

IQWiG Reports – Commission No. A15-53

**Secukinumab
(new therapeutic indication) –
Benefit assessment according to
§35a Social Code Book V¹**

Extract

¹ Translation of Assessment module I, Sections I 2.1 to I 2.6, and Assessment module II, Sections II 2.1 to II 2.6, of the dossier assessment *Secukinumab (neues Anwendungsgebiet) – Nutzenbewertung gemäß § 35a SGB V* (Version 1.0; Status: 10 March 2016). Please note: This translation is provided as a service by IQWiG to English-language readers. However, solely the German original text is absolutely authoritative and legally binding.

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Secukinumab

Assessment module I

Psoriatic arthritis

Medical and scientific advice:

No advisor on medical and scientific questions was involved in the present dossier assessment.

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- Thomas Kaiser
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Keywords: secukinumab, psoriatic arthritis, benefit assessment

¹ Due to legal data protection regulations, employees have the right not to be named.

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List of abbreviations

Abbreviation	Meaning
ACT	appropriate comparator therapy
DMARD	disease-modifying anti-rheumatic drug
G-BA	Gemeinsamer Bundesausschuss (Federal Joint Committee)
IQWiG	Institut für Qualität und Wirtschaftlichkeit im Gesundheitswesen (Institute for Quality and Efficiency in Health Care)
MTX	methotrexate
SGB	Sozialgesetzbuch (Social Code Book)
TNF α	tumour necrosis factor alpha

I 2 Benefit assessment

I 2.1 Executive summary of the benefit assessment

Background

In accordance with §35a Social Code Book (SGB) V, the Federal Joint Committee (G-BA) commissioned the Institute for Quality and Efficiency in Health Care (IQWiG) to assess the benefit of the drug secukinumab. The assessment was based on a dossier compiled by the pharmaceutical company (hereinafter referred to as “the company”). The dossier was sent to IQWiG on 14 December 2015.

Research question

The aim of the present report was to assess the added benefit of secukinumab, alone or in combination with methotrexate (MTX), in comparison with a tumour necrosis factor alpha (TNF α) inhibitor (etanercept or adalimumab or infliximab or golimumab), if applicable in combination with MTX, as appropriate comparator therapy (ACT) in adult patients with active psoriatic arthritis when the response to previous disease-modifying anti-rheumatic drug (DMARD) therapy has been inadequate.

The assessment was conducted based on patient-relevant outcomes and on the data provided by the company in the dossier.

Results

The company presented no studies in its dossier that are suitable to compare secukinumab with the ACT in adult patients with active psoriatic arthritis. Hence there was no hint of an added benefit of secukinumab in comparison with the ACT (TNF α inhibitor [etanercept or adalimumab or infliximab or golimumab], if applicable in combination with MTX); an added benefit of secukinumab is not proven.

It remains unclear whether an indirect comparison would have been possible for the present benefit assessment and whether an added benefit or lesser benefit of secukinumab in comparison with the ACT could have been derived from such an indirect comparison.

Extent and probability of added benefit, patient groups with therapeutically important added benefit²

Since no relevant study was presented for the assessment of the added benefit of secukinumab in adult patients with active psoriatic arthritis, an added benefit versus the ACT specified by

² On the basis of the scientific data analysed, IQWiG draws conclusions on the (added) benefit or harm of an intervention for each patient-relevant outcome. Depending on the number of studies analysed, the certainty of their results, and the direction and statistical significance of treatment effects, conclusions on the probability of (added) benefit or harm are graded into 4 categories: (1) “proof”, (2) “indication”, (3) “hint”, or (4) none of the first 3 categories applies (i.e., no data available or conclusions 1 to 3 cannot be drawn from the available data). The extent of added benefit or harm is graded into 3 categories: (1) major, (2) considerable, (3) minor (in addition, 3 further categories may apply: non-quantifiable extent of added benefit, no added benefit, or less benefit). For further details see [1,2].

the G-BA (TNF α inhibitor [etanercept or adalimumab or infliximab or golimumab], if applicable in combination with MTX) is not proven. Hence there are also no patient groups for whom a therapeutically important added benefit can be derived.

The result of the assessment of the added benefit of secukinumab in comparison with the ACT in adult patients with active psoriatic arthritis is summarized in Table 1.

