

## National Institute for Health and Care Excellence

## Single Technology Appraisal (STA)

## Brolucizumab for treating wet age-related macular degeneration [ID1254]

## Response to consultee and commentator comments on the draft remit and draft scope (pre-referral)

**Please note:** Comments received in the course of consultations carried out by NICE are published in the interests of openness and transparency, and to promote understanding of how recommendations are developed. The comments are published as a record of the submissions that NICE has received, and are not endorsed by NICE, its officers or advisory committees.

## Comment 1: the draft remit

Section	Consultee/ Commentator	Comments [sic]	Action
Appropriateness	Royal National Institute of Blind People	Yes	Thank you for your comment. No action required.
	Royal College of Pathologists	Yes	Thank you for your comment. No action required.
	RCOPhth	Yes	Thank you for your comment. No action required.
	Bayer Plc Ltd	No comment	Noted. No action required.

Section	Consultee/ Commentator	Comments [sic]	Action
	Novartis Pharmaceutica Is UK Limited	We consider it appropriate to refer this topic to NICE for appraisal	Thank you for your comment. No action required.
	Fight for Sight	Yes	Thank you for your comment. No action required.
Wording	Royal College of Pathologists	Yes	Thank you for your comment. No action required.
	RCOPhth	Yes	Thank you for your comment. No action required.
	Bayer Plc Ltd	No comment	Noted. No action required.
	Novartis Pharmaceutica Is UK Limited	The licence wording is currently anticipated to be: [REDACTED] [REDACTED] Therefore, we consider the wording of the remit to be appropriate.	Thank you for your comment. No action required.
	Fight for Sight	Yes	Thank you for your comment. No action required.
Timing Issues	Royal National Institute of Blind People	Current treatment for wet AMD has a very significant impact on patients life, requiring frequent trips to hospital for monitoring and treatment. Brolucizumab is likely to reduce the frequency of visits for	Comments noted. NICE has scheduled this topic into its work

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		some patients. This will have a very positive impact for individual patients and may help with the capacity challenges that hospital eye services are currently struggling with. We know that patients are permanently losing vision due to delayed and cancelled hospital eye care appointments because of limited capacity within ophthalmology therefore urgent appraisal of brolocizumab is required.	programme. For further details, see the NICE website: <a href="https://www.nice.org.uk/guidance/proposed/gid-ta10455">https://www.nice.org.uk/guidance/proposed/gid-ta10455</a> .
	Royal College of Pathologists	The proposed appraisal is of interest, although it could be assessed according to a regular NICE schedule given already available treatment options.	Thank you for your comment. No action required.
	RCOPhth	Routine	Thank you for your comment. No action required.
	Bayer Plc Ltd	No comment	Noted. No action required.
	Novartis Pharmaceuticals UK Limited	<p>Brolucizumab delivers greater reductions in central subfield thickness (CSFT), in addition to demonstrating a significant reduction in retinal fluid compared to aflibercept.<sup>1-3</sup></p> <p>Retinal fluids are key markers used by physicians to determine injection frequency (retreatment) in clinical practice.<sup>1-5</sup> Therefore brolocizumab offers an opportunity for patients and healthcare professionals to treat with an anti-VEGF less frequently than current treatment options.<sup>1-3</sup> This is especially important due to service capacity constraints in the NHS. Up to 5 people per month are permanently losing sight due to delayed and cancelled hospital appointments due to wet AMD.<sup>6</sup></p>	Comments noted. NICE has scheduled this topic into its work programme. For further details, see the NICE website: <a href="https://www.nice.org.uk/guidance/proposed/gid-ta10455">https://www.nice.org.uk/guidance/proposed/gid-ta10455</a> .

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		Brolucizumab has the potential to address the unmet need of effective disease control with reduced treatment frequency and monitoring burden compared with available therapy. Therefore we believe that timely NICE guidance for brolucizumab would be valuable to patients, their carers and the NHS.	
	Fight for Sight	There are licensed therapies for the treatment of neovascular AMD which are available for all patients and there is relatively little unmet need. However, the treatment burden on patients with AMD is high so a therapy that will reduce this is welcomed.	Thank you for your comment. No action required.

**Comment 2: the draft scope**

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Background information	Royal College of Pathologists	Background information is well summarised in simple wording.	Thank you for your comment. No action required.
	RCOPhth	Adequate	Thank you for your comment. No action required.
	Bayer Plc Ltd	No comment	Noted. No action required.
	Novartis Pharmaceuticals UK Limited	We consider this section to be accurate and complete.	Thank you for your comment. No action required.

