NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Final appraisal document

Risankizumab for treating moderate to severe plaque psoriasis

1 Recommendations

1.1 Risankizumab is recommended as an option for treating plaque psoriasis in adults, only if:

- the disease is severe, as defined by a total Psoriasis Area and Severity Index (PASI) of 10 or more and a Dermatology Life Quality Index (DLQI) of more than 10 and
- the disease has not responded to other systemic treatments, including ciclosporin, methotrexate and phototherapy, or these options are contraindicated or not tolerated and
- the company provides the drug according to the commercial arrangement (see section 2).

1.2 Stop risankizumab treatment at 16 weeks if the psoriasis has not responded adequately. An adequate response is defined as:

- a 75% reduction in the PASI score (PASI 75) from when treatment started or
- a 50% reduction in the PASI score (PASI 50) and a 5-point reduction in DLQI from when treatment started.

1.3 If patients and their clinicians consider risankizumab to be one of a range of suitable treatments, including guselkumab, secukinumab and ixekizumab, the least expensive should be chosen (taking into account

administration costs, dosage, price per dose and commercial arrangements).

1.4 When using the PASI, healthcare professionals should take into account skin colour and how this could affect the PASI score, and make the clinical adjustments they consider appropriate.

1.5 When using the DLQI, healthcare professionals should take into account any physical, psychological, sensory or learning disabilities, or communication difficulties that could affect the responses to the DLQI and make any adjustments they consider appropriate.

1.6 These recommendations are not intended to affect treatment with risankizumab 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.

Why the committee made these recommendations

Risankizumab is proposed as an alternative to other biological therapies already recommended by NICE for treating severe plaque psoriasis in adults. Evidence from clinical trials shows that risankizumab is more effective than adalimumab and ustekinumab. Indirect comparisons suggest that risankizumab is likely to provide similar health benefits compared with guselkumab, and better PASI response rates compared with many other biologicals.

For the cost comparison, it is appropriate to compare risankizumab with guselkumab. The total costs associated with risankizumab are similar to or lower than those associated with guselkumab. Therefore, risankizumab is recommended as an option for use in the NHS for severe plaque psoriasis that has not responded to systemic non-biological treatments, or if these are contraindicated or not tolerated.

2 Information about risankizumab

Marketing authorisation indication	Risankizumab (Skyrizi, AbbVie) has a marketing authorisation 'for the treatment of moderate to severe plaque psoriasis in adults who are candidates for systemic therapy'.
Dosage in the marketing authorisation	Risankizumab is administered by subcutaneous injection at a dose of 150 mg at weeks 0 and 4, and then every 12 weeks. Consideration should be given to stopping treatment in people whose condition has shown no response after 16 weeks of treatment.
Price	The list price of risankizumab is £3,326.09 per 150 mg (2×75 mg prefilled syringes) dose (excluding VAT; price as quoted in company's submission). The company has a commercial arrangement (simple discount patient access scheme). This makes risankizumab available to the NHS with a discount. The size of the discount is commercial in confidence. It is the company's responsibility to let relevant NHS organisations know details of the discount.

3 Committee discussion

The appraisal committee (section 6) considered evidence submitted by AbbVie and a review of this submission by the evidence review group (ERG). See the committee papers for full details of the evidence.

Decision problem

The company's decision problem is relevant to clinical practice

3.1 The company proposed that risankizumab should be considered in adults as an alternative to other biological therapies for psoriasis that has not responded adequately to non-biological systemic treatment or phototherapy, or if these are contraindicated or not tolerated. The company's proposed decision problem was narrower than risankizumab's marketing authorisation because it excluded people who had not had systemic non-biological therapy or phototherapy. However, the committee agreed that the proposed population was consistent with previous NICE recommendations for biological treatments for psoriasis, and with their use in clinical practice. The company presented a comparison with a

NICE-recommended biological treatment (guselkumab). The committee agreed that this was consistent with the criteria for a cost-comparison appraisal (see section 3.6). The committee recalled that NICE's technology appraisal guidance on guselkumab recommends that treatment should stop if there is an inadequate response at 16 weeks. An adequate response is defined as:

- a 75% reduction in the Psoriasis Area and Severity Index score (PASI 75) from when treatment started or
- a 50% reduction in the PASI score (PASI 50) and a 5-point reduction in Dermatology Life Quality Index (DLQI) from when treatment started.

The committee considered that it would be reasonable to consider the same approach for this appraisal and concluded that the company's decision problem was relevant to clinical practice.

Clinical effectiveness

Risankizumab is more effective than adalimumab and ustekinumab

3.2 Risankizumab has been studied in 4 randomised controlled trials including a total of about 2,200 adults with plaque psoriasis. It was directly compared with ustekinumab in 2 trials (UltIMMa-1 and UltIMMa-2), and to adalimumab in the IMMvent trial. In these trials, risankizumab was associated with statistically significant improvements compared with ustekinumab and adalimumab in primary and secondary outcomes, including PASI response rates. The committee noted that an improvement in PASI 90 response, a primary endpoint of the trials, is particularly important to patients. Risankizumab was associated with a higher PASI 90 response at week 16 than ustekinumab (UltIMMa-1: PASI 90 response rates 75.3% and 42.0% respectively, $p<0.001$) or adalimumab (IMMvent: PASI 90 response rates 72.4% and 47.4% respectively, $p<0.001$). The committee accepted that the results of these trials showed that risankizumab was more effective than adalimumab and ustekinumab.

