



Covid-19: Guidance for systemic therapy of psoriasis during Covid-19 pandemic

A narrative review of the existing literature was conducted in late September 2020.

Infection with the newly identified SARS-CoV 2 virus can cause a disease termed Covid-19 presenting with characteristic symptoms such as dry cough and fever. Data about Covid-19 in patients with diseases such as psoriasis is still sparse.

As psoriasis is a frequent disorder with approximately 2 out of 100 people in Europe being affected, people with psoriasis have been and will continue to be exposed to the SARS-CoV 2 virus, depending on the course of the pandemic.

Psoriasis is a systemic disease with skin, bone/joint, and vascular inflammation. People with psoriasis have an increased risk for atherosclerosis, myocardial infarction or stroke. Moderate to severe psoriasis is frequently associated with comorbidity such as obesity, hypertension, diabetes, and cardiovascular disease that have been associated with higher mortality in patients with Covid-19.

Is there an increased risk for SARS-Cov-2 infection and Covid-19 in people with psoriasis?

Patients with psoriasis do not appear to be at increased risk of SARS-CoV-2 infection or worse COVID-19 outcomes ¹. First registry data from PsoProtect, CoronaBest, and others do not show an increased risk of SARS-CoV 2 infection or Covid-19 including severe courses in psoriasis patients including those on systemic therapies, mainly on biologics. Some case reports of psoriasis patients receiving systemic treatment developing COVID-19 have been reported with favorable outcome.

Should patients under systemic therapy for psoriasis continue treatment during the Covid-19 pandemic?

There is no data to support treatment interruption in psoriasis patients because of the current SARS-CoV2 pandemic ¹.

A prophylactic treatment discontinuation in an attempt to reduce a possible risk of infection may result in psoriasis flares or reduced efficacy when treatment is being reintroduced.

If patients express concerns about the safety of systemic psoriasis therapy during the Covid-19 pandemic shared-decision making is needed after informing the patient about current guideline recommendations and about the benefits and risks of treatment discontinuation. ²



Should systemic therapy be interrupted in people with psoriasis tested positive for SARS-CoV-2 or with Covid-19?

As potentially negative effects cannot be fully excluded at the given time systemic therapy should be temporarily interrupted in people with psoriasis tested positive for SARS-CoV2 or in those who have Covid-19. After cessation of symptoms re-introduction of systemic therapy is possible and should be decided on a case by case basis.

Should people with moderate-to-severe psoriasis be started on systemic therapy?

Currently, there is no data that indicates starting systemic therapy is a risk factor for SARS-CoV-2 infection or Covid-19.^{1,2}

However, patients should be informed about this lack of data. As part of the shared-decision making it would be advisable for the physician to obtain explicit consent from the patient for whichever treatment decision is jointly decided upon. Monitoring frequencies may be increased in the beginning of newly started systemic therapy.

Is there evidence for a positive effect of systemic therapy in people with psoriasis with SARS-CoV-2 infection or Covid-19?

The clinical characteristics of Covid-19 may be different in populations regarding ethnicity, living environment and other factors. In patients with severe Covid-19 some immunosuppressants have shown beneficial effects including tocilizumab and janus-kinase-inhibitors such as baricitinib³. Current clinical trials are investigating whether f. ex. the IL-6 inhibitor sarilumab, the TNF- α inhibitor adalimumab, and IL-17 inhibitor ixekizumab have beneficial effects in COVID-19 disease⁴⁻⁸.

Registries

To better understand the impact of SARS-CoV-2 infection psoriasis patients tested positive should be followed-up carefully and entered into registries such as PsoProtect (global), or CoronaBest (Germany). People with psoriasis undergoing systemic therapy should be advised to follow current guidelines for hygiene and physical distancing as recommended in their respective area of residence.

Given that this is a novel and rapidly changing situation, recommendations may be modified as more data becomes available.



References

1. Centre of Evidence Based Dermatology. CEBD Coronavirus Dermatology Resource. In. 2020.
2. Russell B, Moss C, George G *et al.* Associations between immune-suppressive and stimulating drugs and novel COVID-19-a systematic review of current evidence. *Ecancermedicalscience* 2020; **14**: 1022.
3. Cantini F, Niccoli L, Matarrese D, Nicastrì E, Stobbione P, Goletti D. Baricitinib therapy in COVID-19: A pilot study on safety and clinical impact. *J Infect* 2020.
4. Feldmann M, Maini RN, Woody JN *et al.* Trials of anti-tumour necrosis factor therapy for COVID-19 are urgently needed. *Lancet* 2020; **395**: 1407-9.
5. A multicenter, randomized controlled trial for the efficacy and safety of tocilizumab in the treatment of new coronavirus pneumonia (COVID-19) In. Anhui, China: Chinese Clinical Trial Registry: ChiCTR2000029765. 2020.
6. A randomized, open-label, controlled trial for the efficacy and safety of Adalimumab Injection in the treatment of patients with severe novel coronavirus pneumonia (COVID-19) In. Shanghai, China: Chinese Clinical Trial Registry: ChiCTR2000030089; 2020. 2020.
7. Evaluation of the Efficacy and Safety of Sarilumab in Hospitalized Patients With COVID-19. In. NLM identifier: NCT04315298. 2020.
8. A randomized, blinded, controlled, multicenter clinical trial to evaluate the efficacy and safety of Ixekizumab combined with conventional antiviral drugs in patients with novel coronavirus pneumonia (COVID-19). In. CHICTR. 2020.