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	Fight for Sight	The background information is accurate.	Thank you for your comment. No action required.
The technology/ intervention	Royal College of Pathologists	Yes	Thank you for your comment. No action required.
	RCOPhth	Adequate	Thank you for your comment. No action required.
	Bayer Plc Ltd	No comment	Noted. No action required.
	Novartis Pharmaceuticals UK Limited	We consider this section to be accurate and complete.	Thank you for your comment. No action required.
	Fight for Sight	Yes	Thank you for your comment. No action required.
Population	Royal National Institute of Blind People	Is it worth considering the treatment may also be useful in delaying the onset of some cases of Stargardt disease in young adults?	Thank you for your comment. The remit of this appraisal is for treatment of wet age-related macular degeneration. No action required.

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	Royal College of Pathologists	The population is defined appropriately. Unable to comment on need for any subgroups.	Thank you for your comment. No action required.
	RCOPhth	I would prefer - "Adults over 50 years old with untreated active choroidal neovascularisation secondary to age-related macular degeneration affecting the fovea.	Thank you for your comment. Age is a protected characteristic. NICE does not discriminate based on age. The drug will be appraised within its full marketing authorisation. No action needed
	Bayer Plc Ltd	<p>We suggest the wording is changed to "adults with wet age-related macular degeneration" to better align with the draft remit/appraisal objective.</p> <p>This will maintain consistency and remove the suggestion that the appraisal is only considering brolocizumab as a first-line treatment i.e. an "untreated" population</p>	Thank you for your comment. The population wording within the scope has been amended to 'Adults with choroidal neovascularisation secondary to age-related macular degeneration'.
	Novartis Pharmaceuticals UK Limited	The population is defined inappropriately. Please delete 'untreated and active'. Adults with choroidal neovascularisation secondary to age-related macular degeneration should be considered as the	Thank you for your comment. The population wording within the scope has been amended to

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		appropriate population for this appraisal. This is to enable consistency with NICE TA155 and TA294.	'Adults with choroidal neovascularisation secondary to age-related macular degeneration'.
	Fight for Sight	Yes the correct population is defined in terms of our current knowledge of prevalence and incidence of AMD. Current NICE guidelines state that nAMD patients with visual acuity of greater than 6/12 can start anti-VEGF treatment. We would argue that all patients with progression should be treated with an anti-VEGF technology.	Thank you for your comment. No action required.
Comparators	Royal National Institute of Blind People	"Best supportive care" could include AREDS or AREDS2 trial comparisons.	Thank you for your comment. 'Best supportive care' is included to capture the available treatments for any patients who cannot have the listed comparators. The appraisal committee will consider treatments which are used in clinical practice for all patients within the marketing authorisation. In addition, the company submission will allow the opportunity to include the outcomes measured

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			as part of its evidence base. These will be reviewed by the committee in the appraisal. No action required.
	Royal College of Pathologists	Yes	Comment noted. No action required.
	RCOPhth	Yes. None can be described as the best. How should best supportive care be defined? There is no such thing as best supportive care - this should be called "Not treating the patient." if it is included at all.	Thank you for your comment. 'Best supportive care' is included to capture the available treatments for any patients who cannot have the listed comparators. The appraisal committee will consider treatments which are used in clinical practice for all patients within the marketing authorisation. No action required.
	Roche Products Ltd	Bevacizumab (Avastin©) is not licensed for wet age-related macular degeneration (wAMD). Avastin was developed and is manufactured for intravenous use in the treatment of a number of cancers.  Roche does not believe bevacizumab can offer additional medical benefit over the approved medicines for the treatment of	Thank you for your comment. Bevacizumab is currently used within the NHS in England for the treatment of wet age-related macular

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		<p>ophthalmologic diseases. Therefore, we do not intend to develop bevacizumab for intraocular use. Roche's primary focus is on unmet need. In light of this, we are focusing our R&amp;D in ophthalmology on discovering and developing new medicines for serious diseases of the eye for which significant unmet need remains, and in the treatment of diseases where well tolerated, effective therapies are not available.</p> <p>However we firmly support a physician's right to make an informed choice of medication for their patients, that patients should be informed and give consent that they are receiving an unapproved product, and that they understand the risks and benefits associated with it.</p>	degeneration and is therefore considered an appropriate comparator for this appraisal. No action required.
	Bayer Plc Ltd	Bevacizumab is not an appropriate comparator to brolocizumab. Bevacizumab cannot be considered 'routine practice' or 'best alternative care' as it is not licensed for use in the eye and its use in the NHS is very low.	Thank you for your comment. Bevacizumab is currently used within the NHS in England for the treatment of wet age-related macular degeneration and is considered an appropriate comparator for this appraisal. The appraisal committee will consider treatments which are used in clinical practice for all patients within the marketing authorisation. No action required.

