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Reply to: Comment on "Serious infections among a large cohort of subjects with systemically treated psoriasis"

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To the Editor: We thank Arnold and Feldman for their thoughtful response to our original investigation.[1] We acknowledge that knowing the magnitude of increased risk and number needed to harm are helpful in comprehensively illustrating clinically significant risk to both providers and patients. We would like to point out that the main comparator group in our study (ie, our reference group noted in Table II)[2] is patients treated with nonbiologic agents, not patients who were exposed to no systemic therapy at the time of the adverse event. The incidence rate of a serious skin and soft tissue infection among those who were using nonbiologic agents was similar to the rate of those on no systemic therapy (0.581% for nonbiologic agent versus 0.584% for no systemic treatment), but lower than the rate of those exposed to a biologic agent (0.736%). For calculating number needed to harm, compared with psoriasis patients treated with a nonbiologic, 1 out of every 645 biologic-exposed psoriasis patients risk hospitalization with a serious soft tissue infection.

Arnold and Feldman end their reply by stating that while there might be an increased risk for a serious adverse infection event due to exposure to a biologic medication, the risk might be small compared with the potential improvement in patients' lives. This is true when comparing biologics versus no treatment. We wish to clarify that we are by no means advocating for no systemic treatment for moderate-to-severe psoriasis, which is why we chose nonbiologic treatment as our primary comparator group. Indeed, when comparing biologic to nonbiologic systemic therapies, both treatments have similar efficacy with respect to objective measures of clinical response (such as the Psoriasis Area and Severity Index score)[3] and patient-reported quality-of-life measures related to disease (such as the Dermatology Life Quality Index).[4]

By publishing these data from a real world setting, we hope to inform patients and providers about the adverse infectious disease outcomes, so they can make clinically informed treatment decisions balancing both risks and benefits. Given the multitude of available therapeutic options for psoriasis, we advocate for increased awareness of adverse serious

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infectious events so that potential infections can be caught early and treated, yielding improved outcomes.

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