# Dear Editors,

Thank you very much for giving me the opportunity to revise my manuscript (Artificial Intelligence in Cancer, manuscript NO: 74661).

#### Reviewer #1:

- 1. In this minireview, the author introduce the use of Artificial intelligence (AI) in gastric cancer diagnostics to increase diagnostic efficiency, especially for the early detection of lesions which both support the less experienced endoscopist and the one experienced. The article presents the latest developments in the diagnosis of EGC with AI. However, the author does not discuss much about the limitations of AI in diagnosis of EGC.
- 1) I have implemented the discussion as suggested (P 8-9):
- "Ultimately, the overall performance of AI in identifying and classifying EGCs is even better than that of experienced ......should be carried out."

However, I emphasize that the most recent reviews document that the limitations of artificial intelligence in the diagnosis of early gastric cancer have decreased.

### Reviewer #2:

- **1.** (Abstract) The sentence, "AI can represent a greater opportunity for the early detection of lesions because supporte the less experienced endoscopist, but also the one experienced, in defining the margins of the tumor and the depth of infiltration." seems include grammatical and spelling errors. Please confirm it.
- 1) The correction has been made:
- "AI improves the early detection of gastric lesions because it supports both the non-expert endoscopist, for detection, and expert, in defining the margins of the tumor and the depth of infiltration."
- **2.** (P3L26) Please give some examples of multiple factors.
- 2) The correction has been made:
- "..and is modified by multiple factors, such as training and technologies."
- $\boldsymbol{3.}~(P4L12)$  Please enter a bar between 40% and 60%.
- 3) The correction has been made.
- **4.** (P5L22,23) A unit of "lm" seems strange. I think "μm" is common.
- 4) The correction has been made.
- **5.** (P6L20) Please add the numbers of related references on "Current studies".
- 5) The correction has been made.
- **6.** . I recommend that the authors add a table regarding the outcomes of the extracted studies.
- 6) The table has been added (Table 2).
- 7. This article mainly described the excellent outcomes for diagnosing early gastric cancer. The authors should discuss the challenges to overcome for clinical use of AI in this field as well.
- 7) We have implemented the discussion as suggested (P 8-9).

## Reviewer #3:

**1.** The author should introduce the general operations about the diagnosis of GC, such as CT, MRI, US, and emphasize the advantage of endoscopic, and the disadvantage of endoscopic in the clinical practice.

Thank you for this interesting observation. My manuscript focuses on early gastric cancer.

I added the following sentence in the paper (The optical endoscopic diagnosis of EGC):...While in the diagnosis and staging of advanced GC, computed tomography, endoscopic ultrasound and positron emission tomography are important,...

However, my manuscript focuses on the diagnosis of early gastric lesions.

- **2.** AI technology is also used in some others, such as CT or MRI, I also suggest the author introduce some background in the introduction section.
- 2) Thank you for the interesting observation. I added the following sentence in the paper (Introduction):...as well as for the detection of invasion depth, lymph node and peritoneal metastasis with imaging techniques.

### Reviewer #4:

- **1.** In this manuscript, the author reviewed the published papers related CAD systems in the diagnosis of EGC and concluded that the AI recognizes those lesions even better than the most experienced endoscopists can detect. Generally, this is an interesting and well-written minireview with sufficient references, though similar topic has been published in other journals.
- 1) Thank you for the appreciation of our study.