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	Novartis Pharmaceuticals UK Limited	<p>Aflibercept and ranibizumab are licensed treatments for patients with wet AMD. Both treatments are part of standard of care currently used in the NHS and are therefore appropriate comparators to brolocizumab.</p> <p>Unlicensed bevacizumab is not an appropriate comparator for this topic.</p> <p>Unlicensed bevacizumab is neither standard of care nor has a marketing authorisation in the UK for wet AMD. While licensed treatments have been assessed to be clinically and cost effective, unlicensed medicines have not undergone rigorous regulatory scrutiny, to enable a favourable risk/benefit analysis to be made. In addition bevacizumab has an [REDACTED] in the UK, therefore it cannot be considered as established clinical practice in the NHS for wet AMD.</p> <p>Best supportive care is also not an appropriate comparator as patients with wet AMD should be offered treatment with aflibercept or ranibizumab (NICE TA155 and TA294).</p>	<p>Thank you for your comment. Bevacizumab is currently used within the NHS in England for the treatment of wet age-related macular degeneration and is considered an appropriate comparator for this appraisal. The appraisal committee will consider treatments which are used in clinical practice for all patients within the marketing authorisation. No action required.</p> <p>Thank you for your comment. 'Best supportive care' is included to capture the available treatments for any patients who cannot have the listed comparators. The</p>

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			appraisal committee will consider treatments which are used in clinical practice for all patients within the marketing authorisation. No action required.
	Fight for Sight	Yes	Comment noted. No action required.
Outcomes	Royal National Institute of Blind People	Including the number (%age) of patients complying with treatment at set points could give a broad, aggregate measure of how well brolocizumab is tolerated by patients, as well as the quality of the results of treatment as experienced by them.	Thank you for your comment. The list of outcomes is not exhaustive and the company submission will allow the opportunity to include the outcomes measured as part of its evidence base. These will be reviewed by the committee in the appraisal. No action required.
	Royal College of Pathologists	Yes	Thank you for your comment. No action required.

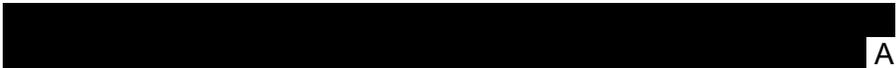
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	RCOPhth	I think use of CSFT is potentially problematic as increased atrophy (a bad thing) will result in lower CSFT, as will a drug with more anti VEGF activity (a good thing). There is debate over whether the CSFT can be reduced too much.	Thank you for your comment. The company submission will allow the opportunity to include the outcomes measured as part of its evidence base. These will be reviewed by the committee as part of the appraisal. No action required.
	Bayer Plc Ltd	No comment	Noted. No action required.
	Novartis Pharmaceuticals UK Limited	We consider the specified outcome measures to be appropriate.	Thank you for your comment. No action required.
	Fight for Sight	Generally these are accurate measures. The inclusion of Central Subfield Foveal Thickness (CSFT) measure may be erroneous.	Thank you for your comment. The company submission will allow the opportunity to include the outcomes measured as part of its evidence base. These will be reviewed by the committee as part of the appraisal. No action required.

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Economic analysis	Royal College of Pathologists	Unable to comment	Noted. No action required.
	RCOPhth	No definite time horizon is given. The current treatments are often used for 3 to 7 years and sometimes longer.	Thank you for your comment. The committee will determine the appropriateness of the time horizon included in the company submission as part of the appraisal process. No action required.
	Bayer Plc Ltd	<p>The head-to-head trials of brolocizumab versus aflibercept used an injection frequency of every 8-weeks for aflibercept. However, the SmPC for aflibercept allows patients to follow a treat-and-extend regimen whereby the time between injections can be extended beyond 8-weeks. The comparison of brolocizumab with aflibercept should consider a treat-and-extend regimen for aflibercept which is becoming established practice in the NHS.</p> <p>The treat-and-extend regimen was added to the SmPC based on data from the ALTAIR study.</p>	Thank you for your comment. The company submission allows the opportunity to expand on the evidence based used. The committee will determine its appropriateness as part of the appraisal process. No action required.

