

## The 6<sup>th</sup> Annual Retinal Pioneers Summit (7 and 8 March 2024, London): Key educational content

### Meeting overview

- The Retinal Pioneers Summit is an annual meeting designed to enable UK ophthalmologists to explore the latest innovations and scientific and clinical advancements in the management of medical retina conditions.
- The objectives of this Retinal Pioneers Summit were:



To discuss the **latest developments** in the medical retina landscape, including the **latest anti-VEGF treatments** and **wider implications for clinical practice**



To provide a platform for the **sharing of best practice to enhance management** of retinal disease and explore the potential impact of current and forthcoming **technologies to advance patient care**



To equip attendees with **practical skills and holistic knowledge** to facilitate **development of retina services** to meet the **unmet needs of patients**

### Meeting statistics

18

Expert speakers

143

Consultant ophthalmologists attending from across the UK

4

Parallel workshops

1

Keynote speech



### EYLEA (aflibercept) 8 mg & 2 mg

Following the approval of EYLEA 8 mg in the UK for the management of neovascular age-related macular degeneration (nAMD) and visual impairment due to diabetic macular oedema (DMO),<sup>1</sup> several sessions over the 1.5-day Retinal Pioneers Summit meeting explored topics relating to EYLEA 8 mg, alongside general management of common retinal pathologies.

#### DEBATE: Is VEGF inhibition the mainstay for the management of retinal disease?

- A range of anti-VEGF agents are available in medical retina; each molecule has been purpose-designed and has its own PK/PD properties.<sup>1-7</sup>
- World-renowned physicians Dr David Brown, Director of Research (*Retina Consultants of Texas, USA*), arguing for the motion, and Dr Jeffrey Heier, Director of the Retina Service (*Ophthalmic Consultants of Boston, USA*), arguing against the motion, explored the true extent of therapies available for the management of retinal pathologies and the relevance of their respective target pathways, particularly the importance of inhibiting the VEGF pathway.



- The debate saw both speakers explore key outcomes from a variety of clinical trials to deliberate the efficacy of targeting pathways, including Ang-2, PDGF and VEGF-C, for the management of retinal diseases, as well as the effectiveness of alternative therapeutic approaches, such as macular laser and steroids for DMO compared to that of VEGF inhibition.



#### THE VERDICT: Is VEGF inhibition the mainstay for the management of retinal disease? (n=111)



**88.3%** of respondents voted YES\*



**11.7%** of respondents voted NO\*

#### PLENARY: EYLEA 8 mg in focus

- Richard Gale, Consultant Ophthalmologist (*York and Scarborough Teaching Hospitals NHS Foundation Trust*), provided an overview of the current medical retina landscape in his presentation '**Unmet needs in medical retina: The importance of durable disease management**'. During this presentation, Professor Gale highlighted the **increase in demand for anti-VEGF injections**,<sup>8,9</sup> and the implications for patients and clinics alike.<sup>10,11</sup> **Durable treatment agents** could help **reduce treatment burden** and **alleviate capacity** through **fewer injections**.<sup>†, 12</sup>
- Sobha Sivaprasad, Consultant Ophthalmologist (*Moorfields Eye Hospital NHS Foundation Trust*), subsequently provided an introduction to EYLEA 8 mg, including the rationale for the use of a higher molar dose<sup>†</sup> and key results from the Phase IIb/III clinical trials, PULSAR and PHOTON. Professor Sivaprasad explained that aflibercept provides **sustained VEGF suppression** via its specifically engineered molecular properties,<sup>7</sup> which is augmented by the higher molar dose and **34% unexpected slower ocular clearance** of EYLEA 8 mg (vs. 2 mg).<sup>13</sup>
- In the PULSAR and PHOTON clinical trials:<sup>14,15</sup>
  - Aflibercept 8 mg met its primary endpoint of non-inferiority in vision gains compared with aflibercept 2 mg at Week 48
  - Of patients randomised to aflibercept 8 mg q16 at baseline, 79% and 89% of patients with nAMD and DMO, respectively, reached a last completed treatment interval of  $\geq$ q16 at Week 96 with only three loading doses
  - No new or unexpected safety signals were identified; the safety profile of aflibercept 8 mg was comparable to that of aflibercept 2 mg and there were no clinically relevant differences in intraocular pressure (IOP) between aflibercept 8 mg and 2 mg
- Dr David Brown described experiences with EYLEA 8 mg at his US and other US clinicians' clinics, following US approval in August 2023. In reference to EYLEA 8 mg, he stated "**Anything you can do to decrease the number of injections\* makes a happier patient**, and a potentially happier NHS service budget."



