, S. Priglinger (Munich/D)**
Response of secondary choroidal neovascularization in chronic central serous chorioretinopathy to an extended upload of anti-VEGF agents

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