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	Novartis Pharmaceuticals UK Limited		Thank you for your comment. No action required.
Equality	Royal College of Pathologists	No anticipated issues	Thank you for your comment. No action required.
	RCOPhth	I can see no issues with unlawful discrimination	Thank you for your comment. No action required.
	Bayer Plc Ltd	No comment	Noted. No action required.
	Novartis Pharmaceuticals UK Limited	Visual impairment resulting from wet AMD is a legally recognised disability, as stated in the Equality Act 2010. The patient population addressed in this submission is a protected group under this act.	Thank you for your comment. No action required.
Other considerations	Royal National Institute of Blind People	Frequency of treatment – if Brolucizumab is effective for longer than existing treatments, so reducing the frequency of injections, this would improve patient experience.	Thank you for your comment. The appraisal committee will consider evidence relating to patient quality of life as part of the appraisal. No action required.

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	RCOPhth	Patients with vision better than 6/12 should be considered separately from those with vision worse than 6/12 as available treatments for these groups are different. (Ranibizumab and Aflibercept are not funded if vision better than 6/12 although Avastin may be available in some centres).	Thank you for your comment. The appraisal committee will consider all patients within the marketing authorisation. No action required.
	Roche Products Ltd	<p>We would advise reconsideration of the proposed subgroups as there is good quality evidence to suggest the efficacy of anti-VEGF treatments in both classic and occult lesion classifications.</p> <p>We suggest that uncertainty needs to be considered if taking into account the availability and cost of future biosimilar products, for the following reasons:</p> <ul style="list-style-type: none"> <li>- there are currently no licensed biosimilar products available for wAMD and there is uncertainty about timing of future availability.</li> <li>- predicting the cost of future biosimilars would be challenging. We are aware of differing pricing strategies in disease areas with different market dynamics, and therefore extrapolating from other disease areas may not lead to an accurate representation of future costs.</li> </ul>	<p>Thank you for your comment. The company submission allows the opportunity to highlight any subgroup analyses undertaken. No action needed.</p> <p>Thank you for your comment. The company submission allows the opportunity for any uncertainties to be highlighted. The appraisal committee will consider evidence relating to these as part of the decision-making process. No action needed.</p>
	Bayer Plc Ltd	None	Noted. No action required.

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	Novartis Pharmaceuticals UK Limited	The brolucizumab draft scope states; <i>“If the evidence allows the following subgroups will be considered:</i> <ul style="list-style-type: none"> <li>• <i>lesion is classic or occult neovascularisation in nature.”</i></li> </ul> The results of the subgroup analyses up to week 48 showed a relevant benefit in terms of best corrected visual acuity (BCVA) improvement from baseline and was not suggestive of sub-group specific differences for all brolucizumab patients regardless of lesion type. Therefore, this suggested subgroup analysis is not considered appropriate.	Thank you for your comment. The company submission allows the opportunity to highlight any subgroup analyses undertaken. No action needed.
	Fight for Sight	In terms of other sub-groups we feel the committee should look at those with Polypoidal Choroidal Vasculopathy and Retinal Angiomatous Proliferation.	Thank you for your comment. The company submission allows the opportunity to highlight any subgroup analyses undertaken. No action needed.
Innovation	Royal National Institute of Blind People	RNIB Sight Loss Data Tool v4 estimates that there are 176,000 people currently living with late wet AMD – set to rise to 234,000 by 2030. In 2017-2018, the most recent full-year data set, the number of ophthalmology appointments surpassed trauma and orthopaedics as the most commonly attended outpatient speciality, at 7.6 million appointments (NHS Digital, Hospital Outpatient Activity 2017-18). The potential reduction in frequency of injections from eight to 12 weeks should result in a considerable improvement in the quality of life for patients and carers, due to the decreased disruption in their lives (particularly for those of working age who may find frequent appointments difficult to arrange), and less call on patient transport	Thank you for your comment. Innovation will be considered in more detail as part of the full appraisal. No action required.