Table 1: Secukinumab – extent and probability of added benefit in the therapeutic indication active psoriatic arthritis

Therapeutic indication	ACT ^a	Extent and probability of added benefit
Alone or in combination with MTX in adult patients with active psoriatic arthritis when the response to previous DMARD therapy has been inadequate	TNF α inhibitor (etanercept or adalimumab or infliximab or golimumab), if applicable in combination with MTX	Added benefit not proven
a: Presentation of the respective ACT specified by the G-BA. In cases where the company, because of the G-BA's specification of the ACT, could choose a comparator therapy from several options, the respective choice of the company is printed in bold. ACT: appropriate comparator therapy; DMARD: disease-modifying antirheumatic drug; G-BA: Federal Joint Committee; MTX: methotrexate; TNF α : tumour necrosis factor alpha		

This result concurs with the company's assessment, which also derived no added benefit of secukinumab in active psoriatic arthritis.

The G-BA decides on the added benefit.

I 2.2 Research question

The aim of the present report was to assess the added benefit of secukinumab, alone or in combination with MTX, in comparison with a TNF α inhibitor (etanercept or adalimumab or infliximab or golimumab), if applicable in combination with MTX, as ACT in adult patients with active psoriatic arthritis when the response to previous DMARD therapy has been inadequate.

In its dossier, the company followed the G-BA's specification of the ACT (TNF α inhibitor [etanercept or adalimumab or infliximab or golimumab], if applicable in combination with MTX). It did not limit its conclusions on the added benefit to one of the ACT options. The company additionally differentiated 3 subpopulations and chose the same ACT for each of them. The differentiation into 3 subpopulations was not followed for the present benefit assessment (see also Section I 2.7.1 of the full dossier assessment).

The assessment was conducted based on patient-relevant outcomes and on the data provided by the company in the dossier.

I 2.3 Information retrieval and study pool

The study pool of the assessment was compiled on the basis of the following information:

Sources of the company in the dossier:

- study list on secukinumab (status: 11 November 2015)
- bibliographical literature search on secukinumab (last search on 6 October 2015)
- search in trial registries for studies on secukinumab (last search on 5 October 2015)

To check the completeness of the study pool:

- search in trial registries for studies on secukinumab (last search on 11 January 2016)

No additional relevant study was identified from the check.

The company identified no relevant study from the steps of information retrieval mentioned.

Besides the search for studies of direct comparisons, the company stated that it had aimed to conduct several indirect comparisons for each of the subpopulations it had defined. It stated to have conducted an unsystematic literature search for this. According to the company, this unsystematic literature search had shown that only limited data were available for an indirect comparison and that particularly no data from studies on the ACT were available for the subpopulations defined by the company. The company's statements could not be verified, however, because it disclosed neither the inclusion criteria for the unsystematic search nor the search itself nor its result and the conclusions derived from it.

The company additionally stated that it had conducted a network meta-analysis nonetheless and referred to an analysis that is not publicly accessible [3]. This was not documented in Module 4B of the dossier. It could be inferred from the documents presented by the company in Module 5 that the analysis was not geared towards the present benefit assessment. The inclusion criteria (e.g. comparator therapy, relevant outcomes, study duration) did not concur with the ones defined by the company itself for the present assessment. Furthermore, the analysis was outdated (last search date: September 2014).

It therefore remains unclear whether an indirect comparison would have been possible for the present benefit assessment and whether an added benefit or lesser benefit of secukinumab in comparison with the ACT could have been derived from such an indirect comparison.

I 2.4 Results on added benefit

The company presented no studies in its dossier that are suitable to compare secukinumab with the ACT in adult patients with active psoriatic arthritis. Hence there was no hint of an added benefit of secukinumab in comparison with the ACT (TNF α inhibitor [etanercept or adalimumab or infliximab or golimumab], if applicable in combination with MTX); an added benefit of secukinumab is not proven.

This concurs with the company's assessment.

I 2.5 Extent and probability of added benefit

Since no relevant study was presented for the assessment of the added benefit of secukinumab in adult patients with active psoriatic arthritis, an added benefit versus the ACT specified by the G-BA (TNF α inhibitor [etanercept or adalimumab or infliximab or golimumab], if applicable in combination with MTX) is not proven. Hence there are also no patient groups for whom a therapeutically important added benefit can be derived.

The result of the assessment of the added benefit of secukinumab in comparison with the ACT in adult patients with active psoriatic arthritis is summarized in Table 2.

Table 2: Secukinumab – extent and probability of added benefit in the therapeutic indication active psoriatic arthritis

Therapeutic indication	ACT ^a	Extent and probability of added benefit
Alone or in combination with MTX in adult patients with active psoriatic arthritis when the response to previous DMARD therapy has been inadequate	TNF α inhibitor (etanercept or adalimumab or infliximab or golimumab), if applicable in combination with MTX	Added benefit not proven
a: Presentation of the respective ACT specified by the G-BA. In cases where the company, because of the G-BA's specification of the ACT, could choose a comparator therapy from several options, the respective choice of the company is printed in bold. ACT: appropriate comparator therapy; DMARD: disease-modifying antirheumatic drug; G-BA: Federal Joint Committee; MTX: methotrexate; TNF α : tumour necrosis factor alpha		

This result concurs with the company's assessment, which also derived no added benefit of secukinumab in active psoriatic arthritis.

