NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Health Technology Evaluation

Guselkumab for treating moderately to severely active ulcerative colitis ID6237

Draft scope

Draft remit/evaluation objective

To appraise the clinical and cost effectiveness of guselkumab within its marketing authorisation for treating moderately to severely active ulcerative colitis.

Background

Ulcerative colitis is the most common inflammatory bowel disease. The cause of ulcerative colitis is unknown. Hereditary, infectious and immunological factors have been proposed as possible causes. It can develop at any age, but peak incidence is between the ages of 15 and 25 years, with a second, smaller peak between 55 and 65 years. At least 1 in every 227 people in the UK has been diagnosed with ulcerative colitis,[1] around 296,000 people.[2] Ulcerative colitis can be defined as mild, moderate or severe. NICE's resource impact template for 8 drug regimens to treat moderately to severely active ulcerative colitis estimates 52% of diagnoses are moderate to severe disease.

Ulcerative colitis can cause inflammation in the inner lining of the large intestine. This is usually restricted to the mucosal surface. This usually affects the rectum and extends proximally throughout the colon. The symptoms of ulcerative colitis include bloody diarrhoea, pain, urgency, ulceration, tenesmus (a persistent, painful urge to pass stool even when the rectum is empty), fatigue, and anaemia. About 30% of people will have extra-intestinal manifestations involving joints, eyes, skin, and liver.[3] Ulcerative colitis is associated with significant morbidity; symptoms can have a debilitating impact on quality of life and daily life, including physical, social, and mental wellbeing. It is a lifelong disease, and symptoms can recur, or the disease can go into remission for months or even years.

Around 50% of people with ulcerative colitis will have at least 1 relapse per year.[4] About 80% of these are mild to moderate and about 20% are severe.[4] 15% to 25% of people with ulcerative colitis will need to be admitted to hospital for acute severe colitis.[5] Complications of ulcerative colitis may include haemorrhage, bowel perforation, stricture formation, abscess formation and anorectal disease. Some people may also develop primary sclerosing cholangitis, osteoporosis, and toxic megacolon. People with long-standing disease have an increased risk of bowel cancer.

The aim of treatment in active disease is to address symptoms and then maintain remission. Initial management depends on clinical severity, extent of disease and the person's preference, and may include aminosalicylates (sulfasalazine, mesalazine, balsalazide or olsalazine), corticosteroids (beclometasone, budesonide, hydrocortisone, or prednisolone) and biological treatments. An immunosuppressant (such as mercaptopurine or azathioprine) may be considered to maintain remission if aminosalicylates fail to do so (see NICE's guideline on managing ulcerative colitis).

NICE has recommended several biological treatments for moderately to severely active ulcerative colitis:

- infliximab, adalimumab and golimumab (NICE technology appraisal guidance 329) in adults whose disease has responded inadequately to conventional therapy including corticosteroids and mercaptopurine or azathioprine, or who cannot tolerate, or have medical contraindications for, such therapies
- vedolizumab (NICE technology appraisal guidance 342)
- tofacitinib (NICE technology appraisal guidance 547) in adults when conventional therapy or a biological agent cannot be tolerated or the disease has responded inadequately or lost response to treatment
- ustekinumab (NICE technology appraisal guidance 633) when conventional therapy or a biological agent cannot be tolerated, or the disease has responded inadequately or lost response to treatment; this is only if a tumour necrosis factor-alpha inhibitor has failed, cannot be tolerated or is not suitable
- filgotinib (NICE technology appraisal guidance 792) when conventional or biological treatment cannot be tolerated, or if the disease has not responded well enough or has stopped responding to these treatments
- ozanimod (NICE technology appraisal guidance 828) when conventional treatment cannot be tolerated or is not working well enough and infliximab is not suitable, or biological treatment cannot be tolerated or is not working well enough
- upadacitinib (NICE technology appraisal guidance 856) when conventional or biological treatment cannot be tolerated, or if the condition has not responded well enough or has stopped responding to these treatments
- mirikizumab (NICE technology appraisal guidance 925) when conventional or biological treatment cannot be tolerated, or the condition has not responded well enough or lost response to treatment; this is only if a tumour necrosis factor (TNF) alpha inhibitor has not worked or a TNF-alpha inhibitor cannot be tolerated or is not suitable
- etrasimod (NICE technology appraisal guidance 956) in people 16 and over when conventional or biological treatments cannot be tolerated or the condition has not responded well enough, or lost response to treatment.

For people admitted to hospital with acute severe ulcerative colitis, NICE's guideline on managing ulcerative colitis recommends offering intravenous corticosteroids to induce remission and assessing the need for surgery. Surgery may be considered as emergency treatment for severe ulcerative colitis that does not respond to drug treatment. People may also choose to have elective surgery for unresponsive or frequently relapsing disease that is affecting their quality of life. The scope of this appraisal does not include severe ulcerative colitis that is a medical emergency requiring intensive inpatient treatment.

The technology

Guselkumab (Tremfya, Janssen) does not currently have a marketing authorisation in the UK for ulcerative colitis. It is being studied in clinical trials compared with placebo in people with moderately to severely active ulcerative colitis who have had an inadequate response, lost response, or were intolerant to either a conventional therapy, a biological treatment, or a JAK inhibitor (tofacitinib).

