Treatment of Macular Oedema secondary to Retinal Vein Occlusion (RVO) in Adults High Cost Drugs Pathway

Document control

Date	Version	Amendments
October 2025	2.0	Updated pathway; combined BRVO and CRVO pathways into a single pathway. Pathway developed in accordance with NCL 'Principles for Commissioning High-Cost Drug Pathways for ICB Commissioned Indications', November 2023, and includes relevant published NICE TAs.
April 2015	1.0	Inaugural document

Groups / individuals who have overseen the development of this guidance:	NCL HCD Team, NCL Provider Trust Ophthalmology Specialist Clinicians, NCL Joint Formulary Committee Team
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NCL JFC is funded by and provides advice to Provider Trusts and the Integrated Care Board in NCL.

Treatment of macular oedema secondary to retinal vein occlusion (RVO) in adults

Green: lowest cost **Amber**: moderate cost **Red**: highest cost.
If more than one treatment is suitable, the least expensive treatment should be used.

Visual impairment in the affected eye caused by macular oedema following central or branch retinal vein occlusion (RVO) in adults

1st choice

Aflibercept 2mg biosimilar (*preferred option*) TA305 / TA409

Consider switching if patient fulfills criteria for [1,2]

Dexamethasone intravitreal implant TA229

If patient fulfills criteria for [1]

If patient did not previously respond to aflibercept 2mg

2nd choice

Faricimab [3, 4] TA1004

Consider switching if patient fulfills criteria for [1,2]

Dexamethasone intravitreal implant TA229

Commissioning notes:

- **For BRVO,** although NICE TAs mandate use of grid laser photocoagulation prior to dexamethasone implant (TA229) and ranibizumab (TA283), it is not the preferred treatment option in current clinical practice. Use of grid laser photocoagulation prior to using dexamethasone implant and ranibizumab for BRVO is **not** mandated in NCL.

[1] **Consider initiating on OR switching from anti-VEGF to dexamethasone, if a patient fulfills any of the following criteria (~8% of patients):**

- Recent cardiovascular events.
- Pregnancy (if the benefits outweigh the risks).
- Patients unable to comply with injection frequency of anti-VEGFs and who have at least one of the following conditions:
  - Advanced dementia, requires hospital transport, requires treatment under sedation / general anaesthesia in theatre, learning difficulties that may impact treatment regimen OR co-morbidities requiring frequent hospital appointments / inpatient admissions.

[2] **Consider switching from dexamethasone to anti-VEGF if:**

- Adverse drug reaction (ADR) (e.g. raised IOP).
- Initial use was due to cardiovascular event and risk has decreased/resolved.
- Patient had a better response whilst on anti-VEGF compared to steroid implants.

[3] **Ranibizumab biosimilar** is available as per NICE TA283 and may be considered in specific situations e.g. allergy/ADR to previous anti-VEGF.

[4] If **faricimab** offers no added clinical benefit **OR** if an ADR has occurred, clinicians may consider switching back to **aflibercept biosimilar**.
NB: This is only permitted **once**.

Treatment regimen

Options may include a 'treat and extend' regimen, where the interval for the next anti-VEGF injection is extended by 2 to 4 weeks or a 'PRN' regimen for RVO, depending on patient response. Please refer to individual Trust guidance for further information. This would be based on best-corrected VA and OCT. Any long-term service capacity constraints should be discussed with the NCL ICB High Cost Drugs team to discuss any variations in the treatment pathway.

Monitoring (for commissioning purposes)

Best-corrected VA (Snellen) at baseline and at annual intervals should be recorded.

First line treatment options

- The first line anti-VEGF choice should be aflibercept, followed by faricimab and in certain cases ranibizumab – see above for full details.
- In certain cases, it may be clinically appropriate for dexamethasone intravitreal implant (Ozurdex®) to be used as an alternative first line option to anti-VEGF treatment (see Box 1 above). It is acknowledged that in clinical practice, patients may require re-treatment of dexamethasone intravitreal implant (Ozurdex®) every 4-6 months (<6 monthly off-label). NCL ICB commissions up to three implants per eye per year.

Switching between treatments and a sub-optimal response

1. Consider switching patients from aflibercept to faricimab (or ranibizumab), in patients who do not respond to at least three consecutive monthly intravitreal injections. In certain instances, patients may be switched from dexamethasone intravitreal implant to anti-VEGF treatment (see Box 2 above).
2. Suboptimal response is defined as persistent intraretinal fluid or subretinal fluid on OCT and unchanged (less than or equal to 5-letter improvement) / reduced VA due to RVO.
3. Patients established on anti-VEGF treatment may be switched to dexamethasone intravitreal implant (Ozurdex®) either temporarily or permanently. (See Box 1 above). NB: If this were a temporary switch, patients would revert to their original anti-VEGF, once clinically appropriate.

Fellow eye

Consider harmonisation of treatment of the fellow eye; this includes current treatment and previous historical treatment of the fellow eye.

The safety and efficacy of dexamethasone intravitreal implant (Ozurdex®) administered to both eyes concurrently, has not been studied and therefore, administration to both eyes concurrently is not recommended (SPC).

Treatment cessation

Treatment cessation is recommended when:

1. There has been no clinical improvement despite optimal treatment **OR**
2. Macular oedema has completely resolved with no potential for VA improvement **OR**
3. Best recorded VA is less than 15 letters on two consecutive visits when:
    i. The deterioration in VA is attributed to RVO and not any other pathology AND
    ii. It is not the patient's better seeing eye.

Commissioned treatments with RAG rating based on cost:

Drug	Cost *	Maintenance dosing interval		Additional Information
		Minimum	Maximum	
Aflibercept 2mg biosimilar	£	1 month	Not stated	
Ranibizumab biosimilar	£	~1 month (4 weeks as per SPC)	Not stated	May be considered if there is an allergy/reaction to a previous anti-VEGF.
Dexamethasone intravitreal implant	££	4 months	Not stated	Up to a maximum of three implants per eye per year (<6 monthly off-label).
Faricimab	£££	~1 month (4 weeks as per SPC)	~4 months (16 weeks as per SPC)	

* **Green (£)**: lowest cost **Amber (££)**: moderate cost **Red (£££)**: highest cost

Glossary

Anti-VEGF	Drugs that block the action of Vascular Endothelial Growth Factor
IOP	Intraocular pressure
RVO	Retinal Vein Occlusion
BRVO	Branch Retinal Vein Occlusion
CRVO	Central Retinal Vein Occlusion
VA	Visual Acuity
OCT	Optical Coherence Tomography
SPC	Summary of Product Characteristics

References

Clinical guidelines – Retinal Vein Occlusion, The Royal College of Ophthalmologists, January 2022. Available at https://www.rcophth.ac.uk/wp-content/uploads/2015/07/Retinal-Vein-Occlusion-Guidelines-2022.pdf. Accessed 02/09/2025

Acknowledgements

NHS England. Commissioning Guidance: Medical Retinal Treatment Pathway in Macular Oedema Secondary to Retinal Vein Occlusion. October 2025.