For research article

Response to Reviewer 1 Comments

1. Summary

Thank you very much for taking your valuable time to review this manuscript. Please find the detailed responses below and the corresponding revisions/corrections highlighted/in track changes in the re-submitted files.

2. Questions for General Evaluation	**Reviewer's Evaluation**	**Response and Revisions**
Does the introduction provide sufficient background and include all relevant references?	Yes	
Are all the cited references relevant to the research?	Yes	
Is the research design appropriate?	Yes	
Are the methods adequately described?	Yes	
Are the results clearly presented?	Can be improved	
Are the conclusions supported by the results?	Yes	

3. Point-by-point response to Comments and Suggestions for Authors

Comments 1:

Dear Authors

Thank you for giving me the opportunity to review your manuscript. I really appreciate the time and effort dedicated in this paper. The authors present a novel study with a new MMR screening with the use of AI. Congratulations for this great idea!

Material and Methods

1. Why did the authors exclude non-endometrioid cases? MMRd is present in 10-16% of non-endometrioid histology. It should be explained in M&M.

Response 1:

Thank you for important point. As you rightly pointed out, but unfortunately, there were insufficient specimen to construct appropriate classification models for serous cancer and clear cell cancer individually. Therefore, we have excluded them from this study. Therefore, we have added description to Materials and Methods about the number of excluded cases

and the reasons for their exclusion (Page3-4, Line 146-152).

Comments 2:

2. Line 141. Have the authors considered the possibility of performing in preoperative sample? The concordance is excellent when it is compared to surgical specimen (Berg et al. 2023. doi: 10.1038/s41416-022-02063-3)

Response 2:

Thank you for pointing this out. We also considered about constructing an AI classification model using preoperative curettage samples. However, many endometrial curretage specimens exhibited significant degradation and deformation, making it difficult to obtain a sufficient quantity of noise-free tumor region image data to construct a classification model. Additionally, we have added detailed description referring to the paper you suggested to address this issue (Page11-12, Line 441-449).

4. Response to Comments on the Quality of English Language

Point 1:

Response 1:

Thank you for your important suggestion. The manuscript has already undergone English editing by MDPI English editing service at the "Academic" quality level. For the additional content in this revision, I also utilized the MDPI service. Please find attached pdf files of the certificate of English editing.

5. Additional clarifications