



BEDFORDSHIRE, LUTON AND MILTON KEYNES AREA PRESCRIBING COMMITTEE (APC)

INTRAVITREAL INJECTIONS USED IN OPHTHALMOLOGY ALGORITHM

Updated: January 2025 Ratified by BLMK APC: February 2025 Review date: January 2028

The following organisations contribute to and participate in the BLMK APC – Bedfordshire Luton and Milton Keynes Integrated Care Board; Bedfordshire Hospitals NHS Foundation Trust; Cambridgeshire Community Services NHS Trust; Central and North-West London NHS Foundation Trust; East London NHS Foundation Trust; Milton Keynes University Hospital NHS

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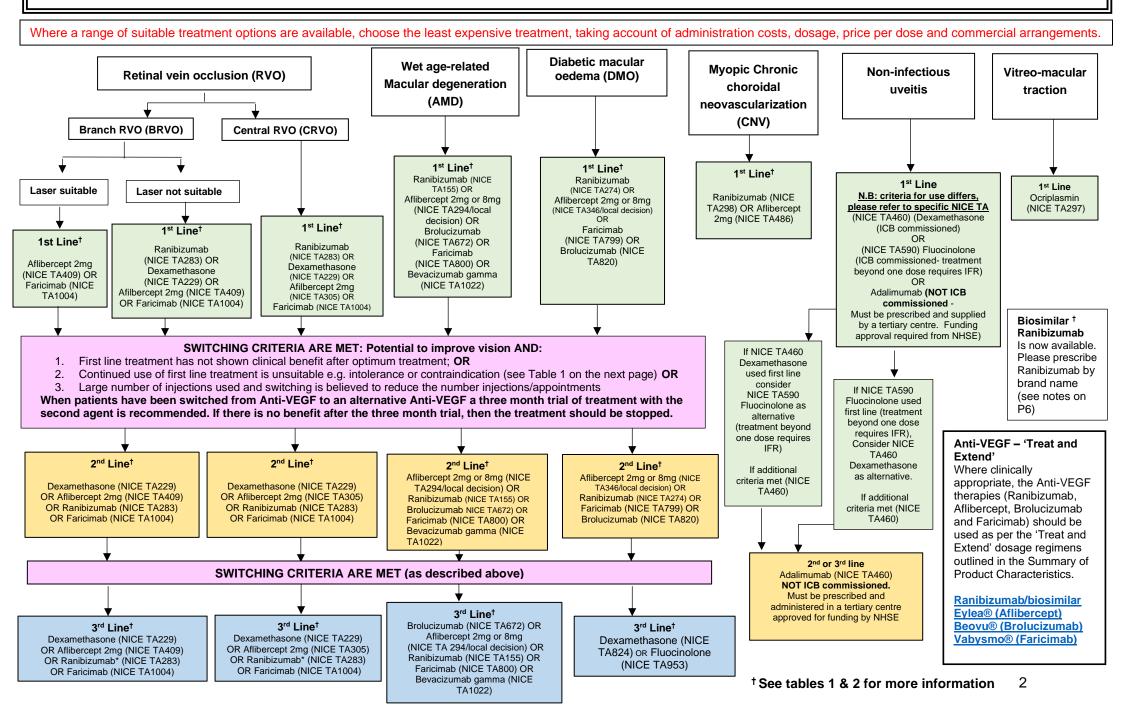


Table 1: Absolute contraindications to steroid and anti-VEGF intravitreal injections

| Absolute contraindications | Dexamethasone | Fluocinolone | Aflibercept | Ranibizumab | Brolucizumab | Faricimab | Bevacizumab gamma |
|--|---------------|--------------|-------------|-------------|--------------|-----------|----------------------|
| Active or suspected ocular or periocular infection | х | х | х | х | х | х | х |
| Active severe intraocular inflammation | х | х | х | х | х | х | х |
| Hypersensitivity to the active substance or to any of the excipients | х | х | х | х | х | х | х |
| Advanced glaucoma which cannot be controlled by medications alone | х | х | - | - | - | - | - |
| Aphakic eyes with ruptured posterior lens capsule | Х | - | - | - | - | - | - |
| Eyes with anterior chamber intraocular lens (ACIOL), iris or transscleral fixated intraocular lens and ruptured posterior lens capsule | х | - | - | - | - | - | - |
| Infectious uveitis | - | Х | - | - | - | - | - |
| Pregnancy or Breast Feeding | - | - | Х | Х | х | х | х |
| Clinical signs of irreversible ischaemic visual function loss | - | - | х | х | х | х | - |

