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Predicting treatment success with biologics in psoriasis

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Drug survival analyses are frequently used to evaluate the performance of drugs used in chronic conditions in real-world practice, such as biologics for psoriasis.[1] The hypothesis is that a long drug survival indicates that the drug performs well. It is assumed that, if there were problems such as ineffectiveness or side-effects, the drug would have been stopped earlier.[2] Ultimately, it would be valuable for physicians to know beforehand which patients are likely to have successful or unsuccessful drug survival, enhancing personalized medicine. Predictive factors that guide physicians in decision making are needed to fulfil this purpose.

In this issue of the *BJD*, Mourad *et al.* report a systematic review and meta-analysis regarding predictive factors for drug survival of biologics in psoriasis.[3] An extensive search has been carried out leading to the inclusion of 16 cohort studies (n = 32 194) for the review. Three predictive factors were further investigated in a meta-analysis: sex, obesity and a diagnosis of psoriatic arthritis. Female sex and obesity were associated with a higher chance of discontinuation on a subset of biologics, while having a diagnosis of psoriatic arthritis led to lower rates of discontinuation. In a stratified analysis, it was shown that female sex and obesity led to more discontinuations because of adverse events, and that obesity was also associated with more discontinuations as a result of ineffectiveness.

The study by Mourad *et al.* provides important insights into which factors may pose a risk for discontinuation of specific biologics. It could be relevant to choose a drug based on prognostic factors that are present in a specific patient. This may guide physicians already in choosing the right biologic for the individual patient. It should be noted that a direct causal relationship between these prognostic factors and drug survival cannot be estimated from such observational studies. This should be an important topic for future aetiological research. For example, to improve drug survival in women, who more often stop biologics as a result of safety issues, different questions should be answered first. Important questions would be: do women have more safety issues when taking biologics or do they only report more issues? Which safety issues are present? Are preventive measures regarding safety possible? With regards to obesity, other questions are relevant, such as, is weight loss really leading to better survival rates before or during treatment? Should we base our dosages more on weight?

Studies like the present article by Mourad *et al.* are important in an era where multiple treatment options are available, as is the case in psoriasis care today. With many ongoing drug developments, also for other chronic skin diseases, a careful examination of predictive factors for treatment success will remain relevant.

Conflicts of interest

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References

1 Lin PT, Wang SH, Chi CC. Drug survival of biologics in treating psoriasis: a meta-analysis of real-world evidence. *Sci Rep* 2018; **8**:16068.
2 van den Reek J, Kievit W, Gniadecki R *et al.* Drug survival studies in dermatology: principles, purposes, and pitfalls. *J Invest Dermatol* 2015; **135**:1–5.
3 Mourad A, Straube S, Armijo-Olivo S, Gniadecki R. Factors predicting persistence of biologic drugs in psoriasis: a systematic review and meta-analysis. *Br J Dermatol* 2019; **181**:450–58.

How reliable are scoring systems for hidradenitis suppurativa?

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In order to conduct meaningful clinical trials on interventions for disease, the use of proper measurement instruments is key. This is increasingly acknowledged and large initiatives are being founded to improve the field of measurement in medicine. One of these initiatives is called COnsensus-based Standards for the selection of health Measurement INstruments (COSMIN),[1] which mainly aims to develop core outcome sets (COSs), containing an agreed minimum set of outcomes that should be measured and reported in all clinical trials of a specific disease.[2] Such COSs are composed of high-quality