

Dear Editor

We would first thank you and the reviewers for a constructive feedback making it possible to improve the editorial. The text has been reviewed for language editing and a certificate has been provided. The changes have made the manuscript more reader friendly. The language editing has not been tracked in the manuscript but this can be provided if necessary.

The references have also been adjusted according to the journals requirements. One very recent publication from Nature Biomedical Engineering has got a PMID yet so a link to the manuscript has been provided

We now hope that the manuscript is ready for publication

On behalf of the authors

Sincerely,

Thomas de Lange

Point to point response to the reviewers:

Reviewer 1

This is a review article about machine learning in GI endoscopy field. This article provides the concept and the perspective in a way that is easy to understand. I would prefer if it provides more of recent studies in this field, because many studies have been recently published in this area. But still I am impressed by this article.

Thank you for this comment. We realize that we have omitted several new studies and have added 11 references, most of them from 2018. See below

Reviewer 2

Well written, and educational manuscript based on authors' papers. There are some reports published about deep learning about gastrointestinal endoscopy. Please refer to them and discuss. Thank you for this comment. We have added two paragraphs to be more specific about recent publications regarding deep learning in endoscopy and pathological conditions where the use of artificial intelligence has been tested.

In the machine learning chapter we have added a new first paragraph
«Automated detection of anomalies in the GI tract have been proposed for diseases such as Barrett's esophagus, gastric cancer, angiectasia, celiac disease, polyp detection and characterization and a number of methods and algorithms have been tested in the recent years.

We have also added a new sentence in the conclusion:

“Another limitation is that the lesion characterization systems rely on advanced endoscopic functionality like Narrow Band Imaging, endoscopy or Volumetric laser endomicroscopy, to which most endoscopy units do not have access, particularly not in the low income countries.

We have also added one publicly available dataset in the table.

References added after the revision.

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On behalf of the authors

Yours sincerely

Thomas de Lange