Table 2: Relative contraindications to steroid and anti-VEGF intravitreal injections

| Relative Contraindications | Dexamethasone | Fluocinolone | Aflibercept | Ranibizumab | Brolucizumab | Faricimab | Bevacizumab gamma | Comments |
|---|---------------|--------------|-------------|-------------|--------------|-----------|----------------------|--|
| Raised intraocular pressure (IOP)/family history of raised IOP | Х | х | х | х | х | х | х | Anti-VEGFs: do not inject while the intraocular pressure is ≥ 30 mmHg |
| History of ocular viral infection (including herpes simplex) | Х | - | - | - | - | - | - | |
| Retinal vein occlusion with significant retinal ischaemia | Х | - | - | - | - | - | - | |
| Posterior capsule tear or iris defect | Х | Х | - | - | - | - | - | |
| Patients who cannot or who do not wish to have regular multiple injections | - | - | х | х | х | х | х | |
| Patients who have had a myocardial infarction (MI), Transient Ischaemic Attack (TIA) or cardiovascular accident (CVA) in the preceding 3-6 months. | - | - | x | x | x | x | x | |
| Females who are of child-bearing age | - | - | x | x | x | x | x | Effective contraception advised during treatment and for at least 3 months* after the last dose of treatment. *4 months for aflibercept 8mg |
| Active systemic infections | - | - | Х | Х | Х | Х | Х | |

| Relative Contraindications | Dexamethasone | Fluocinolone | Aflibercept | Ranibizumab | Brolucizumab | Faricimab | Bevacizumab gamma | Comments |
|--|---------------|--------------|-------------|-------------|--------------|-----------|----------------------|---|
| Retinal pigment epithelial tear | - | - | х | х | х | х | Х | Risk factors associated with the development of a retinal pigment epithelial tear after anti-VEGF therapy for wet AMD and potentially also other forms of CNV, include a large and/or high pigment epithelial retinal detachment. When initiating therapy, caution should be used in patients with these risk factors for retinal pigment epithelial tears. |
| Rhegmatogenous retinal detachment, macular holes and retinal break | - | - | x | х | х | х | х | Treatment should be withheld in subjects with rhegmatogenous retinal detachment, stage 3 or 4 macular holes or retinal break. Treatment should not be resumed until an adequate repair has been performed. |
| Subretinal haemorrhage | - | - | х | х | х | - | х | The dose should be withheld, and treatment should not be resumed earlier than the next scheduled treatment in the event of a subretinal haemorrhage involving the centre of the fovea, or, if the size of the haemorrhage is ≥50%, of the total lesion area. |
| Performed or planned intraocular surgery within the previous or next 28 days | | | х | х | х | х | х | Treatment should not be resumed earlier than the next scheduled treatment |

BNF/SPC – Additional cautions/safety information:

Ranibizumab - diabetic macular oedema due to type 1 diabetes; diabetic patients with HbA1^c over 12%; uncontrolled hypertension; retinal detachment; macular hole; patients with RVO presenting irreversible ischaemic visual function loss.

Aflibercept - diabetic patients with uncontrolled hypertension; HbA1_c over 12% and/or proliferative diabetic retinopathy; poorly controlled glaucoma; retinal detachment; retinal hole.

MHRA/CHM advice: *Eylea*® 40 mg/mL (aflibercept solution for intravitreal injection): higher risk of intraocular pressure increase with the pre-filled syringe (<u>April 2021</u>)

Brolucizumab - poorly controlled glaucoma (do not use while intra-ocular pressure is 30 mmHg or higher); Intraocular inflammation, including retinal vasculitis and/or retinal vascular occlusion.

MHRA/CHM advice: Brolucizumab (*Beovu*®): risk of intraocular inflammation and retinal vascular occlusion increased with short dosing intervals (<u>January 2022</u>); Diabetic patients with HbA1c greater than 10% or with proliferative diabetic retinopathy; uncontrolled hypertension.

Faricimab – poorly controlled glaucoma; DMO patients with HbA1c over 10%; patients with high-risk proliferative diabetic retinopathy; diabetic or RVO patients with uncontrolled hypertension.

Bevacizumab gamma – poorly controlled glaucoma; the dose should be withheld, and treatment should not be resumed earlier than the next scheduled treatment in the event of thromboembolism, including myocardial infarction (MI), acute coronary syndrome (ACS), stroke, deep vein thrombosis (DVT), and pulmonary embolism (PE).