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		services, for those patients that use them. Less frequent appointments would also help improve capacity at eye clinics.	
	Royal College of Pathologists	The technology might increase treatment options for age related macular degeneration. Even if the technology achieves similar results to current recommended treatments, it might still be worth assessing if it would potentially lower treatment costs.	Thank you for your comment. No action required.
	RCOPhth	<p>This is not a step change but may be an incremental change for the better particularly if it is priced appropriately.</p> <p>I am not sure if ability to hold a driving license (vision better than 6/12 in at least one eye) is included in QALY measurement but it is a major concern of my patients. it should be noted that up to 50% of patients have bilateral involvement within 3 years in some studies.</p>	Thank you for your comment. Innovation will be considered in more detail as part of the full appraisal. No action required.
	Bayer Plc Ltd	No comment	Noted. No action required.
	Novartis Pharmaceuticals UK Limited	<p><u>Molecule</u> Brolucizumab is the most clinically advanced single-chain antibody fragment (scFv) in development for ophthalmic application.<sup>2, 8</sup></p> <p> A low molecular weight and high concentration gradient between the vitreous and the retina increases drug distribution into the target site of action, ensuring rapid and effective control of anatomical disease activity.</p> <p><u>Superior Anatomical Outcomes</u></p> <p>Overall, brolucizumab demonstrated superiority to aflibercept with respect to the anatomical outcomes.</p>	Thank you for your comment. Innovation will be considered in more detail as part of the full appraisal. No action required.

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		<p>The year two phase III study findings demonstrated that fewer patients on brolocizumab had intra-retinal fluid (IRF), sub-retinal fluid (SRF), and/or sub-retinal pigment epithelium (sub-RPE) fluid; key markers used by physicians to determine injection frequency in clinical practice.<sup>1-5</sup></p> <p>Additionally, brolocizumab patients demonstrated reductions in central subfield thickness (CSFT).<sup>1</sup> An increase in CSFT in wet AMD is an important measure of abnormal fluid accumulation and edema and may result in reduced vision.</p> <p>The brolocizumab superiority demonstrated in anatomical outcomes support the underlying hypothesis that a lower molecular weight combined with a higher concentration gradient between vitreous and retina increase the drug distribution to the target site for a sustained period hence providing the potential for fewer injections compared to current available treatments.</p> <p><u>Extended Treatment Intervals</u></p> <p>Robust visual gains and superiority in anatomical parameters were achieved with brolocizumab with a lower re-treatment frequency versus aflibercept. For patients on brolocizumab 6 mg who successfully completed year one on a 12-week dosing interval, 82% in HAWK (NCT02307682) and 75% in HARRIER (NCT02434328) were maintained on a 12-week dosing interval in year two.<sup>1</sup></p> <p>Patients, carers and the NHS could benefit from fewer injections and monitoring requirements compared to existing treatments. Advantages include potential cost-savings for the NHS, relieving clinic capacity and reduced psychological burden associated with injections for patients and their families. QALY calculations will not</p>	

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		<p>account for a reduction in the burden associated with wet AMD injections.</p> <p>Overall brolocizumab should be considered as a step-change in the management of wet AMD.</p>	
	Fight for Sight	<p>We feel that the technology is potentially innovative as treatment administration every three months or longer reduces the burden on patients when compared to the current treatments available. This will have an appreciative impact on the quality of life of patients.</p>	<p>Thank you for your comment. Innovation will be considered in more detail as part of the full appraisal. No action required.</p>
Questions for consultation	RCOPhth	<p>If the price of Brolocizumab is equal too or less than Lucentis or Aflibercept then it would be reasonable to offer to switch patients requiring frequent use (4 or 6 weekly) of alternative drugs to Brolocizumab if the safety and efficacy is considered to be at least as good as current alternatives.</p> <p>Where do you consider brolocizumab will fit into the existing NICE pathway for age-related macular degeneration?</p> <p>First line treatment and an alternative to try in patients requiring frequent use of competitor products</p> <p>No barriers other than those already existing with capacity to provide treatment in the NHS, if the injection frequency can really be reduced as surged by the trial data then this would help the NHS significantly</p> <p>I am no expert in this cost comparison methodology but comparing the costs with existing products seems like a good idea</p> <p>Clinal efficacy is likely to be similar but with marginal or significant reduction in resource depending on which treatment protocol are used in individual hospitals.</p>	<p>Thank you for your comments. The appraisal process allows the committee to consider all evidence submitted for the technology in its decision-making. No action required.</p> <p>Thank you for your comment.</p>

