NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Health Technology Evaluation

Emicizumab for preventing bleeding episodes in people with mild or moderate haemophilia A

Draft scope

Draft remit/evaluation objective

To appraise the clinical and cost effectiveness of emicizumab within its marketing authorisation for preventing bleeding episodes in people with mild or moderate haemophilia A without inhibitors.

Background

Haemophilia is a rare, lifelong genetic condition that affects the ability of blood to clot. This is caused by the inability or reduced ability of the body to produce substances called clotting factors which are needed for clotting. In haemophilia A the factor affected is called factor VIII (eight). Haemophilia A is normally an inherited condition found in males. Females who carry the haemophilia gene may have mild or, rarely, severe symptoms of bleeding.

The main symptom of haemophilia is prolonged bleeding but other complications include bleeding into joints and muscles without having had an injury. Severity of haemophilia is classed according to how much clotting factor is missing compared to normal expected levels of clotting factor. Mild haemophilia is classed as having over 5% of normal clotting factor. Moderate haemophilia is classed as having between 1% and 5% of normal clotting factor.

The prevalence of haemophilia A is estimated at around 20 per 100,000 male births.[1] Registry data suggests that in 2020/2021 there were 8,740 people with haemophilia A, including 5,745 people with mild haemophilia A and 816 with moderate haemophilia A in the UK.[2]

Current clinical management of haemophilia A involves prophylactic treatment, to prevent bleeding and long-term damage caused by bleeding and on-demand treatment, in response to bleeding episodes. Replacement of the missing clotting factor VIII in the blood through an intravenous infusion of clotting factor concentrate is used as a prophylactic and on-demand treatment.

About 5-7% of people with haemophilia A develop antibodies to replacement clotting factor, called inhibitors, which makes treatment with clotting factor replacement less effective.[1]

NHS England has clinical commissioning policies for emicizumab as a further prophylactic treatment option in people with haemophilia A with inhibitors and in people with severe haemophilia A without inhibitors.

The technology

Emicizumab (Hemlibra, Roche) has a marketing authorisation for routine prophylaxis of bleeding episodes in people with haemophilia A with factor VIII inhibitors or with severe haemophilia A without factor VIII inhibitors.

Emicizumab does not currently have a marketing authorisation in the UK for treating mild to moderate haemophilia A without factor VIII inhibitors. It has been studied for use as a prophylactic treatment in an open-label, single-armed clinical trial in people with mild or moderate haemophilia A without factor VIII inhibitors.

Intervention(s)	Emicizumab
Population(s)	People with mild or moderate haemophilia A, without factor VIII inhibitors, for whom prophylaxis is clinically indicated
Subgroups	If the evidence allows, the following subgroups should be considered: • people with mild haemophilia A • people with moderate haemophilia A
Comparators	• Factor VIII concentrate
Outcomes	The outcome measures to be considered include: • annualised bleeding rate • need for further treatment with factor VIII injections • durability of response to treatment • complications of the disease (e.g. joint problems and joint surgeries) • adverse effects of treatment • health-related quality of life.
Economic analysis	The reference case stipulates that the cost effectiveness of treatments should be expressed in terms of incremental cost per quality-adjusted life year. 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. Costs will be considered from an NHS and Personal Social Services perspective.
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	**Related Technology Appraisals:** None. **Related appraisals in development:** 'Concizumab for preventing bleeding episodes in haemophilia A or haemophilia B' NICE technology appraisal guidance [ID5099]. Publication date to be confirmed. **Related Guidelines:** None. **Guidelines in development:** None. **Related Interventional Procedures:** None. **Related Public Health Guidance/Guidelines:** None. **Related Quality Standards:** None.
Related National Policy	NHS England (2013) 2013/14 NHS standard contract for haemophilia (all ages) section B part 1 - service specifications The NHS Long Term Plan, 2019. NHS Long Term Plan NHS England (2018/2019) NHS manual for prescribed specialist services (2018/2019) Chapter 132. Department of Health and Social Care, NHS Outcomes Framework 2016-2017: Domains 2-5. https://www.gov.uk/government/publications/nhs-outcomes-framework-2016-to-2017 NHS England (2019) Clinical Commissioning Policy: Emicizumab as prophylaxis in people with severe congenital haemophilia A without factor VIII inhibitors (all ages). NHS England (2018) Clinical Commissioning Policy: Emicizumab as prophylaxis in people with congenital haemophilia A with factor VIII inhibitors (all ages).

Questions for consultation

Are the comparators defined appropriately? Which treatments are considered to be established clinical practice in the NHS for preventing bleeding episodes in people with haemophilia A?

Where do you consider emicizumab will fit into the existing care pathway for haemophilia A?

Will emicizumab be used instead of or in addition to factor VIII concentrate for preventing bleeds in haemophilia A?

Are there any specialist tests that would need to be introduced for emicizumab? Are factor VIII inhibitors routinely tested for in clinical practice?

Would emicizumab be a candidate for managed access?

Do you consider that the use of emicizumab can result in any potential substantial health-related benefits that are unlikely to be included in the QALY calculation?

Please identify the nature of the data which you understand to be available to enable the committee to take account of these benefits.

NICE is committed to promoting equality of opportunity, eliminating unlawful discrimination and fostering good relations between people with particular protected characteristics and others. Please let us know if you think that the proposed remit and scope may need changing in order to meet these aims. In particular, please tell us if the proposed remit and scope:

- could exclude from full consideration any people protected by the equality legislation who fall within the patient population for which emicizumab will be licensed;
- could lead to recommendations that have a different impact on people protected by the equality legislation than on the wider population, e.g. by making it more difficult in practice for a specific group to access the technology;
- could have any adverse impact on people with a particular disability or disabilities.

Please tell us what evidence should be obtained to enable the committee to identify and consider such impacts.

NICE intends to evaluate this technology through its Single Technology Appraisal process. We welcome comments on the appropriateness of appraising this topic through this process. (Information on NICE's health technology evaluation processes is available at https://www.nice.org.uk/about/what-we-do/our-programmes/nice-guidance/nice-technology-appraisal-guidance/changes-to-health-technology-evaluation).

References

1. National Organisation for Rare Disorders. Hemophilia A. 2021. Available from: https://rarediseases.org/rare-diseases/hemophilia-a/ [Accessed 15th September 2022].

2. United Kingdom Haemophilia Centres Doctors' Association (2021) UKHCDO Annual Report 2021. Accessed March 2022