NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Health Technology Evaluation

Obinutuzumab with immunosuppressive therapies for treating lupus nephritis [ID6420]

Final scope

Remit/evaluation objective

To appraise the clinical and cost effectiveness of obinutuzumab with immunosuppressive therapies within its marketing authorisation for treating lupus nephritis.

Background

Systemic lupus erythematosus (SLE) is a chronic autoimmune condition that causes inflammation in the body's tissues. The manifestations of SLE vary greatly between people and can affect the whole body including the skin, joints, internal organs and serous membranes.

In some people with SLE, the body's immune system targets kidney cells, particularly the filtering units called glomeruli, resulting in inflammation. This complication is called lupus nephritis. Lupus nephritis is divided into classes (1 to 6), based on glomerular pathology, following a kidney biopsy.[1] Common signs and symptoms of lupus nephritis include blood or foam in urine, swelling in extremities, and high blood pressure. Untreated lupus nephritis can permanently damage kidneys.[2] People with lupus nephritis are at increased risk of developing end-stage renal disease[3], which requires lifelong dialysis or kidney transplantation.[4,5] Lupus nephritis has an increased mortality risk compared with SLE without lupus nephritis.[3]

There are currently around 60,000 people with SLE in England and Wales and around 3,000 people are diagnosed with SLE each year.[5] Up to 60% of people with SLE develop lupus nephritis.[6,7,8] Compared with people who are described as white, the prevalence of lupus nephritis is around 4, 18 and 19 times higher, respectively, among those with Indo-Asian, Afro-Caribbean and Chinese family backgrounds.[9] People from ethnic minority groups may also have more severe disease that is less likely to respond to some treatment. Lupus nephritis is also more prevalent in women than in men,[9] but men may be more likely to present with more severe disease.[10]

There is no cure for lupus nephritis. The aim of current treatments for lupus nephritis is to preserve renal function, prevent disease flares, improve quality of life, and improve survival.[6] Because lupus nephritis has a relapsing and remitting pattern, treatments are used to either induce or maintain remission. Most people will have hydroxychloroquine and corticosteroids alongside an immunosuppressive. The choice of immunosuppressive agent varies. The immunosuppressives used to induce remission include mycophenolate, cyclophosphamide, rituximab with mycophenolate, and tacrolimus with or without mycophenolate. NICE technology appraisals guidance 882 (2023) also recommends voclosporin, a calcineurin inhibitor, with mycophenolate mofetil for treating active class 3 to 5 (including mixed class 3 and 5, and 4 and 5) lupus nephritis in adults. Maintenance treatments include mycophenolate, azathioprine or tacrolimus monotherapy. However, despite treatment, many people do not have sustained kidney remission so remain at risk of developing progressive chronic kidney disease, and end stage kidney disease.

The technology

Obinutuzumab (Gazyvaro, Roche) does not currently have a marketing authorisation in the UK for people with lupus nephritis. It has been studied in a phase 3 trial in people with class 3 or 4 (including mixed class 3/5 and 4/5) lupus nephritis compared with placebo alongside standard care including mycophenolate mofetil and corticosteroids.

Intervention(s)	Obinutuzumab with immunosuppressive therapies
Population(s)	People with lupus nephritis

Comparators	Established clinical management without obinutuzumab including:
	• induction alongside hydroxychloroquine and corticosteroids including:
	  ○ ciclosporin with or without mycophenolate
	  ○ cyclophosphamide
	  ○ mycophenolate
	  ○ rituximab with mycophenolate
	  ○ tacrolimus with or without mycophenolate
	  ○ voclosporin with mycophenolate mofetil
	  ○ belimumab with mycophenolate
	• maintenance treatment with mycophenolate, azathioprine or a calcineurin inhibitor (such as tacrolimus).

Outcomes	The outcome measures to be considered include: • renal response • rate and severity of renal-related events (e.g., flares) • rate and duration of remission • incidence of end-stage renal disease • corticosteroid use • mortality • 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. The availability of any commercial arrangements for the intervention, comparator and subsequent technologies will be taken into account. The availability and cost of biosimilar and generic products should be taken into account.
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:** Voclosporin with mycophenolate mofetil for treating lupus nephritis (2023) NICE technology appraisal guidance 882. Belimumab for treating active autoantibody-positive systemic lupus erythematosus (2021). NICE Technology Appraisal TA752.

References

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