



## Optimizing care for psoriatic patients requiring systemic therapies: how will COVID-19 disease transform risk perceptions?

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Dear Editors,

Many authors have recently published recommendations for patient treatment during the Coronavirus disease 2019 (COVID-19) pandemic [1]. Coronavirus disease 2019 (COVID-19) pandemic outcomes seem to be determined by the extent of imbalances in the host immune system [2]. The primary immune response is positive and leads to viral clearance in the majority of cases. However, for reasons that are unclear, the secondary immune response (“cytokine storm”) may be exaggerated and challenge tissue integrity, sometimes leading to multiple organ failure, acute respiratory distress syndrome (ARDS), and death [2] (Fig. 1). As of 18 May 2020, Italy had 225,549 confirmed COVID-19 cases and 30,332 associated deaths. The median age of patients dying was 80 years; 60.7% of these presented with 3 or more comorbidities (Table 1) [3]. In accordance with recommendations from dermatology societies [4], patients under treatment including biologic agents and apremilast, and/or immunosuppressants were advised not to discontinue their drugs without consultation; cessation of treatment was suggested only with signs of infection. We agree with many suggestions that the interruption of therapies may cause the dysregulation of inflammatory cytokines that may not only exacerbate the disease itself, but may also be involved in the pathogenesis of the viral infection. Actually, there is not an agreement nor a study sustaining the impact of continuing

or stopping treatments in psoriatic patients during the COVID-19 pandemic [4]. But the issue of starting any systemic treatment now or in the coming weeks has not yet been addressed. Immunosuppressants (i.e., corticosteroids, methotrexate, cyclosporine) are associated with an increased risk of infection. The risk is usually dose dependent, varies with each agent, and often relates more to the underlying health condition being treated. Clinical trials and real evidence on biologics (i.e., TNF- $\alpha$ , IL-17, IL-23, and IL12/23 inhibitors) do not show substantial increases in infection risk compared to placebo [5]. Until further evidence is available, the risks and benefits of initiating systemic therapy should be examined on an individual basis, considering the risk of exposure to COVID-19 based on occupation or housing situation and the following factors: endemic area, jobs requiring frequent/close contact with people who may be infected but are not known or suspected patients, healthcare workers, infected family members or co-workers, nursing home residents. In addition, we advise caution starting an immunosuppressive therapy in the presence of risk factors for COVID-19 mortality such as age > 60, hypertension, diabetes and obesity, which are common in psoriatic patients (Table 1). Another logistical parameter that should not be underestimated is the need for frequent careful monitoring during immunosuppressants, with laboratory examinations [5] and routine dermatological follow-ups, which could be problematic under the restrictions on movement. Moreover, now more than ever, biological therapies should be chosen as safer therapeutic options that decrease the rate of morbidity and the risks connected to immunosuppressive therapies. We have highlighted an issue about the drugs chosen by patients who are candidates for systemic therapies in the era of COVID-19. Given all of the above, the authors’ personal opinion is that only biologic treatments or apremilast should be considered when possible in this particular period.

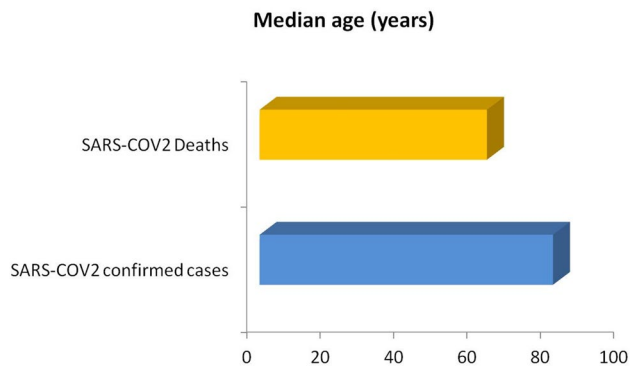
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**Fig. 1** Median age of patients with SARS-CoV-2 infection and SARS-CoV-2-positive deceased patients

**Table 1** Most common comorbidities observed in SARS-CoV-2-positive deceased patients

Diseases	<i>N</i>	%
Hypertension	1317	69.7
Type 2 diabetes	603	31.9
Ischemic heart disease	518	27.4
Atrial fibrillation	411	21.7
Chronic renal failure	405	21.4
COPD (chronic obstructive pulmonary disease)	327	17.3
Active cancer in the past 5 years	301	15.9
Heart failure	298	15.8
Dementia	280	14.8
Obesity	230	12.2
Stroke	206	10.9
Number of comorbidities		
1 comorbidity	273	14.4
2 comorbidities	400	21.2
≥3 comorbidities	1147	60.7

## Compliance with ethical standards

**Conflict of interest** None of the authors have conflicts of interest to disclose.

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