

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Health Technology Evaluation

Pegcetacoplan for treating geographic atrophy

Final scope

Final remit/evaluation objective

To appraise the clinical and cost effectiveness of pegcetacoplan within its marketing authorisation for treating adults with geographic atrophy.

Background

Age-related macular degeneration (AMD) is a disease that affects the macula, which is the central region of the retina. The condition has distinctive clinical stages. Early and intermediate AMD is associated with drusen (yellow deposits under the retina) and macular pigmentary changes, usually with normal or near-normal vision. Late AMD is characterised by a decrease or loss of central vision. Late AMD is further classified in two forms: geographic atrophy and neovascular AMD. Geographic atrophy is a chronic progressive degeneration of the macula that causes irreversible loss of the retinal pigment epithelium, photoreceptors, and underlying choriocapillaris.^{1,2}

In the early stages of geographic atrophy, people may experience a reduction of visual capacity under low-light conditions. As the disease progresses visual blind spots develop, leading to loss of central vision and blindness.² In most cases the loss of visual function occurs in both eyes.¹ People with geographic atrophy may have difficulty in reading, judging distance and seeing in dark conditions and so may encounter a loss of mobility and independence, and a reduction in quality of life.³

Some of the known risk factors for developing geographic atrophy are increased age, obesity, having high blood pressure, race (more prevalent in Caucasians), smoking and having family history of AMD.⁴⁻⁶

The prevalence of geographic atrophy in the UK is between 1.3% for those aged over 50 and 6.7% in those aged over 80 years.⁷

There are currently no pharmacological therapies approved for the treatment of geographic atrophy.

The technology

Pegcetacoplan (Syfovre, Apellis Pharmaceuticals) does not currently have a marketing authorisation in the UK for treating geographic atrophy. It has been studied in clinical trials compared with placebo in adults with geographic atrophy.

Intervention(s)	Pegcetacoplan
Population(s)	Adults with geographic atrophy secondary to age-related macular degeneration

Subgroups	Presence of subfoveal lesions compared with non-subfoveal lesions
Comparators	Established clinical management without pegcetacoplan
Outcomes	The outcome measures to be considered include: <ul style="list-style-type: none"> • change in geographic atrophy lesion size • best corrected visual acuity (the affected eye) • adverse effects of treatment • health-related quality of life.
Economic analysis	<p>The reference case stipulates that the cost effectiveness of treatments should be expressed in terms of incremental cost per quality-adjusted life year.</p> <p>The reference case stipulates that the time horizon for estimating clinical and cost effectiveness should be sufficiently long to reflect any differences in costs or outcomes between the technologies being compared.</p> <p>Costs will be considered from an NHS and Personal Social Services perspective.</p> <p>The availability of any commercial arrangements for the intervention, comparator and subsequent treatment technologies will be taken into account.</p> <p>The cost effectiveness analysis should include consideration of the benefit in the best and worst seeing eye.</p>
Other considerations	Guidance will only be issued in accordance with the marketing authorisation. Where the wording of the therapeutic indication does not include specific treatment combinations, guidance will be issued only in the context of the evidence that has underpinned the marketing authorisation granted by the regulator.
Related NICE recommendations	<p>Related technology appraisals:</p> <p>Faricimab for treating wet age-related macular degeneration (2022) NICE technology appraisal guidance 800.</p> <p>Brolucizumab for treating wet age-related macular degeneration (2021) NICE technology appraisal guidance 672.</p> <p>Ranibizumab for treating choroidal neovascularisation associated with pathological myopia (2013) NICE technology appraisal guidance 298.</p> <p>Aflibercept solution for injection for treating wet age-related macular degeneration (2013) NICE technology appraisal guidance 294.</p>

	<p>Ranibizumab and pegaptanib for the treatment of age-related macular degeneration (2008) NICE technology appraisal guidance 155.</p> <p>Related NICE guidelines:</p> <p>Age-related macular degeneration (2018) NICE guideline NG82.</p>
Related National Policy	<p>The NHS Long Term Plan (2019) NHS Long Term Plan</p> <p>NHS England (2018) NHS manual for prescribed specialist services (2018/2019) Chapter 12.</p> <p>NHS England (2013/2014) NHS Standard contract for Specialised Ophthalmology (Adult)</p>

References

1. British Medical Journal. Age related macular degeneration. 2023. Accessed May 2023.
2. Boyer DS, Schmidt-Erfurth U, van Lookeren Campagne M, Henry EC, Brittain C. The pathophysiology of geographic atrophy secondary to age-related macular degeneration and the complement pathway as a therapeutic target. *Retina* (Philadelphia, Pa). 2017;37(5):819- 35.
3. Patel PJ, Ziemssen F, Ng E, Muthutantri A, Silverman D, Tschosik EA, et al. Burden of Illness in Geographic Atrophy: A Study of Vision-Related Quality of Life and Health Care Resource Use. *Clinical ophthalmology* (Auckland, NZ). 2020;14:15-28.
4. Sacconi R, Corbelli E, Querques L, Bandello F, Querques G. A Review of Current and Future Management of Geographic Atrophy. *Ophthalmology and Therapy*. 2017; 6:69-77
5. [Risk factors for geographic atrophy](#) (2023) Macular degeneration. Accessed May 2023.
6. [Age-related macular degeneration](#) (2023) NHS. Accessed May 2023.
7. Owen CG, Jarrar Z, Wormald R, Cook DG, Fletcher AE, Rudnicka AR. The estimated prevalence and incidence of late stage age related macular degeneration in the UK. *Br J Ophthalmol*. 2012 May;96(5):752-6.