

Answers to the comments:

Dear Editor,

We completed the revision of our manuscript entitled "Artificial intelligence applications in predicting the behavior of gastrointestinal cancers in pathology" (MS Number: 80897). According to your decision and the comments of the 1st referee:

1. We accepted the transfer of our manuscript to the Journal of Artificial Intelligence in Gastroenterology.

According to the comments of the second referee, the following revisions have been made:

From an organizational/structural perspective of the paper, it is recommended to separate the discussion regarding the organ-specific cancers (gastric, colorectal, esophageal) and the evaluation of AI having to do with lymph node metastasis, tumor subtypes, and tumor microenvironment and stroma ratio, as the latter are concepts that affect all different types of tumors. Therefore:

A. The manuscript is divided into the following main headings:

- Introduction
- General view of AI in pathology laboratories
- AI in the pathological determination of preneoplastic lesions in GIS:
- AI in the pathological determination of tumor behavior in GIS:
- Overall Limitations of AI-Based Applications in Real-Life Practice:
- Conclusion

B. The section "AI in the pathological determination of preneoplastic lesions in GIS" are separated into the subheadings Barrett's esophagus and Colorectal polyp classification.

C. The section AI in the pathological determination of tumor behavior in GIS is presented under the subheadings Tumor subtyping, Lymph node metastasis, The tumor stroma ratio, tumor microenvironment, tumor

budding, and Survival outcomes. In each subheading, data is also presented separately for Gastric and Colorectal cancers.

D. According to the revision of the structural organization:

The statements in the first submitted form of the manuscript (Page 7, lines 4-9)." Unfortunately, no studies have identified the important parameters in determining tumor behavior and survival in EC. Similarly, studies of EC concerning molecular characterization have not been found. Therefore, in EC, a tumor with extremely high mortality, it is clear that additional pathology studies are necessary to reveal the effectiveness of AI applications in predicting tumor behavior" transferred to the first paragraph of the section AI in the pathological determination of tumor behavior in GIS.

E. The number of many references has been changed

- .The number of references about the classification of colorectal polyps 94-105 (12 references) in the first submitted form of the manuscript has been changed to" 51-62."
- The number of references 51-77 (26 references) about tumor subtypes in GC in the first submitted form of the manuscript has been changed to" 63-88". Besides, a double-cited reference is noted, and one of them is removed (Arai T et al., Ref 51 and 63)
- The number of references 106-119 (14 references) about tumor subtypes in CRC in the first submitted form of the manuscript has been changed to "89-102".
- The number of references 78-84 (7 references) about lymph node metastasis in GC in the first submitted form of the manuscript has been changed to" 103-109".
- The number of references 133-135 (3 references) about lymph node metastasis in CRC in the first submitted form of the manuscript has been changed to" 110-112".

- The number of references, 85-88 (4 references) about the tumor stroma ratio, in GC in the manuscript's first submitted form has been changed to "113-116".
 - The number of references 120-129 (10 references) about the tumor stroma ratio, tumor microenvironment, and tumor budding in CRC in the first submitted form of the manuscript has been changed to "117-126."
 - The number of references 89-93 (5 references) about survival outcomes in GC in the first submitted form of the manuscript has been changed to "127-131."
 - The number of references 130-132 (3 references) about survival outcomes in CRC in the first submitted form of the manuscript has been changed to "132-134."
2. A separate paragraph about the overall limitations of AI is provided
According to the comments. A section before the conclusion is presented as
"Overall Limitations of AI-Based Applications in Real-Life Practice."
Therefore new references (refs no 135-143) have been added.
3. Table numbers have been changed due to changes in the text. In addition, the reference numbers in the tables have been revised. Again, according to the structural changes, the last three rows in Table 2 (in which the data related to CRC are presented) have been brought under the 16th row, which includes the relationships with lymph node metastasis.
- Thank you for your recommendations.