RETINAL PIONEERS
Challenging cases in medical retina

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Real-world case with EYLEA (aflibercept) 8 mg for treatment-naïve DMO: A UK perspective

Richard Gale, *Consultant Ophthalmologist, York and Scarborough Teaching Hospitals NHS Foundation Trust*

Author disclosures | Up to 2024:

Conflicts of Interest: Abbvie, Alimera, Allergan, Amgen, Apellis, Bayer, Biogen, Boehringer Inglehiem, Heidelberg, Lux Bio, Notal vision, Novartis, Regeneron, Roche, Santen.

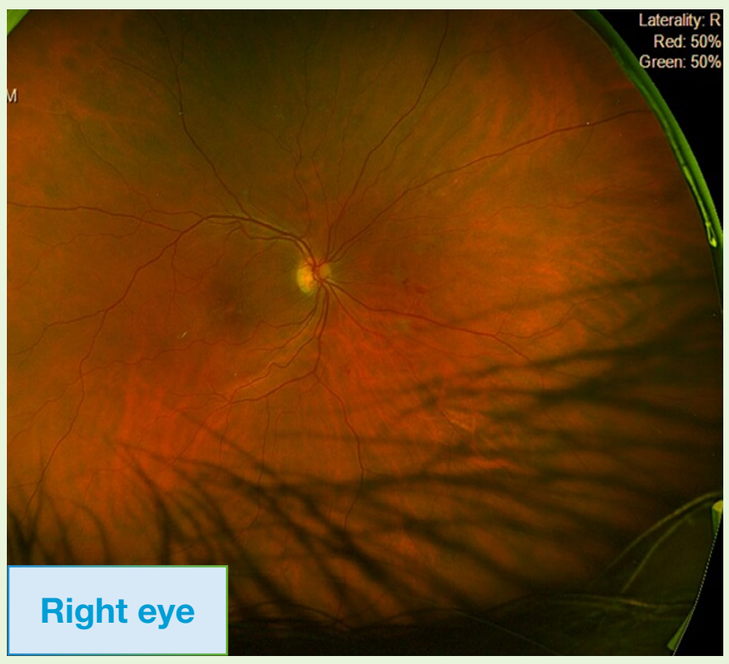
EYLEA 8 mg use in York and Scarborough Teaching Hospitals NHS Foundation Trust

EYLEA 8 mg has been used in **164 eyes** since **21 May 2024** across York and Scarborough Teaching Hospitals NHS Foundation Trust, including **29 eyes** with diabetic macular oedema **(DMO) (6 treatment-naïve DMO and 23 switch patients with DMO)**

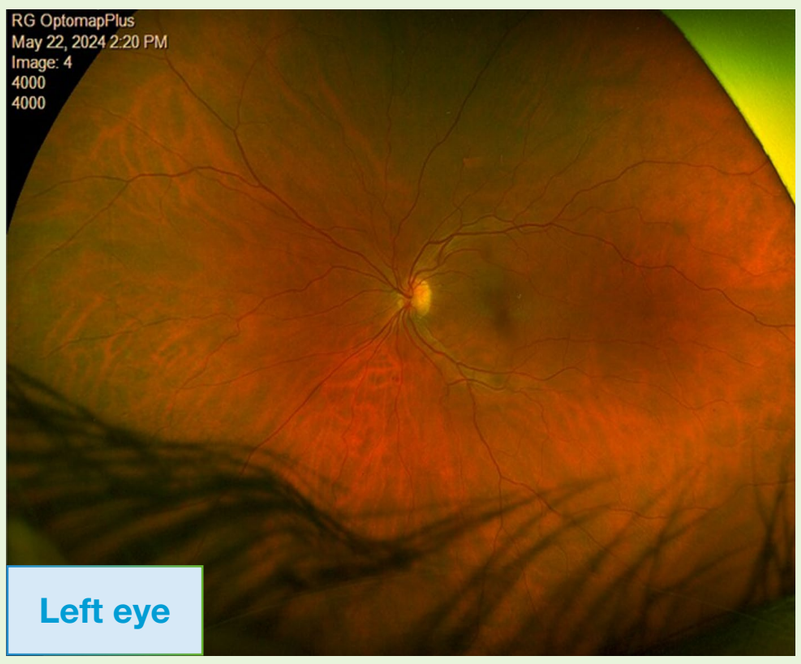
Patient case 1: Journey overview

This case focuses on a **61-year-old male** with **Type 1 diabetes** following diabetic ketoacidosis. Prior to diabetic monitoring, his **vision** was **6/9** and **6/7.5** in the right and left eyes, respectively. Following presentation to the **diabetic monitoring eye clinic** with no new ocular or visual symptoms reported, he was diagnosed with **non-high risk proliferative diabetic retinopathy (right eye) and moderate non-proliferate diabetic retinopathy in the (left eye)**. The presence of bilateral central DMO was identified and the patient was subsequently referred to the **DMO treatment clinic** for **intravitreal therapy** (right eye). This case explores his treatment journey.

