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

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Author’s response to reviews:

Comment    Response/Action

Reviewer 1:

1. Please respond to the reviewer's comments, which can be found below and attached. No action required.

2. As your study is a retrospective analysis of data from clinical trials, please remove the "trial registration" section from your abstract. The ‘Trial registration’ section has been removed.

3. Please include the names of the ethics committees that approved the studies in the Ethics approval and consent to participate section of your manuscript.

Please also confirm whether the current study was submitted to and approved by your institutional ethics committee and include a statement to this effect in your Methods and Ethics approval and consent to participate sections. Please also ensure that the full name of your ethics committee is included in this statement. If the need for ethics approval was waived by an IRB or is deemed unnecessary according to national regulations, please clearly state this, including the name of the IRB or a reference to the relevant legislation. In this validation manuscript, data were pooled from four phase III tofacitinib studies that enrolled patients from well over 115 study centres, in over 25 different countries. The list of individual ethics committees is extensive and would be far too long to include in the manuscript. However, we have included the following text (as detailed in the primary publications of each of the four studies) in the ‘Methods’ section (page 9; lines 164–168) and in the ‘Ethics approval and consent to participate’ section of the
‘Declarations’ section (pages 20–21; lines 363–367): “All clinical studies were conducted in compliance with the ethical principles originating in, or derived from, the Declaration of Helsinki, and with the International Council for Harmonisation Good Clinical Practice Guidelines. All documentation was reviewed by the Institutional Review Board and/or Independent Ethics Committee at each of the investigational centres. All patients provided written informed consent.”

4. Please clarify whether any administrative permissions were required to access the raw data from all four studies included in your manuscript. If so please state who granted permission in the Ethics approval and consent to participate section. There were no administrative permissions required to access the raw data from all four studies included in this manuscript.

5. In the section ‘Funding’, please also describe the role of the funding body in the design of the study and collection, analysis, and interpretation of data and in writing the manuscript. The text in the ‘Funding’ section (page 22; lines 391–396) has been updated to reflect the role of the funding body: “All studies included in this analysis were sponsored by Pfizer Inc. Both Pfizer and non-Pfizer authors have participated in the study design, data collection, data analysis and open scientific discussion of the data, its interpretation, and the development of the associated manuscript. The views and opinions expressed within the manuscript are those of all authors and do not necessarily represent those of the funding organisation.”

6. We note that the author LM has not been included in the Author’s contributions section of your manuscript. The individual contributions of ALL authors to the manuscript should be specified in the Authors’ Contributions section. Guidance and criteria for authorship can be found here:

https://urldefense.proofpoint.com/v2/url?u=http-3A__www.biomedcentral.com_submissions_editorial-2Dpolicies-23authorship&d=DwIGaQ&c=Ftw_YSVcGmqQBvrGwAZugGylNRkk-uER0-5bY9tjsc&r=oOl35WDGXVkJQHoaJG85SZphHf2Yn3F_yOoxXNT08&m=TQk8nCh43G53Y2q1vyZ3bDZjM0ZISOSJ1F37p8aPWD8&s=V1fgFpjhikw1DK6ZEVmVbDiQraUyKqH4eI-GKTcSkXk&e=

Lotus Mallbris’ contributions are included, alongside those of all other authors, on page 22 (lines 398–404) of the manuscript, in the section entitled ‘Authors’ contributions’: “KCD, AGB, JCC, LM and CM were all involved in data interpretation, and manuscript drafting, reviewing and development. CM, JCC and AGB also substantially contributed to the design of the work, and KCD contributed to the acquisition of the data. All authors substantially contributed to the analysis or interpretation of data, and all authors drafted the work and/or revised it critically for important intellectual content, approved the final published version of the manuscript, and are accountable for all aspects of this work.”
7. Please remove the funding information from the Acknowledgements and include it in the Funding section instead. Details of the funding can be found in the ‘Funding’ section of the manuscript (page 22; lines 391–396).

8. Please remove the response to reviewers from the file inventory, as this is no longer needed at this stage. The response to reviewers file has been removed from the file inventory.

9. The Availability of data and materials section refers to the raw data used in your study and presenting tables and figures is not sufficient to state that all data is contained within the manuscript and additional files. Please only use this statement if you have indeed provided all raw data on which your study is based. We strongly encourage all authors to share their raw data, either by providing it in a supplementary file or depositing it in a public repository and providing the details on how to access it in this section. If you do not wish to share your data, please clearly state this in this section along with a justification. Data availability statements can take one of the following forms (or a combination of more than one if required for multiple datasets):

• The datasets used and/or analysed during the current study available from the corresponding author on reasonable request.

• The datasets generated and/or analysed during the current study are not publicly available due [REASON WHY DATA ARE NOT PUBLIC] but are available from the corresponding author on reasonable request.

• The data that support the findings of this study are available from [third party name] but restrictions apply to the availability of these data, which were used under license for the current study, and so are not publicly available. Data are however available from the authors upon reasonable request and with permission of [third party name].

Please note that if you do wish to share your raw data and do not have consent from all patients to publish this data it will need to be de-identified.