Dexamethasone/fluocinolone - MHRA/CHM advice: Corticosteroids: rare risk of central serous chorioretinopathy with local as well as systemic administration (August 2017)

Commissioning Notes:

- All drugs listed in this guideline will require completion of a High Cost Drugs Proforma via Blueteq.
- Biosimilar Ranibizumab (see <u>BLMK formularies</u> for current preferred biosimilar brand), a cost-effective option, is now available. Please prescribe Ranibizumab by brand name.
- In accordance with NICE principles where a range of suitable treatment options are available, choose the least expensive treatment, taking account of administration costs, dosage, price per dose and commercial arrangements.

| Abbreviations | |
|---------------|-----------------------------------|
| AMD | Age related macular degeneration |
| DMO | Diabetic macular oedema |
| RVO | Retinal vein occlusion |
| BRVO | Branch retinal vein occlusion |
| CRVO | Central retinal vein occlusion |
| CNV | Choroidal neovascularisation |
| CI | Contraindication |
| MO | Macular oedema |
| RCO | Royal College of Ophthalmologists |

Version 8; Updated: January 2025

References: January 2025 update refs 2-9,11-17 checked.

- 1. The Royal College of Ophthalmologists Retinal vein occlusion (RVO) clinical guideline, January 2022. <u>Retinal-Vein-Occlusion-Guidelines-2022.pdf (rcophth.ac.uk)</u>.
- 2. _NICE guideline [NG242] Diabetic retinopathy: management and monitoring, August 2024. <u>https://www.nice.org.uk/guidance/ng242</u>.
- 3. Aflibercept: Eylea® 40 mg/ml solution for injection in a vial (last updated 22/09/2023) <u>https://www.medicines.org.uk/emc/product/2879/smpc</u> accessed 08/01/2025.
- Aflibercept: Eylea® 40 mg/ml solution for injection in pre-filled syringe (last updated 22/069/2023) <u>https://www.medicines.org.uk/emc/product/11273/smpc</u> accessed 08/01/2025.
- 5. Aflibercept: Eylea® 114.3 mg/ml solution for injection (last updated 16/07/2024) https://www.medicines.org.uk/emc/product/15397/smpc accessed 08/01/2025.
- Aflibercept: Eylea® 114.3 mg/ml solution for injection in pre-filled syringe (last updated 11/09/2024) <u>https://www.medicines.org.uk/emc/product/15840/smpc</u>, accessed 08/01/2025.
- Dexamethasone: Ozurdex® 700 micrograms intravitreal implant in applicator SPC (last updated 24/10/2023): <u>https://www.medicines.org.uk/emc/product/5654</u> accessed 08/01/2025.
- Fluocinolone acetonide: Iluvien® 190 micrograms intravitreal implant in applicator SPC (last updated 10/05/2024): <u>https://www.medicines.org.uk/emc/product/3061</u> accessed 08/01/2025.
- Ranibizumab: Lucentis® 10 mg/ml solution for injection in pre-filled syringe SPC (last updated 31/07/2023): <u>https://www.medicines.org.uk/emc/product/5418/smpc</u> accessed 08/01/2025.
- 10. eBNF <u>https://bnf.nice.org.uk/</u> accessed 21/03/2024.
- 11. Age-related macular degeneration, NICE guideline [NG82] Published date: January 2018, <u>https://www.nice.org.uk/guidance/ng82</u>
- Brolucizumab: Beovu® 120mg/ml solution in pre-filled syringe or 120mg/ml solution for injection SPC (last updated 06/12/2024), https://www.medicines.org.uk/emc/product/11145, accessed 08/01/2025.
- 13. Ranibizumab: Ongavia® 10mg/ml solution for injection SPC (last updated 15/09/2023): https://www.medicines.org.uk/emc/product/13885/smpc, accessed 08/01/2025.
- Faricimab: Vabysmo® 120 mg/mL solution for injection SPC (last updated 30/12/2024): <u>https://www.medicines.org.uk/emc/product/13741</u>, accessed 08/01/2025.
- Faricimab: Vabysmo® 120 mg/mL solution for injection in pre-filled syringe SPC (last updated 30/12/2024): <u>https://www.medicines.org.uk/emc/product/16012/smpc</u>, accessed 08/01/2025.
- Ranibizumab: Ximluci® 10 mg/mL solution for injection SPC (last updated 18/01/2023): <u>https://www.medicines.org.uk/emc/product/14461</u>, accessed 08/01/2025.
- Bevacizumab gamma: Lytenava® 25 mg/mL solution for injection SPC (last updated 20/12/2024) <u>https://www.medicines.org.uk/emc/product/100349/smpc</u>, accessed 08/01/2025.
- 18. NICE TAs as included in the text.