Validation of a new measure of patient global assessment in psoriasis

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The development and use of accurate and reproducible patient reported outcome measures (PROMs) in skin disease are essential to Dermatology clinical trials and routine clinical practice (1, 2). The establishment of Core Outcome sets, for example the HOME initiative in eczema (3), has solidified PROMs as a requisite contribution to the overall assessment of a Dermatology patient. On introduction of a new PROM to clinical practice, validation is required to confirm that the outcome measured provides a standardised way in which to meaningfully understand a patients' subjective disease response (4)

The International Dermatology Outcome Measures group undertook an iterative Delphi process in 2018 to develop a core set of outcome domains for use in psoriasis trials; one of the 6 domains chosen was 'patient global assessment' (5). In this issue of the BJD, Yu et al (6) propose the use of a newly developed patient global assessment (PtGA) score, based on a single-item 11-point numerical rating scale (NRS). Their aim in the study was to evaluate the psychometric properties of the PtGA NRS for disease severity in a population of patients with moderate-to-severe plaque psoriasis, taken from an observational prospective Chinese registry (Shanghai Psoriasis Effectiveness Evaluation Cohort). Yu et al report that the ptGA NRS is a valid and responsive PROM, with a meaningful difference found to be a reduction of 3 points, and a score of ≤2 as a relevant disease end point for a treat to target approach in psoriasis.

Previous measures of PtGA have been developed for psoriasis, including visual analogue scales (VAS), but most have not been validated (7). A comparison of the use of NRS versus VAS in psoriatic arthritis found that both types of scale have high levels of agreement with skin psoriasis outcomes, and that patients preferred the use of the NRS (8). The authors therefore argue that a new, simple NRS is a straightforward way in which to capture this domain. The benefit of a unidimensional measure such as this, is that it may work well across different subtypes of a condition, can be used in different populations and can represent a patient's overall assessment encompassing different issues such as body surface area, plaque severity, and impact. However it is not able to capture the complexity or idiosyncrasies of the patient experience.

The patient population in which the validation took place included only those with chronic plaque psoriasis and a PASI >5. The ability to assess milder psoriasis at baseline was therefore limited, although the authors argue that at week 12 the PtGA NRS worked well for patients with milder disease activity. There was no subgroup analysis of response in different psoriasis sites, for example inverse psoriasis or scalp psoriasis, and other forms of psoriasis were excluded, for example palmoplantar psoriasis. Further studies should look to validate the scale in these populations where validated outcome measures are even more limited.

This validation study therefore presents a new, simple PtGA NRS for psoriasis that appears to function reliably. The PtGA score was associated with BSA, sPGA, and questions within the DLQI showing that it reflects a broad assessment of disease severity from the patient perspective. To

further understand this measure, patient involvement, studies assessing different subtypes and locations of psoriasis, as well as studies in diverse populations, would be required.

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