Reviewer's report

**Title:** Design and evaluation of software for the objective and easy-to-read presentation of new drug properties to physicians

**Version:** 6  **Date:** 29 December 2014

**Reviewer:** Harry Hochheiser

**Reviewer's report:**

Major compulsory revisions:

I thank the authors for their consideration of my previous review comments. However, I must note that some of the authors’ responses came in the form of rebuttals that argued against my suggestions, as opposed to incorporating them in the manuscript. Below, I summarize these comments, relevant responses, and my comments to those responses:

1. My first concern addressed the application of this tool to new drugs, as opposed to being a more general drug information system. The authors responded: "It would be impossible to design a tool capable of comparing the impact of all the drugs that could be prescribed for the same indication. For each drug, different comparators and endpoints would be used. Information processing would thus be highly complex in any system aiming to compare all the possible drugs for the same indication...Other tools providing guidance for prescription purposes already exist. Instead, this tool is designed to be consulted periodically, by physicians seeking information about new pharmaceutical products."

I disagree with this premise that this tool could not be a general purpose drug information source. Just as the proposed tool displays information about a new medication against a chosen comparator, a general interface could in theory display a selected comparator (perhaps the most frequently prescribed) for an existing drug. That said, I do not believe that this difference of opinion should be a stopping point. Rather, I suggest two specific changes in response to this point:

1a. Please say more about the information systems that provide guidance for prescription purposes, including commercial tools, and clarify differences between the proposed tool and these existing tools.

1b. Indicate why a distinct tool is needed for new drugs, considering that a long-established drug that has not been used by a given practitioner might still be "new" to that individual.

Minor essential revisions:

2. Regarding drug fact boxes, the authors explain that their principal disadvantage is that they are on paper, rather than computerized. I am confused by this statement, as DailyMed (http://dailymed.nlm.nih.gov/dailymed/index.cfm)
provides detailed label information in a web-based format, with an available API. Please acknowledge this availability and discuss any shortcomings, particularly those relevant to your proposed system.

Discretionary revisions:

3. I raised the concern that the proposed interfaces might be inefficient in terms of information density, suggesting that a summary of highlighted information could be provided on the initial screen for any drug. The authors responded by describing the presentation of the synthetic information on the first screen. This is simply a restatement of content in the paper - it is not a substantive response. I suggest the addition of additional discussion of the possibility of adding more detail to the display.

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests