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Integrated Care

Wet Age Related Macular Degeneration (wAMD) Treatment Pathway

Part of Greater Manchester Integrated Care Partnership

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Developed by: NHS GM (Manchester locality)
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Wet AMD confirmed

Check patient meets NICE TA criteria for anti-VEGF therapy: - see Note 1

- **the best-corrected visual acuity is between 6/12 and 6/96**
- **there is no permanent structural damage to the central fovea**
- **the lesion size is less than or equal to 12-disc areas in greatest linear dimension**
- **there is evidence of recent presumed disease progression (blood vessel growth, as indicated by fluorescein angiography, or recent visual acuity (VA) changes**

AND

- **manufacturer provides with discount agreed in PAS**

Anti-VEGF treatment regimen (All):

- Loading phase (LP) of monthly intravitreal injections for at least 3 consecutive months
- Treat-and-Extend (TREX) regimen preferred – see Note 2
- Continue treatment until maximum visual acuity (VA) is achieved +/or there are no signs of disease activity

1st line (includes sequential use – see Note 6)

PREFFERED - Choose least expensive clinically suitable treatment - see Note 3, 4

- Ranibizumab biosimilar (Ongavia®, Ximluci®, Byooviz®) NICE TA155
- Aflibercept (Eylea®) NICE TA294
- Faricimab (Vabysmo®) NICE TA800

PRESCRIBE BY BRAND

2nd line

- **Brolucizumab (Beovu®) NICE TA672 - see Note 5**

PRESCRIBE BY BRAND

DO NOT PRESCRIBE

Ranibizumab originator (Lucentis®)

Ranibizumab 0.5mg injection (vial):

- LP: Minimum 3 x consecutive monthly injections
- Continue monthly injection until max VA achieved +/or no signs of disease activity
- **TREX** – treatment intervals can be extended (max 2 week increment)
- If disease activity recurs shorten treatment interval accordingly

Aflibercept 2mg injection (PFS):

- LP: 3 x consecutive monthly injections then every 2 months
- **TREX** – treatment intervals can be extended (2 to 4 weekly increments) to maintain stable VA +/or anatomic outcomes.
- If disease activity recurs shorten treatment interval accordingly

Faricimab 6mg injection (vial):

- LP: 4 x consecutive monthly injections
- Assess VA + OCT to individualise treatment
- **TREX** – treatment interval can be extended (up to 4 weekly increments) to **maximum 16 weeks**
- If disease activity recurs shorten treatment interval accordingly (up to 8 weekly increments)

Brolucizumab 6mg injection (PFS):

- LP: 3 x consecutive monthly injections
- Assess VA + OCT (i.e. Week 16) to individualise treatment
- **TREX** – treatment interval can be extended to **maximum 12 weeks**
- If disease activity consider 8 weekly interval
- Refer to SPC[6] for alternative regimen

DO NOT ADMINISTER AT INTERVALS < 8 WEEKS APART (AFTER LP)

Switching to biosimilar:

- Review all patients on Lucentis® 0.5mg PFS
- Switch to ranibizumab biosimilar unless clinically unsuitable

Reviewing treatment:

- OCT used to assess response to treatment
- If suboptimal response consider stopping or changing to alternative anti-VEGF – see Note 6
- If initial treatment was **ranibizumab biosimilar** consider changing to aflibercept, brolucizumab or faricimab[2]
- ONLY continue treatment in people who maintain an adequate response to therapy

Discontinuing treatment - see Note 7

- If persistent deterioration in VA and anatomical changes in retina indicating inadequate response to therapy (despite optimally delivered treatment regimen)
- If eye develops late AMD (wet inactive) with no prospect of functional improvement
- Hypersensitivity to an anti-VEGF

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Note: Off-label use of licensed medicines is out of scope and not included in the commissioning pathway.

Anti-VEGF - Anti Vascular Endothelial Growth Factor; **LP** – Loading Phase; **OCT** - Optical Coherence Tomography; **PAS** - Patient Access Scheme; **PFS** – Pre-filled Syringe; **TREX** – Treat-and-Extend; **VA** – Visual Acuity

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Note 1

- NICE[1] acknowledges situations where anti-VEGF treatment may be considered i.e. in eyes with visual acuity of 6/96 or worse (if a benefit in person's overall visual function is expected) and in eyes better than 6/12 anti-VEGF treatment is clinically effective and may be cost effective depending on the regimen used
- This is outside of the mandatory commissioning requirements but recognises use in eyes with BCVA better than 6/12 where clinically indicated.

