

Peer Review File

Article information: <https://dx.doi.org/10.21037/atm-2022-68>

Reviewer Comments

The paper titled “Refinement of a Pharmacogenomics App for Dosing Guidelines for Oncology: Findings from the Usability Evaluation” is interesting. Unlike former studies, this study focused on the application’s potential for adoption among practitioners rather than merely measuring the application interface usability. The respondents were given specific scenarios for determining the prescription of a drug based on pharmacogenomic algorithms. Therefore, their opinions of usability reflected the respondent’s interaction with the mobile app interface as well as how the app would specify the correct dosing from the genetic information given. However, there are several minor issues that if addressed would significantly improve the manuscript.

Comment 1: How to evaluate the perceptions of a prototype of a clinical decision support tool through a mobile application for pharmacogenomics? It is recommended to add relevant content.

Reply 1: Added information on the six open-ended question that focus on the perception of the mobile application.

Changes in the text: See Page 7, Lines 13-15

Comment 2: The lack of representation of health care providers outside the realm of nursing is too limited in this study.

Reply 2: I agree that further testing should be conducted with other disciplines and I added this information for future areas of research. However, the funding was from the Oncology Nursing Society, which focused this study only on the nursing field.

Changes in the text: See Page 14, Lines 13-16

Comment 3: What are the biggest strengths and weaknesses in this research application? It is recommended to add relevant content.

Reply 3: I added the biggest strengths and weakness of the mobile app and the research study itself within the conclusion and limitations sections.

Changes in the text: See Page 13, Lines 5-12

Comment 4: How can further adjustments be made to improve ease of use for nurse practitioners? It is recommended to add relevant content.

Reply 4: I added the adjustments that will be made such as the addition of a calculator function and a simple step-by-step explanation of how to use the mobile app

Changes in the text: See Page 14, Lines 1-5

Comment 5: In which areas can the application of this research be broadly applicable?
It is recommended to add relevant content.

Reply 5: I added an implications section to highlight the broader applicability.

Changes in the text: See Page 14, Lines 19-23 and Page 15, Lines 1-5

Comment 6: How can the application be applied to pharmacology education? It is recommended to add relevant content.

Reply 6: Added information on how this app could be used as a training tool that health care providers including pharmacists could use to educate fellow health care providers.

Changes in the text: See Page 13, Lines 21-23