Please also note that if you include your raw data as a supplementary file you will need to provide, after the References, a section titled “Additional files” where you list the following information about each of your supplementary files: * File name (e.g. Additional file 1), * Title of data, * Description of data. All additional files will also need to have been cited in the main manuscript. The following text has been added to the manuscript under the ‘Availability of data and material’ section on page 21: “Upon request, and subject to certain criteria, conditions and exceptions (see https://www.pfizer.com/science/clinical-trials/trial-data-and-results for more information), Pfizer will provide access to individual de-identified participant data from Pfizer-sponsored global interventional clinical studies conducted for medicines, vaccines and medical devices (1) for indications that have been approved in the US and/or EU or (2) in programmes that have been terminated (i.e., development for all indications has been discontinued). Pfizer will also consider requests for the protocol, data dictionary and statistical analysis plan. Data
may be requested from Pfizer trials 24 months after study completion. The de-identified participant data will be made available to researchers whose proposals meet the research criteria and other conditions, and for which an exception does not apply, via a secure portal. To gain access, data requestors must enter into a data access agreement with Pfizer.”

10. We note that the current submission contains some textual overlap with other previously published works, in particular:


And


This overlap mainly exists in the Methods section.

While we understand that this is work that you have previously published, and some of the same ideas are contained in these publications, please be aware that we cannot condone the use of text from previously published work.

Please rephrase this section where possible and ensure it is fully cited to minimise overlap.

Changes have been made to the text in the Methods section from pages 6–8.

11. At this stage, please upload your manuscript as a single, final, clean version that does not contain any tracked changes, comments, highlights, strikethroughs or text in different colours. All relevant tables/figures/additional files should also be clean versions. Figures (and additional files) should remain uploaded as separate files. Please also take a moment to check our website at https://urldefense.proofpoint.com/v2/url?u=https-3A__www.editorialmanager.com_bder_&d=DwIGaQ&c=Ftw_YSVcGmqQBvrGwAZugGylNR-kk-uER0-5bY94tjsc&r=oOl35WDGXVk-kQHoaJG85SZpghHf2Yn3F_yOoxXNT08&m=TQk8nCh43G53Y2q1vyZ3bDZjM0ZISOSJ1F37p8aPWD8&s=4YXp71LBJRqQX6xRx-ztmVsQI_ce08pBBxrfmDbS5Q&e= for any additional comments that were saved as attachments. Please note that as BMC Dermatology has a policy of open peer review, you will be able to see the names of the reviewers.
Once you have made the necessary corrections, please submit a revised manuscript online at:

https://urldefense.proofpoint.com/v2/url?u=https-3A__www.editorialmanager.com_bder_&d=DwIGaQ&c=Ftw_YSVcGmqQBvrGwAZugGylNRkk-uER0-5bY94tjsc&r=oOl35WDGXVk-kQHoajG85SZpghHf2Yn3F_yOoxXNT08&m=TQk8nCh43G53Y2q1vyZ3bDZjM0ZISOSJ1F37p8aPWD8&s=4YXp71LBJRqQX6xRx-ztmVsQJ_ce0s8pgbbxfmDbS5Q&e= Clean files have been uploaded.

Reviewer 1:

Research Square (Reviewer 3): "STATISTICAL REVIEWER ASSESSMENT:

Is the study design appropriate for the research question (considering whether the analyzed population accurately reflects the design and whether you see any problems with control/comparison groups, e.g., likely confounders)?

Yes - overall design, population, and control groups are appropriate

Are methodologies adequate and well implemented (considering whether assumptions are addressed and whether analyses are robust)?

Yes - methodologies are adequate and well implemented, assumptions are addressed, analysis is robust

Are the analyses adequately communicated (considering whether reporting details are adequate and whether figures and tables are well labeled and described)?

Yes - important reporting details are present, analyses are adequately communicated, figures and tables are well labeled and described

Does the interpretation accurately reflect the analyses without overstatement (considering whether limitations/bias are acknowledged and whether accurate descriptors, e.g., 'significant', are used)?

Yes - interpretation accurately reflects analyses, limitations/bias are acknowledged, accurate descriptors are used

Could an appropriately REVISED version of this work represent a statistically sound contribution?

Yes - current version has sound statistics No changes required.

STATISTICAL REVIEWER COMMENTS:
This is an interesting validation study to validate the PGA scale using data from four phase III studies of tofacitinib among patients with moderate to severe chronic plaque psoriasis. I will limit my review to the methodological aspects as well as the statistical analysis carried out and reported in this study.

This study aimed at achieving this by using Confirmatory Factor Analysis (CFA), assessment of reliability and internal consistency of PGA measurements; definition of the Clinically Important Difference (CID); evaluation of the ability of the PGA to discriminate between different degrees of disease severity; and correlation of the with other clinical outcome measures.

First of all, the data used from the four different studies seems homogeneous (particularly in terms of inclusion criteria of participants) enough to pool them together.

The confirmatory factor analysis is sufficiently reported in methods and results, and seems to have been done well. The same goes for the test-retest reliability and internal consistency reliability evaluations.

Analyses on PGA's ability to differentiate between severity levels of psoriasis and to detect a clinically important difference were also reported with sufficient detail and seem to have been conducted properly. The same also applies to convergent and divergent validity.

REQUESTED REVISIONS: see comments above"  No changes required.