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		Is the primary outcome that was measured in the trial or used to drive the model for the comparator(s) still clinically relevant? Yes Major papers come out every few months on wet ARMD treatment but nothing that should significantly affect this NICE assessment. Treat and Extend Data should be considered.	Thank you for your comments. The appraisal process allows the committee to consider all evidence submitted for the technology in its decision-making. No action required.
	Bayer Plc Ltd	Would it be appropriate to use the cost comparison methodology for this topic? The SmPC for aflibercept allows patients to follow a treat-and-extend regimen whereby injection intervals can be extended beyond 8-weeks. Economic analyses should consider the reduced number of injections (and hence cost) of aflibercept when this regimen is used. As above the treat-and-extend regimen which is included in the SmPC for aflibercept is based on data from the ALTAIR study. If brolocizumab has comparable annual costs (and efficacy) compared to aflibercept following a treat-and-extend regimen then it may be appropriate to use the cost comparison methodology.	Thank you for your comment. No action required.
	Novartis Pharmaceuticals UK Limited	<u>NHS for wet age-related macular degeneration?</u> NICE clinical guideline NG82, as stated in the background section of the draft scope, recommends offering the two licensed anti-VEGFs for patients with wet AMD; ranibizumab and aflibercept. Both treatments are recommended by NICE technology appraisals (TA155 and TA294). As per our comments in the comparators section unlicensed bevacizumab is not an appropriate comparator, furthermore [REDACTED] in the UK it	Thank you for your comments. The company submission will allow the opportunity to expand further on the potential of the technology to be clinically and cost-

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		<p>cannot be considered as established clinical practice in the NHS for wet AMD.</p> <p><u>Should any other comparators for brolocizumab be included in the scope?</u></p> <p>No, only aflibercept and ranibizumab are appropriate comparators.</p> <p><u>How should best supportive care be defined?</u></p> <p>Best supportive care (BSC), can be defined as no treatment or 'watch and wait'. Please see the 'Comparators' section of our response above. We consider BSC an inappropriate comparator for this topic as it does not represent established clinical practice.</p> <p><u>Are the outcomes listed appropriate?</u></p> <p>Please see the 'Outcomes' section of our response.</p> <p><u>Are the subgroups suggested in 'other considerations' appropriate?</u></p> <p>Please see the 'Other considerations' section of our response.</p> <p><u>Are there any subgroups of people in whom brolocizumab is expected to be more clinically effective and cost effective or other groups that should be examined separately?</u></p> <p>Please see the 'Other considerations' section of our response. The results of the BCVA subgroup analyses up to Week 48 showed that irrespective of baseline disease characteristics/demographics, subjects benefited from treatment with brolocizumab. Therefore consideration of subgroups is not applicable as part of this appraisal.</p>	effective. No action required.

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		<p><u>Where do you consider brolocizumab will fit into the existing NICE pathway for age-related macular degeneration?</u></p> <p>Pending the outcome of this appraisal we envisage that brolocizumab will fit within the 'late age-related macular degeneration (wet active)' section of the 'managing age-related macular degeneration' pathway.</p> <p><u>To help NICE prioritise topics for additional adoption support, do you consider that there will be any barriers to adoption of this technology into practice? If yes, please describe briefly.</u></p> <p>No barriers identified.</p> <p><u>NICE intends to appraise this technology through its Single Technology Appraisal (STA) Process. We welcome comments on the appropriateness of appraising this topic through this process. (Information on the Institute's Technology Appraisal processes is available at <a href="http://www.nice.org.uk/article/pmg19/chapter/1-Introduction">http://www.nice.org.uk/article/pmg19/chapter/1-Introduction</a>).</u></p> <p>Please see the 'Economic analysis' section of our response.</p> <p>[REDACTED]</p> <p><u>• Would it be appropriate to use the cost comparison methodology for this topic?</u></p> <p>[REDACTED]</p>	