Intervention(s)	Guselkumab
Population(s)	Adults with moderately to severely active ulcerative colitis that have had an inadequate response, lost response to, or were intolerant to conventional therapy and/or a biological treatment or a JAK inhibitor.
Subgroups	If the evidence allows the following subgroups will be considered: • people who have had 1 or more biological treatments • people who have had treatment with a JAK inhibitor • people who have not had biological treatment or a JAK inhibitor.
Comparators	• TNF-alpha inhibitors (infliximab, adalimumab and golimumab) • JAK inhibitors (such as tofacitinib, filgotinib or upadacitinib) • vedolizumab • ustekinumab • ozanimod • mirikisumab • etrasimod (subject to ongoing NICE appraisal) • risankisumab (subject to ongoing NICE appraisal) • conventional therapies, without biological treatments
Outcomes	The outcome measures to be considered include: • rates of and duration of response, relapse and remission • endoscopic healing • endoscopic remission combined with histological improvement • mortality • measures of disease activity • rates of hospitalisation (including readmission) • rates of surgical intervention • corticosteroid-free remission • 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.

	If the technology is likely to provide similar or greater health benefits at similar or lower cost than technologies recommended in published NICE technology appraisal guidance for the same indication, a cost-comparison may be carried out. 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 treatment technologies will 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:** Etrasimod for treating moderately to severely active ulcerative colitis in people aged 16 and over (2024). NICE technology appraisal guidance 956 Mirikizumab for treating moderately to severely active ulcerative colitis (2023). Technology appraisal guidance 925 Upadacitinib for treating moderately to severely active ulcerative colitis (2023). Technology appraisal guidance 856 Ozanimod for treating moderately to severely active ulcerative colitis (2022). Technology appraisal guidance 828 Filgotinib for treating moderately to severely active ulcerative colitis (2022). Technology appraisal guidance 792 Ustekinumab for treating moderately to severely active ulcerative colitis (2020). Technology appraisal guidance 633 Tofacitinib for treating moderately to severely active ulcerative colitis (2018). Technology appraisal guidance 547 Vedolizumab for treating moderately to severely active ulcerative colitis (2015). Technology appraisal guidance 342 Infliximab, adalimumab and golimumab for treating moderately to severely active ulcerative colitis after the failure of conventional therapy (2015). Technology appraisal guidance 329

	Related technology appraisals in development: Risankizumab for previously treated moderately to severely active ulcerative colitis in people aged 16 and over. NICE technology appraisal guidance [ID6209] Publication date to be confirmed **Related NICE guidelines:** Ulcerative colitis: management (2019) NICE guideline NG130 **Related interventional procedures:** Leukapheresis for inflammatory bowel disease (2005) NICE interventional procedures guidance 126 **Related quality standards:** Inflammatory bowel disease (2015) NICE quality standard 81
Related National Policy	The NHS Long Term Plan (2019) NHS Long Term Plan NHS England (2023) Manual for prescribed specialist services (2023/2024) Chapter 106A. Specialist colorectal surgery services (adults) NHS England (2013) 2013/14 NHS Standard Contract for Colorectal: Complex Inflammatory Bowel Disease (Adult). A08/S/c

Questions for consultation

Where do you consider guselkumab will fit into the existing care pathway for ulcerative colitis?

Please select from the following, will guselkumab be:
A. Prescribed in primary care with routine follow-up in primary care
B. Prescribed in secondary care with routine follow-up in primary care
C. Prescribed in secondary care with routine follow-up in secondary care
D. Other (please give details):
For comparators and subsequent treatments, please detail if the setting for prescribing and routine follow-up differs from the intervention.

Is there a preferred treatment sequence with biological treatments and/or other advanced therapies (for example JAK inhibitors) after an inadequate response or intolerance to conventional therapy?

Are all relevant comparators included in the scope? Specifically, should conventional therapy with aminosalicylates, oral corticosteroids and/or immunomodulators be considered a comparator in the evaluation?

Are there specific sub-groups that would particularly benefit from treatment with guselkumab?

Would guselkumab be a candidate for managed access?

Do you consider that the use of guselkumab 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 guselkumab is 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 is considering evaluating this technology through its cost comparison evaluation process.
Please provide 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).

Technologies can be evaluated through the cost-comparison process if they are expected to provide similar or greater health benefits, at a similar or lower cost, compared with technologies that have been previously recommended (as an option) in published NICE guidance for the same indication. Companies can propose cost-comparison topics to NICE at any stage during topic selection and scoping. NICE will route technologies for evaluation through the cost-comparison process if it is agreed during scoping that the process is an appropriate route to establish the clinical and cost effectiveness of the technology.

NICE's health technology evaluations: the manual states the methods to be used where a cost comparison case is made.

- Is the technology likely to be similar in its clinical effectiveness and resource use to any of the comparators? Or in what way is it different to the comparators?
- Will the intervention be used in the same place in the treatment pathway as the comparator(s)? Have there been any major changes to the treatment pathway recently? If so, please describe.
- Will the intervention be used to treat the same population as the comparator(s)?

- Overall is the technology likely to offer similar or improved health benefits compared with the comparators?
- Would it be appropriate to use the cost-comparison methodology for this topic?

References

1. Crohn's & Colitis UK Ulcerative colitis [accessed March 2024]
2. NHS.UK Ulcerative colitis [accessed March 2024]
3. NICE CKS Ulcerative colitis [accessed March 2024]
4. NICE quality standard 81 inflammatory bowel disease briefing paper 2014 [accessed March 2024]
5. IBD UK Management of acute severe colitis [accessed March 2024]