#### INTERACTIVE WORKSHOP: Key learnings from the National AMD Audit (NOD): How to run an audit in a busy clinic

- Martin McKibbin, Consultant Ophthalmologist (*Leeds Teaching Hospitals NHS Trust*), provided key findings from the latest (Year 2) report of the UK AMD Audit, which analysed data from 66 organisations and 26,847 eyes across the UK.
- Visual acuity outcomes were similar to those seen in Year 1 of the audit, with a low number of serious complications among the 179,000 intravitreal injections administered (75% EYLEA) and an incidence of post-injection endophthalmitis of 1 in 6,600 injections.<sup>16</sup>

Pegpleranib (PDGF pathway) and sozinibercept (VEGF-C pathway) are investigational agents and not licensed for use. This is a promotional poster organised and fully funded by Bayer and is intended for UK healthcare professionals only. Prescribing information and adverse event reporting information for EYLEA (aflibercept) 2 mg and EYLEA 8 mg can be accessed via the QR code located on the last page of this document.

\*Percentage indicates votes following the debate. †Compared with aflibercept 2 mg. ‡In comparison with existing anti-VEGF treatment agents. AMD, age-related macular degeneration; Ang, angiotensin; NOD, National Ophthalmology Database; PD, pharmacodynamic; PDGF, platelet-derived growth factor; PK, pharmacokinetic; q16, every 16 weeks; VEGF, vascular endothelial growth factor. December 2024 | PP-EYL-GB-2626

**Adverse events should be reported. Reporting forms and information can be found at <https://yellowcard.mhra.gov.uk/> or search for MHRA Yellow Card in the Google Play or Apple App Store. Adverse events should also be reported to Bayer plc. Tel.: 0118 2063500, Email: [pvuk@bayer.com](mailto:pvuk@bayer.com)**



## The 6<sup>th</sup> Annual Retinal Pioneers Summit (7 and 8 March 2024, London): Key educational content



### Building an improved standard for UK clinical practice

Several sessions explored the importance of aspects such as communication and clinic culture for the continued improvement of UK clinical practice.

#### PLENARY: Building and maintaining collaborative people cultures

- Suzanne Shale, Ethics Consultant (*The Ethicist Ltd*) and Non-Executive Director (*Oxleas NHS Foundation Trust*), provided a presentation on accountability and enhancing collaboration within clinical practice.
- Suzanne presented the results of the National Training Survey (2023), which showed that ophthalmologists in training had experienced the largest increase in **high risk of burnout** of all specialties (**22% vs. 15% in 2022**).<sup>17</sup> Furthermore, **11% of ophthalmologists** in training reported that **incivility or rudeness** had negatively affected their experience in their position, and **23%** reported that they **did not feel confident reporting discrimination in their workplace without fear of adverse consequences**.<sup>17</sup>
- Suzanne went on to describe key steps that can be taken within clinics to cultivate a safe and collaborative working environment, including:<sup>18</sup>
  - Be clear why tackling poor behaviour matters for patient care
  - Managers and leaders must adhere to high standards of behaviour
  - Interventions need to address systemic factors, not just target individuals



#### INTERACTIVE WORKSHOP: Power skills to optimise resilience and reduce stress and risk of burnout

- Sridevi Kalidindi, Consultant Psychiatrist (*South London and Maudsley NHS Foundation Trust*) and CEO (*klip Global*), focused on the importance of building a healthy clinic environment and provided practical advice on how individual clinicians can identify and reduce stress and maintain good mental health in clinical practice.
- Changes that clinicians can implement to improve their mental health and the wellbeing of other healthcare professionals (HCPs) included:<sup>19</sup>
  - Adapting clinic culture, e.g. ensuring respect and civility
  - Providing personal and career development
  - Taking a proactive approach to mental health, e.g. access to health and wellbeing support



#### INTERACTIVE WORKSHOP: A patient-centred vision for eye care: Insights from the UK Ophthalmology Alliance

- Bushra Mushtaq, Consultant Ophthalmologist (*Sandwell and West Birmingham NHS Trust*), provided insights into plans from the UK Ophthalmology Alliance (UKOA) to improve the patient experience of ophthalmic care.
- The UKOA is a membership group of ophthalmology providers and stakeholders (such as **Getting It Right First Time** [GIRFT] and the **Royal National Institute of Blind People** [RNIB]) across the UK, which aims to influence change and develop and share good practice.<sup>22</sup>
- Bushra highlighted that **43% of adults** in England **do not have adequate literacy skills** to understand health information<sup>23</sup> and, as such, a greater impetus should be placed on non-clinical aspects of patient care to complement clinical care and improve the patient experience.<sup>22</sup> Several ways of doing so include some of the following:
  - Improving patient access to services and information<sup>22</sup>
  - Implementing the RNIB Eye Care Support Pathway<sup>24</sup>
  - Making eye health information and support equitable and accessible (e.g. providing information as early as possible within primary care)<sup>22</sup>



Poll question: Which of the following behaviours have you experienced as aiding high performance in clinical teams? (n=119)\*

The most popular answers were:

**18.6%** Senior clinicians talking openly about their mistakes

**19.8%** Emphasising the scope for learning when things haven't gone well

#### INTERACTIVE WORKSHOP: How can we engage and retain allied healthcare professionals (AHPs) to strengthen the medical retina service?