The G-BA decides on the added benefit.

I 2.6 List of included studies

Not applicable as no studies were included in the benefit assessment.

References for English extract

Please see full assessment for full reference list.

1. Institute for Quality and Efficiency in Health Care. General Methods: version 4.2 [online]. 22 April 2015 [accessed: 20 October 2015]. URL: https://www.iqwig.de/download/IQWiG_General_Methods_Version_%204-2.pdf.
2. Skipka G, Wieseler B, Kaiser T, Thomas S, Bender R, Windeler J et al. Methodological approach to determine minor, considerable, and major treatment effects in the early benefit assessment of new drugs. *Biom J* 2015; 58(1): 43-58
3. Novartis Pharma. Systematic literature review and meta-analysis of efficacy in the treatment of psoriatic arthritis [unpublished]. 2015.

Secukinumab

Assessment module II

Ankylosing spondylitis

Medical and scientific advice:

No advisor on medical and scientific questions was involved in the present dossier assessment.

IQWiG employees involved in the assessment¹:

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Keywords: secukinumab, spondylitis – ankylosing, benefit assessment

¹ Due to legal data protection regulations, employees have the right not to be named.

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List of abbreviations

Abbreviation	Meaning
ACT	appropriate comparator therapy
G-BA	Gemeinsamer Bundesausschuss (Federal Joint Committee)
IQWiG	Institut für Qualität und Wirtschaftlichkeit im Gesundheitswesen (Institute for Quality and Efficiency in Health Care)
SGB	Sozialgesetzbuch (Social Code Book)
TNF α	tumour necrosis factor alpha

II 2 Benefit assessment

II 2.1 Executive summary of the benefit assessment

Background

In accordance with §35a Social Code Book (SGB) V, the Federal Joint Committee (G-BA) commissioned the Institute for Quality and Efficiency in Health Care (IQWiG) to assess the benefit of the drug secukinumab. The assessment was based on a dossier compiled by the pharmaceutical company (hereinafter referred to as “the company”). The dossier was sent to IQWiG on 14 December 2015.

Research question

The aim of the present report was to assess the added benefit of secukinumab in comparison with a tumour necrosis factor alpha (TNF α) inhibitor (etanercept or adalimumab or infliximab or golimumab) in adult patients with active ankylosing spondylitis who have responded inadequately to conventional therapy.

The assessment was conducted based on patient-relevant outcomes and on the data provided by the company in the dossier.

Results

The company presented no studies in its dossier that are suitable to compare secukinumab with the appropriate comparator therapy (ACT) in adult patients with active ankylosing spondylitis. Hence there was no hint of an added benefit of secukinumab in comparison with the ACT (TNF α inhibitor [etanercept or adalimumab or infliximab or golimumab]); an added benefit of secukinumab is not proven.

It remains unclear whether an indirect comparison would have been possible for the present benefit assessment and whether an added benefit or lesser benefit of secukinumab in comparison with the ACT could have been derived from such an indirect comparison.

Extent and probability of added benefit, patient groups with therapeutically important added benefit

Since no relevant study was presented for the assessment of the added benefit of secukinumab in adult patients with active ankylosing spondylitis, an added benefit versus the ACT specified by the G-BA (TNF α inhibitor [etanercept or adalimumab or infliximab or golimumab]) is not proven. Hence there are also no patient groups for whom a therapeutically important added benefit can be derived.

The result of the assessment of the added benefit of secukinumab in comparison with the ACT in adult patients with active ankylosing spondylitis is summarized in Table 1.

Table 1: Secukinumab – extent and probability of added benefit in the therapeutic indication active ankylosing spondylitis

Therapeutic indication	ACT ^a	Extent and probability of added benefit
Adult patients with active ankylosing spondylitis who have responded inadequately to conventional therapy	TNF α inhibitor (etanercept or adalimumab or infliximab or golimumab)	Added benefit not proven
a: Presentation of the respective ACT specified by the G-BA. In cases where the company, because of the G-BA's specification of the ACT, could choose a comparator therapy from several options, the respective choice of the company is printed in bold. ACT: appropriate comparator therapy; G-BA: Federal Joint Committee; TNF α : tumour necrosis factor alpha		

This result concurs with the company's assessment, which also derived no added benefit of secukinumab in active ankylosing spondylitis.

