NICE National Institute for Health and Care Excellence

NICE Pathways

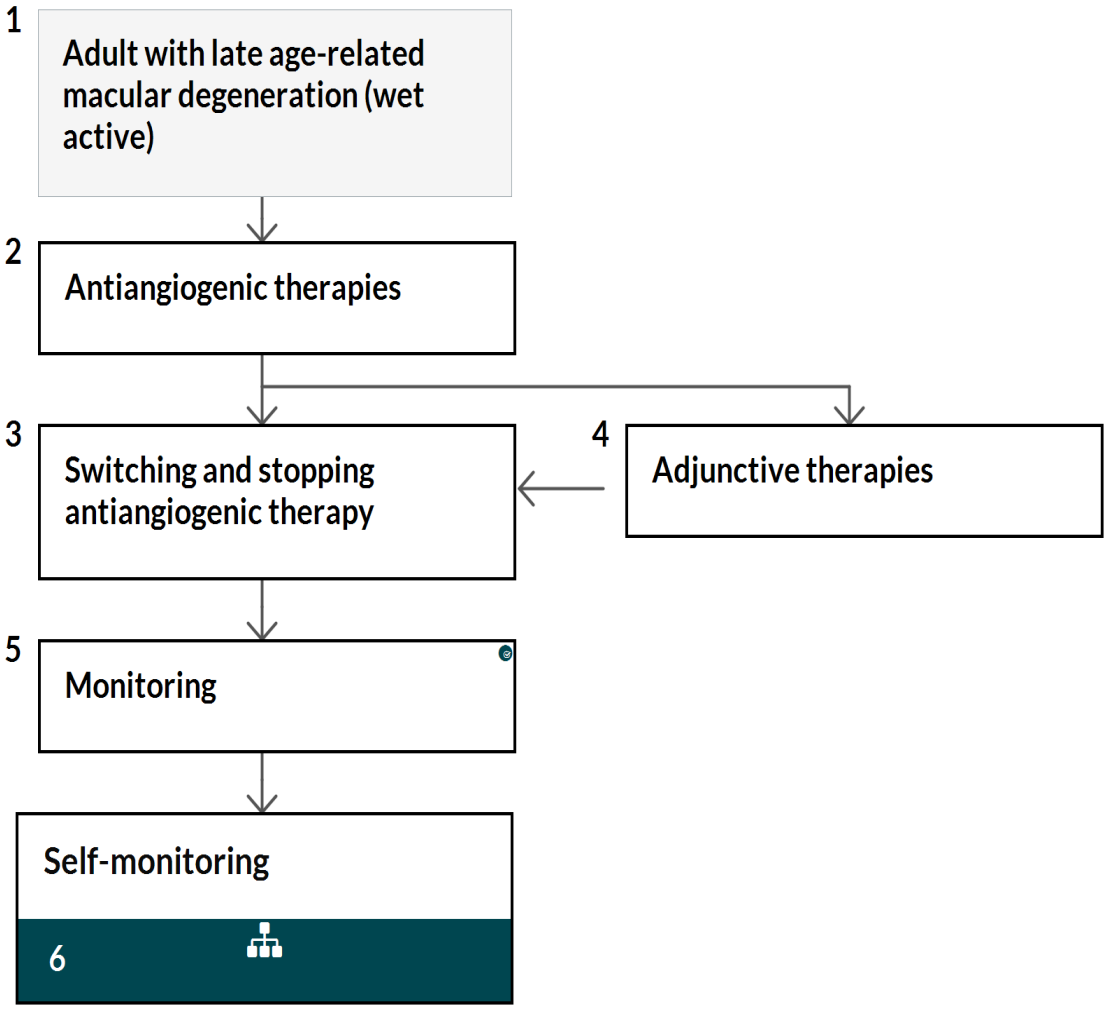
Treating late age-related macular degeneration (wet active)

NICE Pathways bring together everything NICE says on a topic in an interactive flowchart. NICE Pathways are interactive and designed to be used online.

They are updated regularly as new NICE guidance is published. To view the latest version of this NICE Pathway see:

http://pathways.nice.org.uk/pathways/age-related-macular-degeneration
NICE Pathway last updated: 03 February 2021

This document contains a single flowchart and uses numbering to link the boxes to the associated recommendations.