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		<p>[REDACTED]</p> <p><u>• Is the new technology likely to be similar in its clinical efficacy and resource use to any of the comparators?</u></p> <p>Yes, brolucizumab provided robust visual gains and met the non-inferiority primary endpoint versus aflibercept in BCVA and exhibited superiority in key retinal outcomes at year one and year two.<sup>1,2</sup></p> <p>Phase III study findings show that brolucizumab has a greater significant reduction in retinal fluid compared to aflibercept as demonstrated by several key markers used by physicians to determine injection frequency in clinical practice.<sup>1-5</sup></p> <p>For patients on brolucizumab 6 mg who successfully completed year one on a 12-week dosing interval, 82% in HAWK (NCT02307682) and 75% in HARRIER (NCT02434328) were maintained on a 12-week dosing interval in year two.<sup>1</sup></p> <p>Patients, carers and the NHS could benefit from fewer injections and monitoring requirements compared to existing treatments. Advantages include potential cost-savings for the NHS, which is of particular importance when considering the service capacity constraints in the NHS.</p> <p><u>• Is the primary outcome that was measured in the trial or used to drive the model for the comparator(s) still clinically relevant?</u></p> <p>Yes, Phase III trials HAWK and HARRIER met their primary endpoint of non-inferiority in change in BCVA from baseline to week 48 with brolucizumab versus aflibercept. Brolucizumab delivered a mean</p>	

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		<p>change in BCVA of 6.6 letters versus 6.8 letters for aflibercept in HAWK, and 6.9 letters versus 7.6 letters for aflibercept in HARRIER.<sup>2</sup></p> <p>Brolucizumab maintained robust visual gains in year two, with mean change in BCVA of 5.9 letters for brolucizumab versus 5.3 letters for aflibercept in HAWK, and 6.1 letters versus 6.6 letters, respectively, in HARRIER.<sup>1</sup></p> <p>The mean change in BCVA is a key driver in economic modelling of brolucizumab versus aflibercept and ranibizumab. Change in BCVA is clinically relevant, and the BCVA gain demonstrated with brolucizumab is clinically meaningful.</p> <p><u>• Is there any substantial new evidence for the comparator technology/ies that has not been considered? Are there any important ongoing trials reporting in the next year?</u></p> <p>No.</p>	
	Fight for Sight	We believe that the single technology appraisal method is the best method for the appraisal of this technology.	Thank you for your comment. No action required.
Any additional comments on the draft scope	Fight for Sight	The adoption of Brolucizumab may have an effect on the clinical pathway for wet AMD due to the need for less frequent treatment administration and decreased frequency of medical retina imaging.	Thank you for your comment. No action required.
	Novartis Pharmaceuticals UK Limited	<p><u>References</u></p> <p>1. Dugel P, et al. Phase 3, randomized, double-masked, multi-center trials of brolucizumab versus aflibercept for</p>	References noted. No action required.

Section	Consultee/ Commentator	Comments [sic]	Action
		<p>neovascular AMD: 96-week results from the HAWK and HARRIER studies. Presented at: The American Academy of Ophthalmology on October 27, 2018, Chicago.</p> <ol style="list-style-type: none"> <li>2. Dugel P, et al. HAWK &amp; HARRIER: 48-week results of 2 multi-centered, randomized, double-masked trials of brolucizumab versus aflibercept for neovascular AMD. Presented at: The American Academy of Ophthalmology on November 10, 2017, New Orleans.</li> <li>3. Arnold J, et al. The role of sub-retinal fluid in determining treatment outcomes in patients with neovascular age-related macular degeneration--a phase IV randomised clinical trial with ranibizumab: the FLUID study. <i>BMC Ophthalmol.</i> 2016;143(4):679-680.</li> <li>4. National Institute for Health and Care Excellence, <i>NICE guideline [NG82]: Age-related macular degeneration.</i> 2018.</li> <li>5. European Society of Retina Specialists (EURETINA). <a href="#">Guidelines for the management of neovascular age-related macular degeneration.</a> 2014.</li> <li>6. Foot B. MacEwen C. (2017) "Surveillance of sight loss due to delay in ophthalmic treatment ore review: frequency, cause and outcome". <i>Eye</i>, 31: 771-775 (British Ophthalmological Surveillance Unit)</li> <li>7. Novartis, <i>Data on file: Bevacizumab market share in England for wAMD in time period May to August 2018.</i> 2019.</li> <li>8. Holz F, et al. Single-Chain Antibody Fragment VEGF Inhibitor RTH258 for Neovascular Age-Related Macular Degeneration: A Randomized Controlled Study. <i>Ophthalmology.</i> 2016 May;123(5):1080-9</li> </ol>	

**The following consultees/commentators indicated that they had no comments on the draft remit and/or the draft scope**

Department of Health & Social Care indicated they had no comments.