Presentation at baseline (22 May 2024) – Both eyes



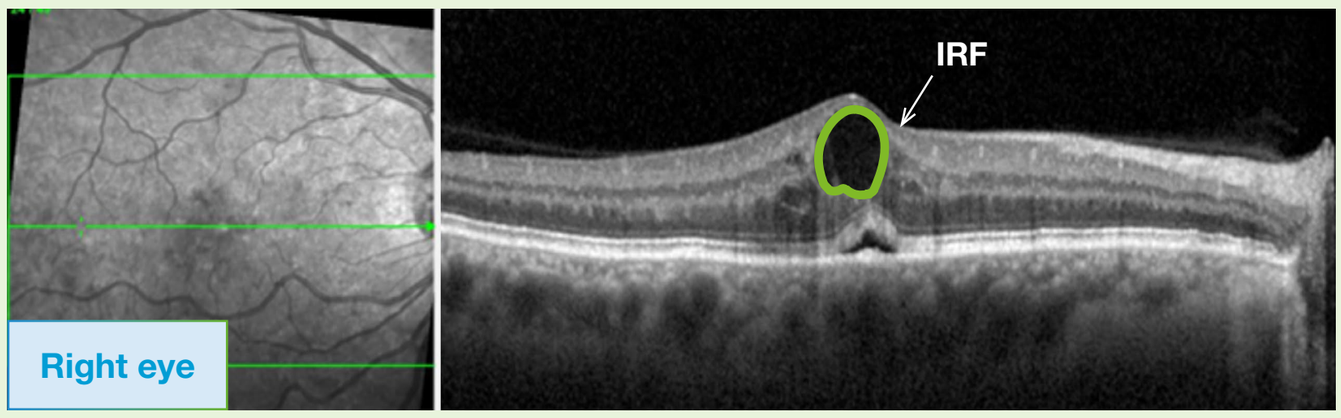
Right eye



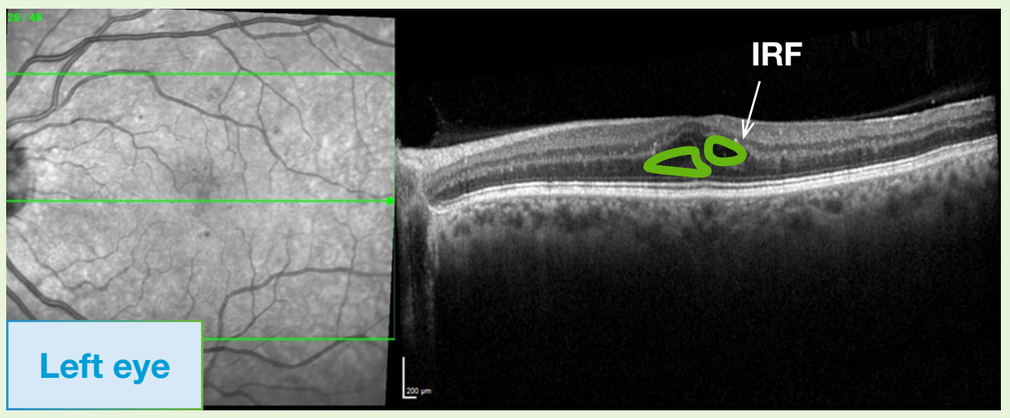
Left eye

Presenting visit pre-treatment	OS	OD
BCVA (Snellen), UK	6/9.5	6/9.5
CST (µm)	452	384
IOP (mmHg)	20	20

Initial examination showed **bilateral nucelar sclerosis**. Fundoscopy highlights **bilateral, healthy-looking optic discs**. **Both maculae** show multiple **microaneurysms**, **hard exudates** and **clinically significant macular oedema**. Right eye shows several **cotton wool spots** and **non-high risk** neovascularisation elsewhere **(NVE)** nasal to the optic disc. Left eye shows intraretinal microvascular abnormality **(IRMA)** but there is no visible new vessel for the left eye. OCT of the macula shows **bilateral increased central intraretinal fluid (IRF).**