1 Adult with late age-related macular degeneration (wet active)

No additional information

2 Antiangiogenic therapies

Offer intravitreal anti-VEGF treatment[1] for late AMD (wet active) for eyes with visual acuity within the range specified in NICE technology appraisal guidance on ranibizumab and pegaptanib (see below).

Be aware that no clinically significant differences in effectiveness and safety between the different anti-VEGF treatments[2] have been seen in the trials considered by the guideline committee.

In eyes with visual acuity of 6/96 or worse, consider anti-VEGF treatment for late AMD (wet active) only if a benefit in the person's overall visual function is expected (for example, if the affected eye is the person's better-seeing eye).

Be aware that anti-VEGF treatment for eyes with late AMD (wet active) and visual acuity better than 6/12 is clinically effective and may be cost effective depending on the regimen used' .

Ensure intraocular injections are given by suitably trained healthcare professionals, for example:

- medical specialists, such as ophthalmologists
- nurse practitioners, optometrists and technicians with experience in giving intraocular injections.

If the injection is delivered by someone who is not medically qualified, ensure that cover is in place to manage any ophthalmological or medical complications.

See the NICE Pathway on medicines optimisation.

Brolucizumab

The following recommendations are from NICE technology appraisal guidance on brolucizumab for treating wet age-related macular degeneration.

Brolucizumab is recommended as an option for treating wet age-related macular degeneration in adults, only if, in the eye to be treated:

[1] At the time of publication (January 2018), bevacizumab did not have a UK marketing authorisation for, and is considered by the MHRA to be an unlicensed medication in, this indication. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent would need to be obtained and documented. See the General Medical Council's Prescribing guidance: prescribing unlicensed medicines, and the MHRA's guidance on the supply of unlicensed medicinal products (specials), for further information. The guideline may inform any decision on the use of bevacizumab outside its UK marketing authorisation but does not amount to an approval of or a recommendation for such use.

[2] Given the guideline committee's view that there is equivalent clinical effectiveness and safety of different anti-VEGF agents (aflibercept, bevacizumab and ranibizumab), comparable regimens will be more cost effective if the agent has lower net acquisition, administration and monitoring costs.

- 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 and
- there is recent presumed disease progression (for example, blood vessel growth, as shown by fluorescein angiography, or recent visual acuity changes).

It is recommended only if the company provides brolucizumab according to the commercial arrangement.

If patients and their clinicians consider brolucizumab to be one of a range of suitable treatments, including aflibercept and ranibizumab, choose the least expensive (taking into account administration costs and commercial arrangements).

Only continue brolucizumab in people who maintain an adequate response to therapy. Criteria for stopping should include persistent deterioration in visual acuity and identification of anatomical changes in the retina that indicate inadequate response to therapy.

These recommendations are not intended to affect treatment with brolucizumab that was started in the NHS before this guidance was published. People having treatment outside these recommendations may continue without change to the funding arrangements in place for them.

See why we made the recommendations on brolucizumab.

NICE has written information for the public on brolucizumab.

Aflibercept

The following recommendations are from NICE technology appraisal guidance on aflibercept solution for injection for treating wet age-related macular degeneration.

Aflibercept solution for injection is recommended as an option for treating wet age-related macular degeneration only if:

- it is used in accordance with the recommendations for ranibizumab in NICE technology appraisal guidance 155 (see below) **and**
- the manufacturer provides aflibercept solution for injection with the discount agreed in the patient access scheme.

People currently receiving aflibercept solution for injection whose disease does not meet the criteria in the paragraph and bullets above should be able to continue treatment until they and their clinician consider it appropriate to stop.

NICE has written information for the public on aflibercept.

Ranibizumab and pegaptanib

The following recommendations are from NICE technology appraisal guidance on ranibizumab and pegaptanib for the treatment of age-related macular degeneration.

Ranibizumab, within its marketing authorisation, is recommended as an option for the treatment of wet AMD if:

- all of the following circumstances apply in the eye to be treated:
  - 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 changes)

and

- the manufacturer provides ranibizumab with the discount agreed in the patient access scheme (as revised in 2012).

It is recommended that treatment with ranibizumab should be continued only in people who maintain adequate response to therapy. Criteria for discontinuation should include persistent deterioration in visual acuity and identification of anatomical changes in the retina that indicate inadequate response to therapy. It is recommended that a national protocol specifying criteria for discontinuation is developed.