- Louise Downey, Consultant Ophthalmologist (*Hull University Teaching Hospitals NHS Trust*), and Ellen Messingham, Senior Optometrist (*Hull University Teaching Hospitals NHS Trust*), discussed the importance of a **strong multidisciplinary team (MDT)** and the key role played by **AHPs** within the NHS, particularly in helping to tackle capacity issues and deter AHPs from moving to other ophthalmic providers or alternative career options.
- During the workshop, Louise and Ellen mentioned the use of resources such as the **Ophthalmic Common Clinical Competency Framework (OCCCF)**<sup>20</sup> to create **internal training packages** to **engage and retain AHPs**. Additional approaches included some of the following:<sup>21</sup>
  - Retain: career structure/progression, personal development and NHS benefits
  - Engage: reward good service, MDT meetings to discuss interesting cases, new skills



### Current and future technologies in medical retina

The Retinal Pioneers Summit 2024 was concluded with a glance towards the future of medical retina.

#### PLENARY: Dry AMD: What to look out for in the next 3 years

- Dr Jeffrey Heier explored the current and future medical retina landscape, specifically regarding the evolution of the management of dry AMD and promising therapies. According to Dr Heier, intensive efforts to develop an efficacious treatment for dry AMD have been ongoing for at least 15 years with little success; however, recent developments with new agents in the USA may finally signal a first step towards minimising the impact of this condition.<sup>25</sup>

#### PLENARY: Advanced imaging techniques: Identifying imaging biomarkers in dry AMD and other retinal diseases

- Dr Justis Ehlers, Medical Director for Continuous Improvement (*Cole Eye Institute, USA*), subsequently looked at how next-generation imaging technologies (e.g. quantitative ultra-wide-field angiography and AI [artificial intelligence] solutions) can be used to aid the diagnosis and assessment of retinal diseases such as dry AMD and DMO.<sup>26</sup>
- Novel approaches for enhanced characterisation of disease phenotype and prediction of disease behaviour may ultimately pave the way for precision management of retinal disease.<sup>26</sup>

#### PLENARY: Artificial intelligence, medical retina, and oclumics

- Siegfried Wagner, Vitreoretinal TSC Fellow (*Moorfields Eye Hospital NHS Foundation Trust*), provided an overview of AI capabilities and oclumics in medical retina, including the ability to use ophthalmic biomarkers to provide insights into disease characteristics and predict disease progression.<sup>27,28</sup>

There are currently no drugs licensed for the treatment of dry age-related macular degeneration in the UK. This is a promotional poster organised and fully funded by Bayer and is intended for UK healthcare professionals only. Prescribing information and adverse event reporting information for EYLEA (afibercept) 2 mg and EYLEA 8 mg can be accessed via the QR code located on the last page of this document.

\*Other options included: Senior clinicians constantly draw focus to patients' needs (17.2%); Social events that include the whole clinical team (14.6%); Senior clinicians modelling the behaviour they want to see (17.2%); Team members call out poor behaviour when it happens (12.6%).

AMD, age-related macular degeneration; CEO, Chief Executive Officer; DMO, diabetic macular oedema; TSC, trainee selected component.

December 2024 | PP-EYL-GB-2626

Adverse events should be reported. Reporting forms and information can be found at <https://yellowcard.mhra.gov.uk/> or search for MHRA Yellow Card in the Google Play or Apple App Store. Adverse events should also be reported to Bayer plc. Tel.: 0118 2063500, Email: [pvuk@bayer.com](mailto:pvuk@bayer.com)





