

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Highly Specialised Technology Evaluation

Eliglustat for treating type 1 Gaucher disease

Final scope

Remit/evaluation objective

To evaluate the benefits and costs of eliglustat within its licensed indication for the treatment of type 1 Gaucher disease for national commissioning by NHS England.

Background

Gaucher disease is an inherited lysosomal storage disorder. It is caused by a deficiency of an enzyme (glucocerebrosidase) which leads to the storage of complex lipids in some types of blood cells. This creates Gaucher cells which occur throughout the liver, spleen, bone marrow and occasionally the lungs. There are 3 subtypes of Gaucher disease, of which type 1 (non-neuropathic) is the most prevalent. All types of Gaucher disease are associated with a variety of symptoms, including pain, fatigue, anaemia, thrombocytopenia, jaundice, bone damage, and enlargement of the liver and spleen.

There is limited data available on the epidemiology of Gaucher disease. Over 90% of people affected have type 1 Gaucher disease. The overall frequency of all types of Gaucher disease is approximately 1 in 50,000 to 1 in 100,000 live births. The prevalence of type 1 Gaucher disease is estimated as 1 in 200,000 in non-Ashkenazi Europeans, which equates to approximately 250 people in England and Wales. It is more common in people of Ashkenazi family origin, with a frequency of approximately 1 in 500 to 1 in 1000 live births.

Treatment of type 1 Gaucher disease requires an individualised approach that begins with a comprehensive multi-systemic assessment of all possible disease manifestations to accurately classify disease burden. Current management options include enzyme replacement therapy (such as imiglucerase or velaglucerase alfa) or substrate reduction therapy (miglustat) for people for whom enzyme replacement therapy is not suitable, alongside supportive therapy (which may include blood products, bisphosphonate therapy and/or analgesia).

The technology

Eliglustat (Cerdelga, Genzyme Therapeutics) is a substrate reduction therapy that partially inhibits the enzyme glucosylceramide synthase, resulting in reduced production of glucosylceramide and Gaucher cells. It is given orally.

Eliglustat does not currently have a marketing authorisation in the UK for treating type 1 Gaucher disease. It has been studied in adults and young

people aged 16 and over who have and have not previously received enzyme replacement therapy, compared with placebo or imiglucerase.

Intervention(s)	Eliglustat
Population(s)	People with symptomatic type 1 Gaucher disease
Comparators	<ul style="list-style-type: none"> • Imiglucerase • velaglucerase alfa <p>For people for whom enzyme replacement therapy is unsuitable:</p> <ul style="list-style-type: none"> • miglustat
Outcomes	<p>The outcome measures to be considered include:</p> <ul style="list-style-type: none"> • type 1 Gaucher disease therapeutic goals • mortality • adverse effects of treatment • health-related quality of life (for patients and carers).
Nature of the condition	<ul style="list-style-type: none"> • disease morbidity and patient clinical disability with current standard of care • impact of the disease on carer's quality of life • extent and nature of current treatment options
Impact of the new technology	<ul style="list-style-type: none"> • clinical effectiveness of the technology • overall magnitude of health benefits to patients and, when relevant, carers • heterogeneity of health benefits within the population • robustness of the current evidence and the contribution the guidance might make to strengthen it • treatment continuation rules (if relevant)
Cost to the NHS and Personal Social Services (PSS), and Value for Money	<ul style="list-style-type: none"> • budget impact in the NHS and PSS, including patient access agreements (if applicable) • robustness of costing and budget impact information • technical efficiency (the incremental benefit of the new technology compared to current treatment)

	<ul style="list-style-type: none"> • productive efficiency (the nature and extent of the other resources needed to enable the new technology to be used) • allocative efficiency (the impact of the new technology on the budget available for specialised commissioning)
Impact of the technology beyond direct health benefits, and on the delivery of the specialised services	<ul style="list-style-type: none"> • whether there are significant benefits other than health • whether a substantial proportion of the costs (savings) or benefits are incurred outside of the NHS and personal and social services • the potential for long-term benefits to the NHS of research and innovation • staffing and infrastructure requirements, including training and planning for expertise.
Other considerations	<p>If the evidence allows, the following subgroups will be considered:</p> <ul style="list-style-type: none"> • people who have and have not been previously treated with enzyme replacement therapy • people with symptomatic type 1 Gaucher disease with and without pulmonary involvement <p>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 in the context of the evidence that has underpinned the marketing authorisation granted by the regulator.</p>
Related NICE recommendations and NICE pathways	None
Related national policy	<p>NHS England, Manual for prescribed specialised services, 2013/2014. Section 71: Lysosomal storage disorder service (adults and children). Available at: http://www.england.nhs.uk/wp-content/uploads/2014/01/pss-manual.pdf</p> <p>National Specialised Commissioning Advisory Group, UK national guideline for adult Gaucher disease, 2012.</p>