Right eye



Left eye

Treatment:

- For the **right eye**, which presented with **non-high risk proliferative diabetic retinopathy**, **close observation** or **panretinal photocoagulation** was suggested. The patient expressed concerns regarding his driving eligibility and requested a close watch for the time being. At this point, he may benefit from **intravitreal therapy** for **central DMO** in the right eye; therefore, he was reviewed in the DMO treatment clinic a few weeks later, where he received his **first injection with EYLEA 8 mg**
  - Iopidine 1% was used as **pre-injection IOP** control prior to treatment with EYLEA 8 mg as the patient's **IOP values** were at the **upper end of normality** and due to the **high dosage** of EYLEA 8 mg.

BCVA, best-corrected visual acuity; CRT, central retinal thickness; IOP, intraocular pressure; OCT, optical coherence tomography; OD, *oculus dexter* (right eye); OS, *oculus sinister* (left eye).

This case study is from a real patient. Information and images courtesy of the author.

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4-week follow-up after first EYLEA 8 mg injection in the right eye (exact date NR)

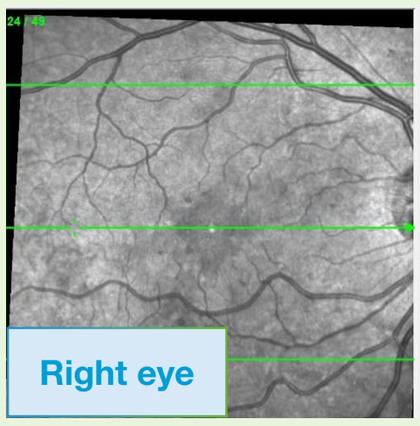
Improvements in **visual acuity** for the right eye were observed after initial **treatment with EYLEA 8 mg.***

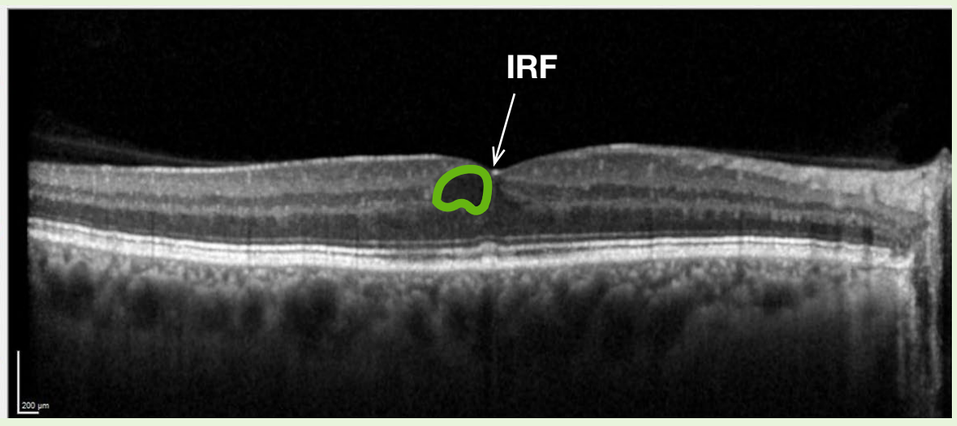
Treatment: Patient received second loading dose with EYLEA 8 mg in the right eye.

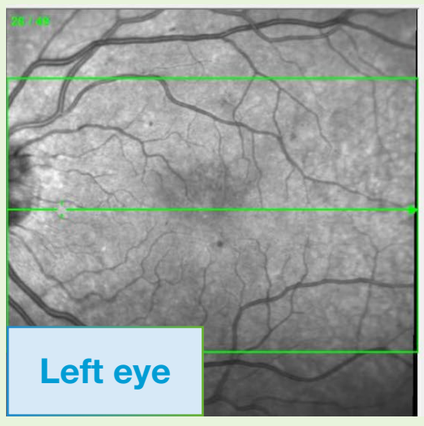
4-week follow-up after second EYLEA 8 mg injection in the right eye (17 July 2024)

