NICE National Institute for Health and Care Excellence

Putting NICE guidance into practice

Resource impact report:
Abrocitinib, tralokinumab or upadacitinib for treating moderate to severe atopic dermatitis (TA814)

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Summary

NICE has recommended abrocitinib and upadacitinib as options for treating moderate to severe atopic dermatitis that is suitable for systemic treatment in adults and young people 12 years and over. NICE has also recommended tralokinumab as an option for treating moderate to severe atopic dermatitis that is suitable for systemic treatment in adults. See the full recommendation wording in section 1.

We estimate that:

- Around 50,100 people aged 12 and over with moderate to severe atopic dermatitis are eligible for treatment with abrocitinib and upadacitinib after adjusting for predicted population growth.
- Around 980 people will commence treatment with abrocitinib in 2022/23 as shown in table 1. Of these, around 265 people discontinue abrocitinib at week 16 because of inadequate response.
- Around 3,660 people will continue treatment with abrocitinib by 2026/27.

Table 1 Estimated number of people in England receiving abrocitinib after adjusting for predicted population growth

Population having abrocitinib each year	**2022/23**	**2023/24**	**2024/25**	**2025/26**	**2026/27**
Market share for abrocitinib (%)	2	4	6	8	10
People commencing treatment each year	978	990	1,002	1,015	1,025
People discontinuing at 16 weeks because of inadequate response	-264	-267	-270	-274	-277
People continuing treatment in year	714	722	731	741	749
People continuing with treatment from previous years	0	714	1,436	2,167	2,908
Total people continuing treatment	**714**	**1,436**	**2,167**	**2,908**	**3,657**

- Around 980 people will commence treatment with upadacitinib in 2022/23 as shown in table 2. Of these, around 265 people discontinue upadacitinib at week 16 because of inadequate response.
- Around 3,660 people will continue treatment with upadacitinib by 2026/27.

Table 2 Estimated number of people in England receiving upadacitinib after adjusting for predicted population growth

Population having upadacitinib each year	**2022/23**	**2023/24**	**2024/25**	**2025/26**	**2026/27**
Market share for upadacitinib (%)	2	4	6	8	10
People commencing treatment each year	978	990	1,002	1,015	1,025
People discontinuing at 16 weeks because of inadequate response	-264	-267	-270	-274	-277
People continuing treatment in year	714	722	731	741	749
People continuing with treatment from previous years	0	714	1,436	2,167	2,908
Total people continuing treatment	**714**	**1,436**	**2,167**	**2,908**	**3,657**

- Around 44,300 adults with moderate to severe atopic dermatitis are eligible for treatment with tralokinumab after adjusting for predicted population growth.
- Around 730 people will commence treatment with tralokinumab in 2022/23 as shown in table 3. Of these, around 200 people discontinue tralokinumab at week 16 because of inadequate response.
- Around 2,740 people will continue treatment with tralokinumab by 2026/27.

Table 3 Estimated number of people in England receiving tralokinumab after adjusting for predicted population growth

Population having tralokinumab each year	2022/23	2023/24	2024/25	2025/26	2026/27
Market share for tralokinumab (%)	1.5	3.0	4.5	6.0	7.5
People commencing treatment each year	733	742	751	761	769
People discontinuing at 16 weeks because of inadequate response	-198	-200	-203	-205	-208
People continuing treatment in year	535	542	548	555	561
People continuing with treatment from previous years	0	535	1,077	1,626	2,181
Total people continuing treatment	**535**	**1,077**	**1,626**	**2,181**	**2,743**

This report is supported by a local resource impact template because the list prices of abrocitinib, upadacitinib and tralokinumab have discounts that are commercial-in-confidence. The discounted prices of abrocitinib, upadacitinib and tralokinumab can be put into the template and other variables may be amended.

This technologies for adults are commissioned by integrated care systems and clinical commissioning groups, the technologies for adolescents are commissioned by NHS England. Providers are NHS hospitals trusts.

1 Upadacitinib, abrocitinib and tralokinumab

1.1 NICE has recommended abrocitinib and upadacitinib as options for treating moderate to severe atopic dermatitis that is suitable for systemic treatment in adults and young people 12 years and over, only if:

- the disease has not responded to at least 1 systemic immunosuppressant, or these are not suitable.
- the companies provide abrocitinib and upadacitinib according to the commercial arrangement.

1.2 Tralokinumab is recommended as an option, for treating moderate to severe atopic dermatitis that is suitable for systemic treatment in adults, only if

- the disease has not responded to at least 1 systemic immunosuppressant, or these are not suitable.
- the company provides tralokinumab according to the commercial arrangement.

1.3 Stop abrocitinib, upadacitinib or tralokinumab at 16 weeks if the atopic dermatitis has not responded adequately. An adequate response is:

- at least a 50% reduction in the Eczema Area and Severity Index score (EASI 50) from when treatment started and
- at least a 4-point reduction in the Dermatology Life Quality Index (DLQI) from when treatment started.

1.4 Take into account how skin colour could affect the EASI score and make any appropriate adjustments.

1.5 Take into account any physical, psychological, sensory or learning disabilities, or communication difficulties that could affect the responses to the DLQI, and make any appropriate adjustments.

