Correspondence in relation to critical appraisal by Chapman et al

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We write to raise some of a number of serious concerns about the recent paper ‘Single maintenance and reliever therapy (SMART) of asthma: a critical appraisal’.1 We believe that it is written in a misleading fashion and contains important errors of fact, presentation and inference.

In the Cochrane review by Bateman et al2 that included full comparative data, as he wrote an accompanying editorial3 and cited it in the present paper. It is unscientific, knowing that symptoms and reliever use outcomes are remarkably similar for fixed-dose and SMART, to not present all the data. It is worse than to imply that fixed-dose, even at the highest approved and marketed doses, achieved target levels of control in the populations studied.

The Cochrane review by Cates and Lasserson,4 limited to comparisons of SMART compared with inhaled corticosteroid monotherapy, is wrongly invoked to support the contention that SMART does not reduce exacerbations compared with current best practice. Furthermore, the Cochrane authors’ conclusions are selectively edited, removing their definition of current best practice and the qualifying phrase ‘although results of five large trials are awaiting full publication’. Chapman and his co-authors are clearly aware of these data. Another Cochrane review that did examine fixed-dose combination therapy, concluding that SMART reduces severe exacerbations requiring oral corticosteroids but not hospitalisation, is not mentioned.5

Suggesting that SMART is proved to be associated with concerning airway inflammation is similarly disingenuous and is inconsistent with key messages constructed by the authors.6 It is misleading to omit that cosinophil counts were in the range of control, that there was no difference in the number of patients who would have been eligible, per protocol, for a maintenance dose increase or decrease, and that fixed-dose combination treatment did not achieve greater improvement in any other asthma endpoint despite more than double the inhaled corticosteroid dose.

This paper purports to be a critical analysis and is published under ‘Review’ in the table of contents. The authors could have presented a balanced description of peer-reviewed evidence, robustly discussing the pros and cons of different medication regimens in clinical practice, but did not. Misrepresentation of scientific evidence is of grave concern. The appropriate response is for the paper to be retracted.

3. Selective citing of text from one Cochrane review,7 with juxtaposition of text to imply that its conclusions were relevant to the studies described immediately before, and failure to cite a more relevant Cochrane review.5

4. Criticism of peer-reviewed publications on the basis of the use of outcome measures which were standard for other randomised controlled trials in asthma at the time (eg, criteria for exacerbations), or on the basis of omission of outcome measures which were either not available (eg, the adherence device used in a 1994 publication) or which have already been reported in a peer-reviewed publication (eg, a composite measure of asthma control).8

Misrepresentation of scientific evidence, whether in a data paper or a review, damages the scientific credibility of a journal. It is difficult to understand how the above errors could have passed through the usually rigorous Thorax peer review system, and this should be a matter of concern to the Editorial Board. The errors in the article, given their number and nature, cannot be addressed by simply publishing an erratum. We call on Thorax to respond appropriately.

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References
7 Single maintenance and reliever therapy (SMART) of asthma

We write to raise concerns about the recent paper by Chapman et al on single maintenance and reliever therapy (SMART) of asthma,4 on the basis that it misrepresents published scientific evidence. The errors include:

1. Reporting outcome measures for one treatment arm from several double-blind studies (table 1 and accompanying text), but omitting the published data5 for comparator arms from the same studies which would have been highly relevant to the authors’ conclusions.

2. Selective omission of data from a peer-reviewed study6 that would have avoided the authors’ doubts about the validity of double-blind double-dummy methodology.

References