The company's network meta-analyses are suitable for decision making

3.3 The company did a series of network meta-analyses on PASI response rates, health-related quality of life (using DLQI) and safety outcomes. These compared risankizumab with guselkumab and with all other NICE-recommended biological agents (using data from 57 randomised controlled trials). The ERG was satisfied with the search strategy, the methodological quality of the included trials and the methodology used for the network meta-analyses. The committee accepted the ERG's view, concluding that the network meta-analyses provided by the company was suitable for decision making.

Risankizumab provides similar PASI response rates to guselkumab, and similar or better rates than other biologicals

3.4 The committee acknowledged that PASI 75 is a key outcome when deciding whether to continue treatment. It noted that the results of the network meta-analysis suggested that risankizumab was similarly effective to guselkumab in terms of PASI 75 response. The committee appreciated that the company analyses also covered a range of outcomes, and that the results for PASI 100 were broadly consistent with those for PASI 75. It noted the safety and tolerability outcomes in the company's network meta-analysis and considered that risankizumab had a similar safety profile to other biologicals for psoriasis. The committee concluded that risankizumab provides similar benefits to guselkumab, and clinical benefits either similar to or greater than other biological agents.

Cost comparison

The total costs associated with risankizumab are similar to or lower than those associated with guselkumab

3.5 The company presented a cost-comparison analysis that modelled the total costs of risankizumab and the comparator guselkumab over 10 years. It took into account stopping treatment based on PASI 75 response rates, which was consistent with the stopping rules specified in

NICE's technology appraisal guidance for guselkumab. The base-case analysis used the same PASI 75 response rates and applied the same rate of long-term stopping of treatment during maintenance therapy for both risankizumab and guselkumab. The committee accepted the company's base-case model. Taking into account the confidential patient access schemes for risankizumab and guselkumab, the committee concluded that the total costs associated with risankizumab were similar to or lower than those associated with guselkumab (the exact results cannot be reported here because the discounts are confidential).

Risankizumab is recommended as an option for treating severe plaque psoriasis in adults

3.6 The committee concluded that the criteria for a positive cost comparison were met because:

- risankizumab provided similar overall health benefits to guselkumab and
- the total costs associated with risankizumab were similar to or lower than the total costs associated with guselkumab.

The committee therefore recommended risankizumab as an option for treating plaque psoriasis in adults. It concluded that the recommendations for risankizumab should be consistent with the company's proposal and NICE's recommendations for guselkumab, that is:

- if the disease is severe (that is, a PASI of 10 or more and a DLQI of more than 10) and
- when the disease has not responded to other systemic treatments, including ciclosporin, methotrexate and phototherapy, or these options are contraindicated or not tolerated and
- when treatment is stopped at 16 weeks if the psoriasis has not responded adequately.

The PASI and DLQI may not be appropriate for all people with psoriasis

3.7 The committee noted, as in previous NICE technology appraisals on psoriasis, potential equality issues:

- the PASI might underestimate disease severity in people with darker skin
- the DLQI has limited validity in some people, and may miss anxiety and depression.

The committee concluded that, when using the PASI, healthcare professionals should take into account skin colour and how this could affect the PASI score, and make the clinical adjustments they consider appropriate. Also, it concluded that, when using the DLQI, healthcare professionals should take into account any physical, psychological, sensory or learning disabilities, or communication difficulties, that could affect the responses to the DLQI, and make any adjustments they consider appropriate.

4 Implementation

4.1 Section 7(6) of the National Institute for Health and Care Excellence (Constitution and Functions) and the Health and Social Care Information Centre (Functions) Regulations 2013 requires clinical commissioning groups, NHS England and, with respect to their public health functions, local authorities to comply with the recommendations in this appraisal within 3 months of its date of publication. Because risankizumab has been recommended through the fast track appraisal process, NHS England and commissioning groups have agreed to provide funding to implement this guidance 30 days after publication. The Welsh ministers have issued directions to the NHS in Wales on implementing NICE technology appraisal guidance. When a NICE technology appraisal recommends the use of a drug or treatment, or other technology, the NHS in Wales must usually provide funding and resources for it within 2 months of the first publication of the final appraisal document.

4.2 When NICE recommends a treatment 'as an option', the NHS must make sure it is available within the period set out in the paragraphs above. This means that, if a patient has moderate of sever plaque psoriasis and the doctor responsible for their care thinks that risankizumab is the right treatment, it should be available for use, in line with NICE's recommendations.

5 Review of guidance

5.1 The guidance on this technology will be considered for review 3 years after publication. The guidance executive will decide whether the technology should be reviewed based on information gathered by NICE, and in consultation with consultees and commentators.

Sanjeev Patel
Vice - Chair, committee B
May 2019

6 Appraisal committee members and NICE project team

Appraisal committee members

The 4 technology appraisal committees are standing advisory committees of NICE. This topic was considered by committee B.

Committee members are asked to declare any interests in the technology to be appraised. If it is considered there is a conflict of interest, the member is excluded from participating further in that appraisal.

The minutes of each appraisal committee meeting, which include the names of the members who attended and their declarations of interests, are posted on the NICE website.

NICE project team

Each technology appraisal is assigned to a team consisting of a health technology assessment analyst (who acts as technical lead for the appraisal), a health technology assessment adviser and a project manager.

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Technical lead

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