1.6 These recommendations are not intended to affect treatment with abrocitinib, upadacitinib or tralokinumab that was started in the NHS before this guidance was published. People having treatment outside these recommendations may continue without change to the funding arrangements in place for them before this guidance was published, until they and their NHS clinician consider it appropriate to stop. In young people this decision should be made jointly by them, their clinician, and their parents or carers.

1.7 The clinical experts explained that atopic dermatitis is a chronic, recurrently flaring, generalised skin condition that often starts in childhood and continues into adulthood for most people. People with severe atopic dermatitis may need hospitalisation for treatment.

1.8 Standard treatment for moderate to severe atopic dermatitis (eczema) includes topical treatments such as emollients and corticosteroids. If these treatments are not effective, systemic immunosuppressants such as methotrexate and ciclosporin can be added. Dupilumab and baricitinib are used if systemic treatments are not effective. Abrocitinib, upadacitinib or tralokinumab would also be used if systemic treatments are not effective.

2 Resource impact of the guidance

2.1 The resource impact is shown in the summary section of this report.

2.2 The current treatment and future market share assumptions are based on clinical opinion and NICE assumptions and are shown in the resource impact template.

2.3 This report is supported by a local resource impact template. The companies have commercial arrangements (simple discount patient access schemes). This makes abrocitinib, upadacitinib and tralokinumab available to the NHS with a discount. The size of the discounts is commercial in confidence. It is the company's responsibility to let relevant NHS organisations know details of the discount.

Savings and benefits

2.4 Abrocitinib and upadacitinib are oral treatments therefore easily administered compared to other treatments that may need subcutaneous injection.

2.5 Having a choice of treatments that improve the condition and which are associated with few, or manageable adverse effects is important to people with atopic dermatitis.

3 Implications for commissioners

3.1 The technologies for adults are commissioned by integrated care systems and clinical commissioning groups, the technologies for adolescents are commissioned by NHS England. Providers are NHS hospitals trusts.

3.2 Abrocitinib, upadacitinib and tralokinumab for moderate to severe atopic dermatitis falls within the programme budgeting category 214X (problems of the skin).

4 How we estimated the resource impact

The population

4.1 The prevalence of atopic dermatitis after adjusting for predicted population growth in adults by 2026/27 is estimated to be around 2 million people in England and around 261,000 in young people aged 12-17 years.

4.2 Table 4 shows the number of people eligible for treatment with abrocitinib, upadacitinib and tralokinumab after adjusting for predicted population growth.

Table 4 Number of adults eligible for treatment in England after adjusting for predicted population growth

Population	Proportion of previous row (%)	Number of people
Total adult population aged 18 years or older forecast in 2026/27		46,263,200
Prevalence of atopic dermatitis (AD) in adults[1]	4.3	1,989,318
People with moderate to severe AD[3]	7	139,252
People with moderate to severe AD eligible for systemic therapy[2]	60	83,551
People with moderate to severe AD with a history of systemic therapy treatment failure and eligible for treatment[3]	53	44,282
Total population aged 12-17 years forecast in 2026/27		4,077,634
Prevalence of atopic dermatitis (AD) in children[1]	6.4	260,969
People with moderate to severe AD[3]	7	18,268
People with moderate to severe AD eligible for systemic therapy[2]	60	10,961
People with moderate to severe AD with a history of systemic therapy treatment failure and eligible for treatment[3]	53	5,809
Total population adults and young people aged 12-17 years eligible for treatment		**50,091**
Total number of people estimated to have started abrocitinib by 2026/27[2]	10	5,009
Number of people continuing treatment with abrocitinib by 2026/27[2]		3,657
Total number of people estimated to have started upadacitinib by 2026/27[2]	10	5,009
Number of people continuing treatment with upadacitinib by 2026/27[2]		3,657
Total number of people estimated to have started tralokinumab by 2026/27[2]	7.5	3,757
Number of people continuing treatment with tralokinumab by 2026/27[2]		2,743

[1] The epidemiology of eczema in children and adults in England: A population-based study using primary care data - Lusignan - 2021 - Clinical & Experimental Allergy - Wiley Online Library

[2] Clinical opinion

[3] Resource impact template for NICE Technology appraisal guidance [TA681]

Assumptions

4.3 The resource impact template assumes that:

- Standard care, baricitinib and dupilumab are the comparators. Users can amend the costs of standard care in the template to reflect local practice.
- The guidance recommends stopping treatment at 16 weeks if the atopic dermatitis has not responded adequately. It is assumed that the proportion of people who may stop at 16 weeks is the same as for baricitinib (NICE Technology appraisal guidance TA681). Therefore, it is assumed that around 27% of people receiving treatment discontinue at 16 weeks because of inadequate response. Discontinuation rates may vary between treatments and can be amended in the template to reflect local assumptions.
- The model does not include any further discontinuation of treatment after 16 weeks. It is assumed that people who continue treatment after 16 weeks will remain on treatment for the duration of the model. However, users can update the model to include discontinuation rates from years 2 to 5. It is assumed that people who stop treatment because of inadequate response in years 2 to 5 will then receive standard care only.
- Treatment costs may include VAT until response to the treatment has been assessed (at 16 weeks). This is because they may initially be dispensed in secondary care. Thereafter, they may be available through homecare medicines services, and it is assumed VAT will not be incurred.
- The market share estimates take into account movements between different treatments.

About this resource impact report

This resource impact report accompanies the NICE guidance on Abrocitinib, tralokinumab or upadacitinib for treating moderate to severe atopic dermatitis and should be read with it.

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