# Secukinumab

## Instructions for use

***Table 1: Instructions for use (Secukinumab)***

Pre-treatment


- Physicians are encouraged to enrol their patients in a registry (if available)
- Objective assessment of disease (such as PASI/BSA/PGA; arthritis)
- HRQoL (such as DLQI/Skindex-29 or -17)
- Medical history and physical examination including prior exposure to treatments, malignancies, infections, inflammatory bowel disease
- Recommended measures include:
  - Check for skin cancer
  - Check for lymphadenopathy
  - Laboratory parameters (see **Table 2**)
  - Exclusion of tuberculosis (see chapter: “tuberculosis”)
  - Check for evidence of active infection
  - Check need for vaccines
- Reliable contraception

During treatment

- Objective assessment of the disease (such as PASI/BSA/PGA; arthritis)
- HRQoL (such as DLQI, Skindex-29 or 17)
- Laboratory parameters (see **Table 2**)
- Medical history and physical examination focusing on infections (in particular upper respiratory tract infections, candida, tuberculosis), contraception, signs or symptoms of inflammatory bowel disease

Post-treatment

- After discontinuation of secukinumab, patients should be followed up with medical history and physical examination
- For information regarding the ongoing need for contraception immediately following biologic treatment cessation, please see chapter "wish for child / pregnancy"

[1] due to personal-financial conflict of interest 4 abstentions

## Recommendations for lab controls

***Table 2: Recommended laboratory controls (Secukinumab)***

| | Period in weeks/months | |
|---|---|---|
| **Parameter** | **Pre-treatment** | **After 3-6 months** |
| Full blood count | X | X |
| Liver enzymes | X | X |
| Serum creatinine | X | |
| Urine status | X | |
| Pregnancy test (urine or blood) | X | |
| CRP | X | |
| HBV/HCV | X | |
| HIV | X | |
| Tuberculosis | X | |
| *Not all tests may be necessary for all patients. Patient history, risk exposure and patient characteristics have to be taken into account. Further specific testing may be required according to clinical signs, risk, and exposure.* | | |
| The recommendations are based on clinical experience. No evidence is available. | | |

## Adverse drug reactions

Please see SmPC and other sources for complete listing. The guideline subcommittee decided to comment on the following aspects:

*Infections*

In the placebo-controlled period of clinical studies in plaque psoriasis infections were reported in 28.7% of patients treated with secukinumab and 18.9% of patients with placebo. Most cases of

infection were mild or moderate upper respiratory tract infections which did not require treatment discontinuation. Mucosal or cutaneous candidiasis were more frequent with secukinumab. Cases responded to standard treatment and did not require treatment discontinuation.[1]

*Neutropenia*

Neutropenia is a rare adverse effect. The exposure-adjusted incidence rate per 100 patient-years for neutropenia with secukinumab treatment was 0.3% in a total of 5181 patients from plaque psoriasis clinical trials representing secukinumab exposures of 10,416.9 patient-years. Grade 3 neutropenia (defined as an absolute neutrophil count between 1.0 and 0.5 × 109/L) was reported in 0.6% patients and grade 4 neutropenia (defined as an absolute neutrophil count of less than 0.5 × 109/L) was reported in 0.04% patients with no dose dependency or temporal relationship to infection in most cases. Most cases of neutropenia were mild, transient and reversible. In contrast to ixekizumab, thrombocytopenia has not been reported. [2]

*Crohn's disease*

The effect of secukinumab on Crohn's disease was studied in a randomized placebo-controlled proof-of-concept trial [3]. Secukinumab 2x10 mg/kg was administered i.v. on day one and day 22. The study was prematurely discontinued due to lack of effect. Four of 39 patients reported exacerbations of Crohn's disease. In the phase III psoriasis clinical trial program, three cases of Crohn's disease were reported as serious adverse events out of which two were exacerbations of pre-existing disease.[4] In patients with psoriasis and Crohn's disease caution, should be exercised and alternative biologicals may be considered before using secukinumab.

*Candidiasis*

Related to the mechanism of action of secukinumab, higher rates of fungal infections, primarily non-serious skin and mucosal candida infections are observed. . Early treatment of candida infections, either with topical or systemic treatment (see **Fehler! Verweisquelle konnte nicht gefunden werden.**) is recommended. Cases are usually described as mild-to-moderate, respond to standard treatment and do not require treatment discontinuation. Note that clinically significant, severe infections are always a contraindication for all biologics.

## Special consideration during treatment

Please see SmPC and other sources for complete listing. The guideline subcommittee decided to comment on the following aspects:

*Surgery*

Real life data on perioperative management of secukinumab has not yet become available. However, there is no evidence to date that continuous treatment with secukinumab will lead to perioperative complications. Patients who need minor surgical treatments including dental treatments and skin surgery, may continue secukinumab treatment. In the case of major surgery, the decision of secukinumab withdrawal should be taken case-by-case considering patient characteristics, the risk of infection, the risk of psoriasis worsening and after counselling with the surgeon.

## Important contraindications

Please see SmPC and other sources for complete listing. The guideline subcommittee decided to comment on the following aspects:

*Absolute contraindications:*

- Clinically important active infections

*Relative contraindications:*

- Pregnancy or breastfeeding
- Inflammatory bowel disease

## Drug interactions

Please see SmPC and other sources for complete listing. The guideline subcommittee decided to comment on the following aspects:

Combinations of secukinumab with other immunosuppressive agents (except for methotrexate)[1] or phototherapy have not been studied.

Il-17 has no direct effect on CYP450 expression. The anti-inflammatory effect of secukinumab may influence CYP450 levels and therefore might interact with the doses of CYP450 dependent medication, especially those with a narrow therapeutic range such as warfarin.[1] Therapeutic monitoring of such drugs should be considered while starting secukinumab.

### Overdose/ measures in case of overdose

No cases of overdose have been reported. Doses of up to 30 mg/kg have been administered in clinical studies. In case of overdose, the patient should be monitored and appropriate symptomatic treatment be instituted immediately.

**References**

1. European Medicines Agency. Cosentyx - Summary of product characteristics (Annex I). 01/04/2016 Cosentyx -EMEA/H/C/003729 -II/0008. In. 2016.
2. Deodhar A, Mease PJ, McInnes IB *et al.* Long-term safety of secukinumab in patients with moderate-to-severe plaque psoriasis, psoriatic arthritis, and ankylosing spondylitis: integrated pooled clinical trial and post-marketing surveillance data. *Arthritis research & therapy* 2019; **21**: 111.
3. Hueber W, Sands BE, Lewitzky S *et al.* Secukinumab, a human anti-IL-17A monoclonal antibody, for moderate to severe Crohn's disease: unexpected results of a randomised, double-blind placebo-controlled trial. *Gut* 2012; **61**: 1693-700.
4. Novartis Pharmaceuticals Corporation. Secukinumab (AIN457) - ADVISORY COMMITTEE BRIEFING MATERIAL: AVAILABLE FOR PUBLIC RELEASE In. U.S. Food and Drug Administration. 2014.