Note 2

- TREX (Treat-and-Extend) is recommended in clinical practice to reduce treatment burden and minimise hospital visits, by extending injection intervals when possible
- Treatment interval should be determined by treating clinician based on the disease activity, visual acuity +/or anatomical parameters
- A TREX dosing regimen can achieve visual outcomes superior to PRN ('as needed')

Note 3

- Includes all licensed, NICE approved anti-VEGF products (including biosimilars) included in Trust formulary
- NICE[1] recommends a discussion between the clinician and the patient about the advantages and disadvantages of each treatment (considering therapeutic need and likely adherence to treatment)
- If more than one treatment option is clinically suitable, the least expensive should be chosen (taking into account; administration costs, dosage, price per dose and commercial arrangements).

Note 4

- If ranibizumab biosimilar is contraindicated or not clinically appropriate for the specific patient or there are specific clinical considerations (such as non-responder to ranibizumab in fellow eye previously, subretinal bleed >50% of lesion, idiopathic PCV then, subject to the criteria specified in the relevant NICE TA, clinicians should consider aflibercept, faricimab or brolucizumab. [2]

Note 5

- May be considered for patients where first line anti-VEGF agents are not clinically suitable or effective
- Due to safety concerns[3] clinicians should consider patient specific risk factors[4] before initiating treatment with brolucizumab. Clinician to discuss benefits vs risks with patient to obtain informed consent.

Note 6

Sequential treatment: use of a second anti-VEGF agent should be considered when:

- a particular anti-VEGF has not shown clinical benefit after optimum treatment OR
- where continued use of the initial anti-VEGF agent is unsuitable because of an allergic reaction or uveitis AND
- where there is still potential for improvement in vision, or improved stabilisation at 6/96 or better, with further treatment

Note 7

- Treatment should only be continued in people who maintain an adequate response to therapy
- For temporary discontinuation (drug withholding) refer to RCOphth guidance[5] and product SmPC.[6]

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First Line Anti-VEGF Treatment Options

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Anti-VEGF treatment	Efficacy	Injection frequency*	Safety
Ranibizumab	NICE 2018[1] - no clinically significant differences in efficacy between aflibercept and ranibizumab from clinical trial evidence. VA outcomes were not clinically or statistically significant such that aflibercept + ranibizumab can be considered equally effective.[1]	TREX – 16.27 injections (Y1 + Y2)[8]	NICE 2018[1]– no clinically significant differences in the safety between aflibercept and ranibizumab.
Aflibercept	NICE 2018[1] - no clinically significant differences in efficacy between aflibercept and ranibizumab from clinical trial evidence. RCOphth proposed additional efficacy for aflibercept due to VEGF binding affinity + additional targeting of placental growth factor.	TREX – 13.63 injections (Y1 + Y2)[8]	NICE 2018[1]– no clinically significant differences in the safety between aflibercept and ranibizumab.
Faricimab	NICE[8] stated that faricimab is as effective as aflibercept from clinical trial evidence + considered similar clinical effectiveness to ranibizumab from indirect comparison.	TREX – 11.48 injections (Y1 + Y2)[8]	NICE suggested that faricimab had similar adverse events to aflibercept and ranibizumab from clinical trials. Rates of ocular adverse events were comparable between faricimab and aflibercept from clinical trials.

*Injection frequency (i.e. Loading phase as per SPC followed by TREX) based on NICE TA 800 assumptions (company base-case scenario)

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Glossary

wAMD	Wet Age Related Macular Degeneration
Anti-VEGF	Anti Vascular Endothelial Growth Factor
VA	Visual Acuity
OCT	Optical Coherence Tomography
TREX	Treat and Extend
PRN	Pro re Nata or ‘AS REQUIRED’
PAS	Patient Access Scheme
PCV	Polypoidal Choroidal Vasculopathy
PFS	Pre-filled Syringe

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