## References

1. Bayer plc. Aflibercept 8 mg – summary of product characteristics.
2. Novartis Pharmaceuticals UK Ltd. Ranibizumab – summary of product characteristics.
3. Novartis Pharmaceuticals UK Ltd. Brolucizumab – summary of product characteristics.
4. Roche Products Ltd. Faricimab – summary of product characteristics.
5. Bayer plc. Aflibercept 2 mg – summary of product characteristics.
6. Hamilton RD, Wong TY, Weichselberger A *et al.* A comparison of the anatomical efficacy of brolucizumab and aflibercept in neovascular age-related macular degeneration (nAMD): An analysis of Weeks 12–16 in the HAWK and HARRIER studies. Presentation at EURETINA 2018; Vienna, Austria, 20–23 September 2018.
7. Schubert W, Terjung C, Rafique A *et al.* Evaluation of molecular properties versus in vivo performance of aflibercept, brolucizumab, and ranibizumab in a retinal vascular hyperpermeability model. *Transl Vis Sci Technol* 2022; 11 (10): 36.
8. EURETINA Education Platform. 2022 clinical survey outcomes. Available at: [https://eplatform.euretin.org/wp-content/uploads/2023/08/Final\\_2022-EURETINA-Survey-Supplement.pdf](https://eplatform.euretin.org/wp-content/uploads/2023/08/Final_2022-EURETINA-Survey-Supplement.pdf). Accessed December 2024.
9. Chopra R, Preston GC, Keenan TDL *et al.* Intravitreal injections: Past trends and future projections within a UK tertiary hospital. *Eye (Lond)* 2022; 36 (7): 1373–1378.
10. Monés J, Singh RP, Bandello F *et al.* Undertreatment of neovascular age-related macular degeneration after 10 years of anti-vascular endothelial growth factor therapy in the real world: The need for a change of mindset. *Ophthalmologica* 2020; 243 (1): 1–8.
11. Royal College of Ophthalmologists. Commissioning guidance: Age related macular degeneration services; May 2024. Available at: <https://www.rcophth.ac.uk/wp-content/uploads/2021/08/AMD-Services-Commissioning-Guidance-Recommendtions.pdf>. Accessed December 2024.
12. Khachigian LM, Liew G, Teo KYC *et al.* Emerging therapeutic strategies for unmet need in neovascular age-related macular degeneration. *J Transl Med* 2023; 21 (1): 133.
13. European Medicines Agency. Assessment report. EYLEA. Available at: [https://www.ema.europa.eu/en/documents/assessment-report/eylea-epar-public-assessment-report\\_en.pdf](https://www.ema.europa.eu/en/documents/assessment-report/eylea-epar-public-assessment-report_en.pdf). Accessed December 2024.
14. Clark WL. 96-week efficacy and safety of aflibercept 8 mg in nAMD: An update from the PULSAR study. Presentation at the Angiogenesis 2024; virtual, 2–3 February 2024.
15. Do DV. Aflibercept 8 mg for diabetic macular edema: 96-week results from the Phase 2/3 PHOTON trial. Presentation at Angiogenesis 2024; virtual, 2–3 February 2024.
16. Information courtesy of Martin McKibbin.
17. The Royal College of Ophthalmologists. GMC’s 2023 annual training survey shows progression improving for ophthalmologists in training, alongside concerns over burnout and access to independent sector. Available at: <https://www.rcophth.ac.uk/news-views/gmcs-2023-annual-training-survey-shows-progression-improving-for-ophthalmologists-in-training-alongside-concerns-over-burnout-and-access-to-independent-sector/>. Accessed December 2024.
18. Maben J, Aunger JA, Abrams R *et al.* Interventions to address unprofessional behaviours between staff in acute care: What works for whom and why? A realist review. *BMC Med* 2023; 21 (1): 403.
19. Information courtesy of Sridevi Kalidindi.
20. NHS England. The Ophthalmic Common Clinical Competency Framework – Curriculum. Available at: <https://www.hee.nhs.uk/our-work/advanced-clinical-practice/ophthalmology-common-clinical-competency-framework-curriculum>. Accessed December 2024.
21. Information courtesy of Louise Downey.
22. Information courtesy of Bushra Mushtaq.
23. NHS Health Education England. Health Literacy ‘how to’ guide. Available at: <https://library.nhs.uk/wp-content/uploads/sites/4/2020/08/Health-literacy-how-to-guide.pdf>. Accessed December 2024.
24. Royal National Institute of Blind People. The Eye Care Support Pathway Report. Available at: [https://media.rnib.org.uk/documents/APDF-IN230702\\_Eye\\_Care\\_Support\\_Pathway\\_Report.pdf](https://media.rnib.org.uk/documents/APDF-IN230702_Eye_Care_Support_Pathway_Report.pdf). Accessed December 2024.
25. Information courtesy of Jeffrey Heier.
26. Information courtesy of Justis Ehlers.
27. Frontiers in Digital Health. Oculomics: Insights into systemic disease through ophthalmic biomarkers. Available at: <https://www.frontiersin.org/research-topics/25501/oculomics-insights-into-systemic-disease-through-ophthalmic-biomarkers>. Accessed December 2024.
28. Zhou Y, Chia MA, Wagner SK *et al.* A foundation model for generalizable disease detection from retinal images. *Nature* 2023; 622 (7981): 156–163.

Prescribing information and adverse event reporting information for EYLEA® (aflibercept) is available via the QR code on the right.

Either [click here](#) or scan the QR code for prescribing information and adverse event reporting information.

For direct access to this prescribing information, please ensure your device's browser settings have automatic PDF download enabled.