The G-BA decides on the added benefit.

II 2.2 Research question

The aim of the present report was to assess the added benefit of secukinumab in comparison with a TNF α inhibitor (etanercept or adalimumab or infliximab or golimumab) as ACT in adult patients with active ankylosing spondylitis who have responded inadequately to conventional therapy.

In its dossier, the company followed the G-BA's specification of the ACT (TNF α inhibitor [etanercept or adalimumab or infliximab or golimumab]). It did not limit its conclusions on the added benefit to one of the ACT options.

The assessment was conducted based on patient-relevant outcomes and on the data provided by the company in the dossier.

II 2.3 Information retrieval and study pool

The study pool of the assessment was compiled on the basis of the following information:

Sources of the company in the dossier:

- study list on secukinumab (status: 11 November 2015)
- bibliographical literature search on secukinumab (last search on 7 October 2015)
- search in trial registries for studies on secukinumab (last search on 5 October 2015)

To check the completeness of the study pool:

- search in trial registries for studies on secukinumab (last search on 11 January 2016)

No additional relevant study was identified from the check.

The company identified no relevant study from the steps of information retrieval mentioned.

Besides the search for studies of direct comparisons, the company stated that it had aimed to conduct an indirect comparison. It stated to have conducted an unsystematic literature search for this. According to the company, this unsystematic literature search had shown that only limited data were available for an indirect comparison and that a comparison with secukinumab could not be presented with methodological correctness due to the heterogeneity (different inclusion and exclusion criteria) of the studies on the ACT. The company's statements could not be verified, however, because it disclosed neither the inclusion criteria for the unsystematic search nor the search itself nor its result and the conclusions derived from it.

The company additionally stated that it had conducted a network meta-analysis nonetheless and referred to an analysis that is not publicly accessible [1]. This was not documented in Module 4C of the dossier. It could be inferred from the documents presented by the company

in Module 5 that the analysis was not geared towards the present benefit assessment. The inclusion criteria (e.g. comparator therapy, relevant outcomes, study duration) did not concur with the ones defined by the company itself for the present assessment. Furthermore, the analysis was outdated (last search date: January 2015).

It therefore remains unclear whether an indirect comparison would have been possible for the present benefit assessment and whether an added benefit or lesser benefit of secukinumab in comparison with the ACT could have been derived from such an indirect comparison.

II 2.4 Results on added benefit

The company presented no studies in its dossier that are suitable to compare secukinumab with the ACT in adult patients with active ankylosing spondylitis. Hence there was no hint of an added benefit of secukinumab in comparison with the ACT (TNF α inhibitor [etanercept or adalimumab or infliximab or golimumab]); an added benefit of secukinumab is not proven.

This concurs with the company's assessment.

II 2.5 Extent and probability of added benefit

Since no relevant study was presented for the assessment of the added benefit of secukinumab in adult patients with active ankylosing spondylitis, an added benefit versus the ACT specified by the G-BA (TNF α inhibitor [etanercept or adalimumab or infliximab or golimumab]) is not proven. Hence there are also no patient groups for whom a therapeutically important added benefit can be derived.

The result of the assessment of the added benefit of secukinumab in comparison with the ACT in adult patients with active ankylosing spondylitis is summarized in Table 2.

Table 2: Secukinumab – extent and probability of added benefit in the therapeutic indication active ankylosing spondylitis

Therapeutic indication	ACT ^a	Extent and probability of added benefit
Adult patients with active ankylosing spondylitis who have responded inadequately to conventional therapy	TNF α inhibitor (etanercept or adalimumab or infliximab or golimumab)	Added benefit not proven
a: Presentation of the respective ACT specified by the G-BA. In cases where the company, because of the G-BA's specification of the ACT, could choose a comparator therapy from several options, the respective choice of the company is printed in bold. ACT: appropriate comparator therapy; G-BA: Federal Joint Committee; TNF α : tumour necrosis factor alpha		

This result concurs with the company's assessment, which also derived no added benefit of secukinumab in active ankylosing spondylitis.

The G-BA decides on the added benefit.

II 2.6 List of included studies

Not applicable as no studies were included in the benefit assessment.

References for English extract

Please see full assessment for full reference list.

1. Novartis Pharma. Systematic literature review and meta-analysis of efficacy in the treatment of ankylosing spondylitis [unpublished]. 2015.

The full report (German version) is published under <https://www.iqwig.de/de/projekte-ergebnisse/projekte/arzneimittelbewertung/a15-53-secukinumab-neues-anwendungsgebiet-nutzenbewertung-gemaess-35a-sgb-v.7153.html>.