Author’s response to reviews

Title: A multi-item Physician Global Assessment scale to assess psoriasis disease severity: validation based on four phase III tofacitinib studies

Authors:

Kristina Callis Duffin (kristina.duffin@hsc.utah.edu)

Andrew G. Bushmakin (andrew.g.bushmakin@pfizer.com)

Joseph C. Cappelleri (joseph.c.cappelleri@pfizer.com)

Lotus Mallbris (lotus@mallbris.se)

Carla Mamolo (carla.m.mamolo@pfizer.com)

Version: 1 Date: 17 Jul 2018

Author’s response to reviews:

Response to reviewer 1:

The objective of this study was to perform a more intensive and rigorous analysis of the PGA using data from four phase III studies of tofacitinib in moderate to severe chronic plaque psoriasis. The authors also mentioned that there is currently no recognised standard definition of the PGA.

Authors have concluded that results of their study demonstrate that three-item PGA scale is a valid and reliable instrument for evaluating disease severity in clinical studies of psoriasis there is currently no recognised standard definition of the PGA.

Re: The authors thank the reviewer for this concise description of the study.

1. A more detailed description of study population is required because the clinical scenarios is different from that in clinical trials; extrapolation of these results in clinical practice will be difficult without such details.
Re: We have amended the first sub-heading in the Methods section (page 5, line 81) from Studies to Studies and patients and have included the following text in this section (page 5, lines 92–98 in the revised manuscript):

Patients in all four studies were ≥18 years of age, diagnosed with chronic (≥12 months) stable plaque psoriasis, had a Psoriasis Area and Severity Index (PASI) score of ≥12, a PGA of moderate or severe, and psoriasis that involved at least 10% of their body surface area. All patients were candidates for systemic or phototherapy; in OPT Compare, patients had to have failed to respond to, had a contraindication to, or been intolerant to, at least one conventional systemic therapy (including ultraviolet therapy) approved for plaque psoriasis treatment.

We have also modified page 6, lines 102–103 in the revised manuscript to remove the definition of the acronym PASI, as this is now defined on lines 93–94 in the revised manuscript.


Re: The authors acknowledge that other PGA validation studies have been published.

The first reference cited by the reviewer is also cited in our manuscript: in the Introduction, we state (page 4, lines 69–71 in the revised manuscript) “previous findings from a phase II clinical trial demonstrated the reliability and validity of the three-item PGA for the assessment of psoriasis severity” and in the Discussion (page 17, lines 283–286 in the revised manuscript) “This analysis provides further validation of the three-item PGA tool … following preliminary validation based on data from a single phase II study”, with a citation to the Cappelleri et al. reference in each case. The present study was considered to be a more intensive and rigorous analysis of the PGA, involving data from 3641 patients pooled across four phase III clinical
trials, than that previously described in the publication by Cappelleri et al., which used data from one phase II study of 197 patients.

Regarding the study reported by Simpson et al., this describes the validation of three measures of physician-reported psoriasis severity, including the static Physician’s Global Assessment (sPGA), which is similar to the PGA validated in the current study. The following text has been added to the Discussion (page 17, lines 271-279 in the revised manuscript) “For example, a previous study reported the validation of three measures of physician-reported psoriasis

Response to reviewer 2:

The paper is well written.

Re: The authors thank the reviewer for this comment.

1. I suggest to add that PGA does not quantify body surface area nor individual lesion locations.

Re: We have amended the text in the Discussion (page 19, lines 336–338 in the revised manuscript):

“However, none of the PGA’s items independently and wholly represents the disease and, equally importantly, the PGA does not include the area of involvement, a critical element to be considered when assessing psoriasis severity.” now reads:

“However, none of the PGA’s items independently and wholly represents the disease and, equally importantly, the PGA does not include quantification of the area of involvement, a critical element to be considered when assessing psoriasis severity, nor does the PGA consider the locations of individual lesions.”