NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Health Technology Evaluation

Nemolizumab for treating moderate to severe atopic dermatitis in people aged 12 and over or prurigo nodularis in adults ID6221

Draft scope

Draft remit/evaluation objective

To appraise the clinical and cost effectiveness of nemolizumab within its marketing authorisation for treating moderate to severe atopic dermatitis in people aged 12 and over or prurigo nodularis in adults.

Background

Atopic dermatitis (also known as atopic eczema) is a long-term condition that affects the skin. It is characterised by a red blotchy rash, dry, itchy and inflamed skin. The skin can also ooze and weep. Constant scratching can cause the skin to split and bleed, which can cause skin infections. Severe dermatitis can be physically disabling or incapacitating and can cause anxiety or depression.

Estimates of the prevalence of atopic dermatitis vary. It is more common in childhood (affecting 1 in 5 children in the UK) and affects 1 in 10 adults in the UK.[1] Of the people who need treatment for atopic dermatitis, 7% will have moderate to severe disease and around 60% of these people will need a systemic treatment rather than an ointment.[2]

Atopic dermatitis is usually managed in primary care. Treatment strategies include advice on the avoidance of factors that can provoke dermatitis, such as soap, and the use of emollients to moisturise and relieve symptoms. For flares, or dermatitis that does not respond to these measures, topical corticosteroids are normally prescribed once or twice daily in conjunction with continued use of emollients as recommended in Technology Appraisal 81.

Two calcineurin inhibitors (tacrolimus and pimecrolimus) are recommended as second-line treatment options when the disease has not been adequately controlled by the use of topical steroids at the maximum strength and potency or where there is a serious risk of important adverse effects from further topical corticosteroid use, particularly irreversible skin atrophy (TA82). Tacrolimus ointment is recommended for treating moderate to severe atopic dermatitis in people aged 2 years and older, while pimecrolimus cream is recommended for treating moderate disease on the face and neck in children aged 2 to 16 years (TA82). Since the publication of TA82, the marketing authorisation for pimecrolimus cream has been extended to include people aged 3 months and older. Alitretinoin is recommended as a possible treatment for adults with severe chronic hand dermatitis affecting their quality of life and not responding to potent topical corticosteroids (TA177). In addition, phototherapy and photochemotherapy (psoralen–ultraviolet A; PUVA) can be used to manage moderate to severe atopic dermatitis in selected adults and older children.[3]

People with moderate or severe atopic dermatitis not responding to topical treatments may be referred to secondary care and treated with stronger oral medications such as oral steroids, systemic immunosuppressants (azathioprine,

ciclosporin, mycophenolate mofetil and methotrexate).[4]
Abrocitinib (TA814) and upadacitinib (TA814) are recommended as options for treating moderate to severe atopic dermatitis in adults and young people 12 years and over whose disease has not responded to at least 1 other systemic therapy, such as ciclosporin, methotrexate, azathioprine and mycophenolate mofetil, or these are contraindicated or not tolerated.

Dupilumab (TA534), baricitinib (TA681) and tralokinumab (TA814) are recommended as options for treating moderate to severe atopic dermatitis in adults whose disease has not responded to at least 1 other systemic therapy. Since the publication of TA534 and TA814 the marketing authorisations for dupilumab and tralokinumab, respectively have been extended to include people aged 12 to 17 years, and are commissioned by NHS England for this group.

Prurigo nodularis, also known as nodular prurigo, is a chronic inflammatory skin condition.[5] Prurigo describes the changes that appear on the skin after it has been scratched for a long time due to intense itchiness (pruritus).[6] In prurigo nodularis, firm itchy bumps (nodules) form on the skin's surface caused by itching. The rash can range in severity from a few to several hundred nodules which appear most commonly on the arms, legs, upper back and abdomen. It may appear on its own or be associated with other skin diseases or underlying conditions. It may occur in episodes or be continuous. The itch associated with prurigo nodularis can interfere with sleep and affect psychological wellbeing.[5]

The cause of prurigo nodularis is unknown. However, it is associated with abnormal levels of nerve fibres and neuropeptides which may contribute to itchiness. People with prurigo nodularis also have higher levels of immune cells which produce cytokines associated with inflammatory responses that may contribute to increased itchiness.[5]

The number of people with prurigo nodularis is uncertain but it is estimated that 0.03% of the population in England have the condition.[6] Any age group can be affected but it is more common in older people and affects more females than males.[7 8]

The treatments for prurigo nodularis aim to stop the skin itching. These include emollients, corticosteroid creams, ointments such as tacrolimus (a calcineurin inhibitor, used off-label), antihistamines, oral steroids and ultraviolet light treatment. Immunosuppressants such as azathioprine, ciclosporin or methotrexate may be used if the condition is severe and has not responded to previous treatments.[6]

The technology

Nemolizumab (brand name unknown, Galderma) does not have a marketing authorisation for atopic dermatitis or prurigo nodularis. It has been studied in the following clinical trials:

- in placebo controlled studies in adults with prurigo nodularis
- in placebo controlled studies in people aged 12 years and older with moderate to severe atopic dermatitis