Pegaptanib is not recommended for the treatment of wet age-related macular degeneration.

People who are currently receiving pegaptanib for any lesion type should have the option to continue therapy until they and their clinicians consider it appropriate to stop.

NICE has written information for the public on ranibizumab and pegaptanib.

Photodynamic therapy

Do not offer PDT alone for late AMD (wet active).

3 Switching and stopping antiangiogenic therapy

Consider switching anti-VEGF treatment for people with late AMD(wet active) if there are practical reasons for doing so (for example, if a different medicine can be given in a regimen the person prefers), but be aware that clinical benefits are likely to be limited.

Consider observation without giving anti-VEGF treatment if disease appears stable (if this event, see self-monitoring).

Consider stopping anti-VEGF treatment if the eye develops severe, progressive loss of visual acuity despite treatment as recommended in antiangiogenic therapies [See page 3].

Stop anti-VEGF treatment if the eye develops late AMD (wet inactive) with no prospect of functional improvement.

Ensure that patients are actively involved in all decisions about the stopping or switching of treatment (see information and support).

4 Adjunctive therapies

Photodynamic therapy

Do not offer PDT as an adjunct to anti-VEGF as first-line treatment for late AMD (wet active).

Only offer PDT as an adjunct to anti-VEGF as second-line treatment for late AMD (wet active) in the context of a randomised controlled trial.

Intravitreal corticosteroids

Do not offer intravitreal corticosteroids as an adjunct to anti-VEGF for late AMD (wet active).

Interventional procedures

NICE has published guidance on the following procedures with **special arrangements** for clinical governance, consent and audit:

- miniature lens system implantation for advanced age-related macular degeneration
- macular translocation with 360° retinotomy for wet age-related macular degeneration
- limited macular translocation for wet age-related macular degeneration

- transpupillary thermotherapy for age-related macular degeneration.

NICE has published interventional procedures guidance on the following procedures which should be used **only in research**:

- epiretinal brachytherapy for wet age-related macular degeneration
- radiotherapy for age-related macular degeneration.

5 Monitoring

Offer people with late AMD (wet active) ongoing monitoring with OCT for both eyes.

Offer fundus examination or colour photography if OCT appearances are stable, but:

- there is a decline in visual acuity **or**
- the person reports a decline in visual function.

Consider FFA to identify unrecognised neovascularisation if OCT appearances are stable, but:

- there is a decline in visual acuity **or**
- the person reports a decline in visual function.

If OCT results suggest macular abnormalities but the abnormalities are not responding to treatment, think about:

- using alternative imaging
- alternative diagnoses.

Quality standards

The following quality statement is relevant to this part of the interactive flowchart.

4. Monitoring late age-related macular degeneration (wet active)

6 Self-monitoring

See Age-related macular degeneration / managing age-related macular degeneration / self-monitoring

Glossary

AMD

age-related macular degeneration

FFA

fundus fluorescein angiography

OCT

optical coherence tomography

PDT

photodynamic therapy

VEGF

vascular endothelial growth factor

Sources

Age-related macular degeneration (2018) NICE guideline NG82

Brolucizumab for treating wet age-related macular degeneration (2021) NICE technology appraisal guidance 672

Aflibercept solution for injection for treating wet age-related macular degeneration (2013) NICE technology appraisal guidance 294

Ranibizumab and pegaptanib for the treatment of age-related macular degeneration (2008) NICE technology appraisal guidance 155

Your responsibility

Guidelines

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

Technology appraisals

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, health professionals are expected to take these recommendations fully into account, alongside the individual needs, preferences and values of their patients. The application of the recommendations in this interactive flowchart is at the discretion of health professionals and their individual patients and do not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

Commissioners and/or providers have a responsibility to provide the funding required to enable the recommendations to be applied when individual health professionals and their patients wish to use it, in accordance with the NHS Constitution. They should do so in light of their duties to

have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

Medical technologies guidance, diagnostics guidance and interventional procedures guidance

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, healthcare professionals are expected to take these recommendations fully into account. However, the interactive flowchart does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Commissioners and/or providers have a responsibility to implement the recommendations, in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity, and foster good relations. Nothing in this interactive flowchart should be interpreted in a way that would be inconsistent with compliance with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.