

Authors must resolve all issues in the manuscript that are raised in the peer-review report(s) and make point-by-point responses to the issues raised in the peer-review report(s), which are listed below:

Reviewer #1:

**Specific Comments to Authors:** In the manuscript by Ullah et al., the authors reviewed artificial intelligence (AI) applied to various areas of clinical decision making. The topic is very hot, interesting, and relevant. However, I have a few recommendations. 1. A number of applications were enumerated in the section "Applications of artificial intelligence". It will be much easier to follow if this section can be restructured and reorganized so that applications in different fields can be more clearly outlined and compared. 2. Although AI has been put to the forefront in cancer research, translating the exciting technology into clinical practice still faces a lot of challenges. It will benefit the readers if the key challenges and potential new technologies to address the challenges can be discussed in detail. 3. Figure 1 and 2 are cited in the manuscript together for multiple times. I suggest that these two figures can be elaborated with extended captions and cited more appropriately.

**Author Response:** Thank you for your positive assessment. We are grateful for the time and energy you expended on our behalf. The correction was made as requested. The manuscript has been revised to take into account all the comments raised by the reviewer. The figure has been recited to explain the topic with extended captions.

Reviewer #2:

**Specific Comments to Authors:** Recite Figure 1-2 in the paper "Application of artificial intelligence in clinical non-small cell lung cancer, DOI: <https://dx.doi.org/10.35713/aic.v1.i1.19>." to some extent it is recommended to adjust. The abstract is a bit convoluted and lacks clear logic.

**Author Response:** The manuscript has been revised to take into account all the comments raised by the reviewer. The manuscript has been revised to take into account all the comments raised by the reviewer, and references have been included following the reviewer recommendations.

Reviewer #3:

**Specific Comments to Authors:** The author is dealing with the Artificial Intelligence in Cancer. In this paper, Ullah et al. show a quick review of the usefulness of AI approaches in the early detection of cancer. AI is capable of detecting cancer at an early stage with accurate diagnosis and improved survival outcomes. Despite the complex data involved in cancer, AI can identify tumors even in early stages. I think it would be interesting to include some small reference to Soft Computing, as an emerging field of IA in the treatment of uncertainty. I include some references on soft computing techniques, which have provided solutions for cancer, regarding diagnosis, and so on: - Bhatia, A., Mago, V., & Singh, R. (2014, September). Use of soft computing techniques in medical decision making: A survey. In 2014 IEEE International Conference on Advances in Computing, Communications and Informatics (ICACCI) (pp. 1131-1137). - Alcantud, JCR et al. (2019). Analysis of survival for lung cancer resections cases with fuzzy and soft set theory in surgical decision making. Plos one, 14(6), e0218283. The manuscript is very

interesting. The motivation and justification are appropriate. The paper is well written in correct English. Now I include some typographical errors in References: Almost all recommendations are related to the homogenization of capitalization and the full version in the names of the journals Ref. 1: For: a cancer journal for clinicians read: A Cancer Journal for Clinicians Refs. 2 and 5: For: Nature medicine read: Nature Medicine Ref. 4: For: Anticancer research read: Anticancer Research Ref. 6: For: Expert review of medical devices read: Expert Review of Medical Devices Ref. 9: Need For Specialized Therapeutic Stem Cells Banks Equipped With Tumor Regression Enzymes And Anti-Tumor Genes. J BiomedAllied Res Need for specialized therapeutic stem cells banks equipped with tumor regression enzymes and anti-tumor genes. Journal of Biomedical and Allied Research Ref. 13: M. Rantalainen Rantalainen, M. Ref. 14: Pearce, G., et al. Artificial neural network and mobile applications in medical diagnosis. In 2015 17th UKSim-AMSS International Conference on Modelling and Simulation (UKSim). 2015. IEEE, Cambridge, pp. 61-64. Ref. 17: Ageing Res Rev Ageing research reviews Ref. 18: For: Ullah M, A.A., Clinical Relevance of RNA Editing to Early Detection of Cancer in Human. Int J Stem Cell Res Ther 2020. 7:066. . read: Ullah, M. and Akbar, A., Clinical Relevance of RNA Editing to Early Detection of Cancer in Human. International Journal of J Stem Cell Research & Therapy 2020. 7:066. Ref. 20: The Pandemic of Novel Coronavirus Disease 2019 (COVID-19): Need for an Immediate Action The pandemic of novel coronavirus disease 2019 (COVID-19): Need for an immediate action Ref. 21: Health and technology Health and Technology.

**Author Response:** Thank you for your positive assessment. We have addressed all the comments by the reviewer and we hope the correction was made as requested. The manuscript has been revised to correct the typographical errors, notably in the references. Some references on soft computing techniques have been added following the reviewer recommendations.

**Reviewer #4:**

**Specific Comments to Authors:** Throughout the very short manuscript, the authors have not centralized an obvious issue that is what AI do and How AI will do to the cancer diagnosis or treatment. Of course, with such a short paragraph, it is not of possibility to implicate such a broad area at all. If the point of view focused just on the early diagnosis, it will has some probability to express it superfluously. The author information are not in conformity in the some section of manuscript. The references are not uniformed according to the author guidance.

**Author Response:** Thank you for your comment. Accordingly, we proofread and corrected typographical errors. The correction was made as requested. The objective is not to provide to the readers an exhaustive review of the literature that is expanding over the last few years, but rather an overview of AI applications for the early detection of cancer.

#### **Step 6: Editorial Office's comments**

Authors must revise the manuscript according to the Editorial Office's comments and suggestions, which are listed below:

**(1) Science Editor:** 1 Scientific quality: The manuscript describes an evidence review of the applications of artificial intelligence in, early detection of cancer. The topic is within the scope of the AIC. (1) Classification: Grade A, Grade B, Grade C and Grade D; (2) Summary of the Peer-Review Report: The

author is dealing with the Artificial Intelligence in Cancer. In this paper, the authors show a quick review of the usefulness of AI approaches in the early detection of cancer. AI is capable of detecting cancer at an early stage with accurate diagnosis and improved survival outcomes. Despite the complex data involved in cancer, AI can identify tumors even in early stages. The questions raised by the reviewers should be answered; and (3) Format: There are 2 figures. A total of 22 references are cited, including 18 references published in the last 3 years. There is 1 self-citation. 2 Language evaluation: Classification: Two Grades A, Grade B and Grade C. 3 Academic norms and rules: The authors provided the signed Conflict-of-Interest Disclosure Form and Copyright License Agreement. No academic misconduct was found in the CrossCheck detection and Bing search. 4 Supplementary comments: This is an invited manuscript. No financial support was obtained for the study. The topic has not previously been published in the AIC. 5 Issues raised: (1) The “Author Contributions” section is missing. Please provide the author contributions; (2) The authors did not provide original pictures. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor; (3) PMID and DOI numbers are missing in the reference list. Please provide the PubMed numbers and DOI citation numbers to the reference list and list all authors of the references. Please revise throughout. 6 Re-Review: Required. 7 Recommendation: Conditional acceptance.

[Author Response: Thank you for your comment. We added the PubMed numbers and DOI citation numbers to the reference and listed all authors.](#)

**(2) Editorial Office Director:** I have checked the comments written by the science editor.

**(3) Company Editor-in-Chief:** I have reviewed the Peer-Review Report, full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the Artificial Intelligence in Cancer, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office’s comments and the Criteria for Manuscript Revision by Authors.

[Author Response: Thank you for your comments.](#)