Intervention(s)	Nemolizumab
Population(s)	• People aged 12 years and over with moderate to severe atopic dermatitis who are candidates for systemic therapy • Adults with prurigo nodularis
Comparators	For atopic dermatitis in people who have not previously had a systemic therapy: • immunosuppressive therapies (azathioprine, ciclosporin, methotrexate and mycophenolate mofetil) For atopic dermatitis in people whose condition has not responded to at least 1 other systemic therapy, or these are not suitable: • abrocitinib • tralokinumab • upadacitinib • baricitinib • lebrikizumab (subject to NICE evaluation) For prurigo nodularis established clinical management without nemolizumab, including: • topical emollients • topical corticosteroids • topical calcineurin inhibitors • antihistamines • oral steroids • phototherapy • immunosuppressive therapies (azathioprine, ciclosporin, methotrexate or thalidomide) • antidepressants including selective serotonin reuptake inhibitors (SSRIs) and serotoninnorepinephrine reuptake inhibitors (SNRIs)
Outcomes	The outcome measures to be considered include: • measures of disease severity • measures of symptom control including improvement in itch • disease free period/maintenance of remission • time to relapse/prevention of relapse • 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 treatment 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:** Dupilumab for treating prurigo nodularis.(2024) NICE technology appraisal guidance 955. Abrocitinib, tralokinumab or upadacitinib for treating moderate to severe atopic dermatitis. (2022) NICE technology appraisal 814. Baricitinib for treating moderate to severe atopic dermatitis (2021) NICE Technology Appraisal 681. Review date 2024. Dupilumab for treating severe asthma with type 2 inflammation (2021) NICE Technology appraisal guidance 751. Dupilumab for treating moderate to severe atopic dermatitis (2018) NICE Technology Appraisal 534. . Alitretinoin for the treatment of severe chronic hand eczema (2009) NICE technology appraisal guidance 177. On static list. Tacrolimus and pimecrolimus for atopic eczema (2004) NICE technology appraisal guidance 82. On static list. Frequency of application of topical corticosteroids for atopic eczema (2004) NICE technology appraisal guidance 81. On static list.

	Related technology appraisals in development: Lebrikizumab for treating moderate to severe atopic dermatitis in people 12 years and over. NICE technology appraisal guidance [ID4025] Publication date to be confirmed **Related NICE guidelines:** Atopic eczema in under 12s: diagnosis and management (2007) NICE guideline CG57. Secondary infection of common skin conditions including eczema: antimicrobial prescribing**.** NICE guideline NG190. **Related interventional procedures:** Grenz rays therapy for inflammatory skin conditions (2007) NICE interventional procedures guidance 236**.** **Related quality standards:** Atopic eczema in under 12s (2013). NICE quality standard 44.
Related National Policy	The NHS Long Term Plan (2019) NHS Long Term Plan NHS England (2023) Manual for prescribed specialist services (2023/2024)

Questions for consultation

Where do you consider nemolizumab will fit into the existing care pathway for:

- atopic dermatitis?
- prurigo nodularis?

Can atopic dermatitis occur alongside prurigo nodularis? If so, how common is this?

Would nemolizumab be used as a first systemic treatment or after immunosuppressive therapies (such as ciclosporin, methotrexate, azathioprine) in both conditions?

How is severity defined in both conditions?

Is nemoliizumab likely to be used in combination with topical corticosteroids or as a monotherapy in clinical practice?

Have all relevant comparators for nemolizuizumab been included in the scope?

Which treatments are considered to be established clinical practice in the NHS for:

- moderate to severe atopic dermatitis in people aged 12 years and over?
- prurigo nodularis?

Do treatments which are considered to be established clinical practice differ between people aged 12-17 and adults in both conditions?

How should established clinical management be defined for both conditions?

Are the outcomes listed appropriate?

Are there any subgroups of people in whom nemolizumab is expected to be more clinically effective and cost effective or other groups that should be examined separately?

Would nemolizumab be a candidate for managed access?

Do you consider that the use of nemolizumab 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 [the treatment(s)] is/are/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. (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 Eczema Society. Our skin and eczema. Accessed March 2024

2. National Institute for Health and Care Excellence (2022) Resource impact report: Abrocitinib, tralokinumab or upadacitinib for treating moderate to severe atopic dermatitis (TA814) . Accessed April 2023.

3. Simpson EL, Bruin-Weller M, Flohr C, Ardern-Jones MR, Barbarot S et al. When does atopic dermatitis warrant systemic therapy? Recommendations from an expert panel of the International Eczema Council. Journal of the American Academy of Dermatology 2017; 77(4):623-633.

4. British Association of Dermatologists (2022) Atopic eczema. Accessed March 2024

5. National Organization for Rare Disorders (NORD) (2021). Prurigo Nodularis. Accessed March 2024

6. British Association for Dermatologists (2020). Nodular prurigo. Accessed March 2024.

7. Epidemiology of prurigo nodularis in England: a retrospective database analysis. Morgan et al. 2022

8. IFSI-guideline on chronic prurigo including prurigo nodularis. Ständer et al. 2020