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Reply to: “COVID-19, syphilis, and biologic therapies for psoriasis and psoriatic arthritis: A word of caution”



To the Editor: We thank Dr Kansal¹ from the All India Institute of Medical Sciences for her pertinent comments in response to our publication on the use of biologic agents for psoriasis patients in the current COVID-19 pandemic.² Certainly, there are other diseases for which screening could be considered in particular populations before starting a biologic, such as syphilis, as Dr Kansal makes a point about in her study. Strongyloides and leprosy are others. These screening tests apply to all immunosuppressants, not just biologic immunomodulators. There will always be exceptions to the clinical trial data, but even with 10 to 20 years of real-world data reporting of many of these biologics, we have not seen alarming rates of influenza or other viral infections in the non-tumor necrosis factor inhibitor classes of biologics that would warrant advice to discontinue treatment.

There are several reasons why biologic agents are different from traditional immunosuppressive drugs such as methotrexate or cyclosporine. They are very targeted and do not affect the entire immune system. Most relevant to our current times, many do not impact host defenses against viral infection. For example, individuals born with deficiencies in molecules like interleukin 17 or p40 are prone to chronic mucocutaneous candidiasis or to mycobacterial and salmonella infections.^{3,4} They do not have increased rates of viral infections. Moreover, the skin itself is a vector for spreading COVID-19, and the impact of active skin disease on transmission is unknown. In addition, there has been speculation that reducing overall inflammation in patients with COVID-19 infection protects against the deadly pneumonia that has caused the demise of so many.⁵ Finally, we know that dupilumab, in addition to treating atopic dermatitis, which in itself can be debilitating, also treats asthma, which could be a complicating factor in COVID-19 infection.

To be clear, we cannot know the long-term impact of biologic agents on patients with suspected or confirmed COVID-19 until more time passes and we have more data. For now, the most medical organizations, including the American Academy of Dermatology, the National Psoriasis Foundation, and the International Eczema Council, among others, have advocated *not* discontinuing biologics in patients who are not infected. Of course, these

agents should be discontinued in patients with active infection.

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IRB approval status: Not applicable.

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