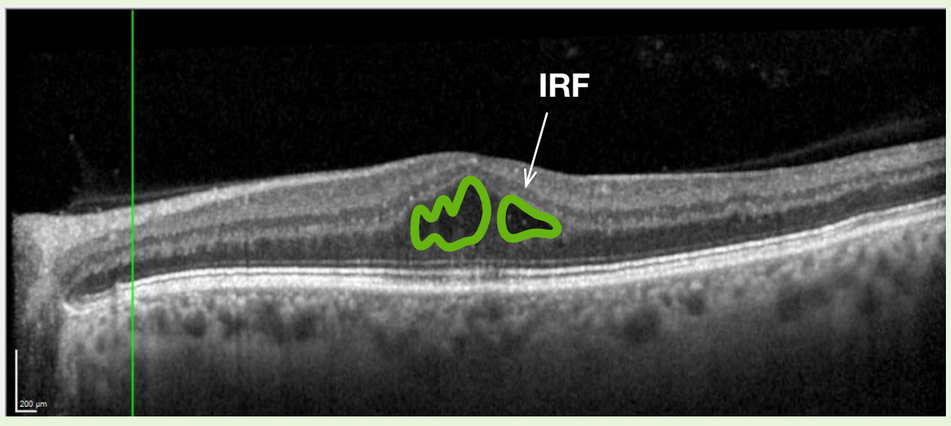
4 weeks after 2nd EYLEA 8 mg in the right eye	OS	OD
BCVA (Snellen), UK	6/9.5	6/6†
CST (µm)	401	349

Vision outcomes remained stable 4 weeks following the second EYLEA 8 mg injection in the right eye; however, CRT was observed to be at 401 µm in the left eye.





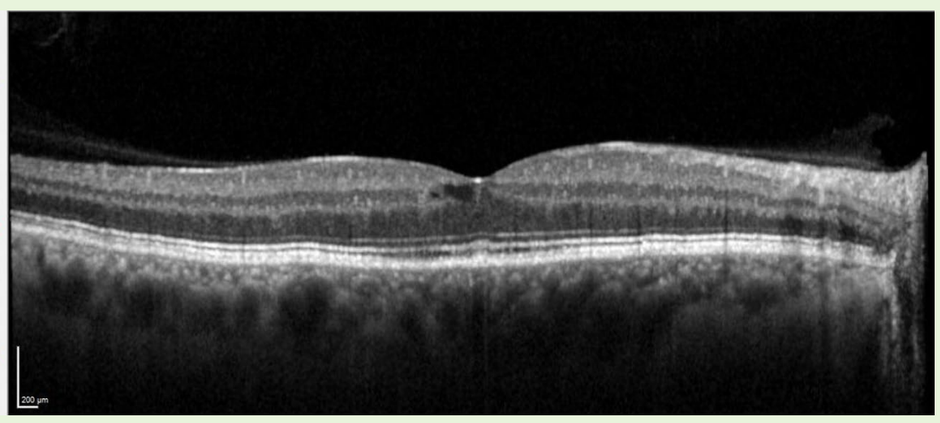




? What would you do?

Treatment:
Left eye: Patient received first monthly loading dose with EYLEA 8 mg
Right eye: Patient received third monthly loading dose with EYLEA 8 mg in the right eye and interval was extended to 8 weeks.
Although Iopidine 1% was used for pre-injection IOP control in the right eye for the first two injections as the patient's IOP was in the upper end of normality, **IOP was reduced by the time of the third injection**; therefore, no iopidine was used for either eye.

8-week follow-up after third EYLEA 8 mg injection in the right eye and 4 weeks after second EYLEA 8 mg in left eye (11/09/2024)



8 weeks after 3rd EYLEA 8 mg in RE and 4 weeks after 2nd in LE	OS	OD
BCVA (Snellen), UK†	6/6	6/6
CST (µm)	NR	
IOP (mmHg)	NR	21

Vision was reported to be **stable** (no improvement or worsening). Visual acuity at this visit did not meet the driving standard so the patient was advised not to drive and get a sight test 1 week following injection visit to determine if glasses will help (**pinhole visual acuity** was **very good** so this was deemed likely). **IRF on OCT** for the **right eye** was **substantially improved**, with **almost no fluid** following the 8-week interval. **IRF on OCT** for the **left eye** was **improved after 2 injections**; however, still persisted. No new blood vessels were observed.

Treatment: Patient to remain on 8-week treatment intervals with EYLEA 8 mg in the right eye. Patient received third loading dose with EYLEA 8 mg in the left eye during treatment visit - also to extend to 8-week treatment intervals with EYLEA 8 mg in the left eye.

*Exact values not reported. †Pinhole. BCVA, best-corrected visual acuity; CRT, central retinal thickness; IOP, intraocular pressure; IRF, intraretinal fluid; LE, left eye; OCT, optical coherence tomography; OD, *oculus dexter* (right eye); OS, *oculus sinister* (left eye); NR, not reported; RE, right eye.

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

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