

Peer Review File

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Review comments

Reviewer A

Thank you for giving me an opportunity to review this manuscript.

The manuscript is well organized and organized. There was no part of the article that needed correction.

Personally, I cannot agree with the MAPS II guidelines for surveillance of HGD in which no lesion can be found on 2nd endoscopy.

HGD has a high possibility of upstage after endoscopic resection, the interval of 6 months is long. However, since there are no other established guidelines other than MAPS II for these cases, I think it would be difficult to introduce a different opinion.

***Authors' reply: We thank reviewer A for taking the time to read and improve our work. We understand that the MAPS II guidelines have caused some controversy within the field and empathize with the concern. Based on reviewer B's comments, we have substantially truncated the surveillance section, including the details on MAPS II guidelines. In this case, we also provide references so readers can access the primary documents if they so choose. ***

Reviewer B

The authors reviewed the recent progression in detection and surveillance of precursor lesions of non-cardia gastric adenocarcinoma (NCGA), focusing on expert opinions from recent literature.

The review lacks **a detailed analysis of image-enhanced endoscopy (IEE)**.

***Authors' response: We agree with reviewer B and C's comments on the lack of expansion regarding image-enhanced endoscopy (IEE). In order to provide readers with more information, we have added a section discussing the features of blue-laser imaging and color linked imaging. ***

The second part, which consists of a summary of the guidelines published in the United States and Europe, is not informative for the readers and should be eliminated. Readers interested in the original guidelines should refer to the respective literature sources in the search.

***Authors' reply: We agree with reviewer B's sentiment on the excessiveness of the summary of US and European guidelines. As a result, we have substantially reduced*

*the surveillance section to focus on comparing and contrasting the guidelines and highlighting overarching themes. There have been various guidelines published on GIM surveillance that combine individual levels risk factors and tissue level risk factors (e.g. anatomic extent, severity, completeness) to risk stratify patients for subsequent cancer risk. Based on this stratification, either general surveillance intervals (AGA) or specific intervals (MAPS II) are defined. We agree that a comprehensive review of these guidelines is beyond the scope of the present work. Instead, a list of the guidelines is provided in the references and can be referenced by the reader. ***

The second part is not informative for the readers. **The original paper should be referred in the literature search.** This part should be eliminated.

***Authors' reply: While we agree with review overall sentiment, we strongly feel that the section on surveillance of dysplasia should be kept. We believe this to be so because there are no clear guidelines for management of dysplasia within current literature. In this section we have comprehensively reviewed the limited guidelines and have synthesized our own novel interpretation into a clear, cohesive management plan. The "figure 5" presents this management plan and is entirely de novo. As such, we feel that the section on dysplasia substantially adds novelty and fills a gap in the existing literature. ***

Reviewer C

The authors describe the methods of detection of cancer precursor conditions and lesions in the stomach and summarize the guidelines concerning their surveillance. The manuscript concerns a very important topic and is generally well written but, in my opinion, it would benefit from some improvements.

The title is not fully informative. It should be rather "Detection and surveillance of gastric cancer precursor conditions and lesions: Evolving guidelines and technologies" or "Detection and surveillance of precancerous conditions and lesions in the stomach: Evolving guidelines and technologies"

***Authors' reply: We acknowledge the deficits in the current title and appreciate the feedback. In order to create a more comprehensive and accurate title we have changed it from "Detection and Surveillance of Precursor Lesions of the Stomach: Evolving Guidelines and Technologies" to "Detection and Surveillance of Gastric Cancer Precursors: Evolving Guidelines and Technologies" ***

My main objection to this manuscript is that in many places the authors cite quite old literature. For example, in line 118 they criticize WLE citing the article written in the

year 1984. At that time there were no high-definition white light imaging. Nowadays with high-definition imaging the value of WLE has much increased. In line 119 the authors write about the recent advances and cite the study from 2014 which is not recent. In line 173 the authors cite the study from 1988 although there is a recent one **DOI: 10.1136/bmjgast-2022-000976**

Authors Response: We appreciate Reviewer C's thoughtful feedback on the lack of recent literature for the review article, thereby limiting its applicability to current practice. We agree with this sentiment and have integrated more updated references regarding WLE and chromoendoscopy so readers can gain a better understanding. For the prior line 118, we have added details regarding high definition WLE, citing doi: 10.1097/MEG.0000000000000097. We have also discussed recent advances in technology citing doi: 10.21037/dmr-21-57 and DOI: 10.1055/s-0042-118087 For the prior line 173, we have integrated more recent literature, citing DOI:10.1136/gut.2004.049171 and DOI: 10.1136/bmjgast-2022-00097

It would be nice to underline which from described methods may serve to screen for GIM during gastroscopy and which aim rather to differentiate the character of the lesions without the biopsy.

***Authors' response: We appreciate the reviewer's comments on emphasizing which modalities screen and which can differentiate the severity of the lesions. We have integrated the studies (doi: 10.5946/ce.2022.087) and (DOI: 10.1055/a-0808-3186) mentioned below that have been shown to predict severity advanced OLGIM stages. We have additionally added a new section on recent imaging modalities such as BLI/CLI. ***

As it is suggested in the MAPS II guidelines the patients should be scored in OLGIM classification because it is the basis of deciding about the further observation of the patient. The authors should write if methods they described were proved to be able to predict advanced OLGIM stages. As far as I know it was lately proved for methylene blue chromoendoscopy (**doi: 10.5946/ce.2022.087**) and for NBI (**DOI: 10.1055/a-0808-3186**).

Authors' response: We thank the reviewer for mentioning important studies that identify modalities that can be utilized to predict advanced OLGIM stages and differentiate the character of the lesions. As mentioned previously, we have included the above references to the manuscript under the individual sections of imaging techniques

The BLI method has not been mentioned although it is more accessible than CLE or AFI.

***Authors' response: We agree with reviewer C's comments on the lack of discussion regarding other techniques of image-enhanced endoscopy (IEE). Based on both reviewer B and C's comments, we have expanded this section and added a portion to the manuscript that features blue-laser imaging and color linked imaging, as well as highlighting current studies in recent literature. ***

The authors may also add what are the main advantages and drawbacks of each method.

Authors' response: We agree with reviewer C's comments and have added additional detail highlighting the advantages and disadvantages for the different imaging modalities

In the conclusion part (line 338) the word scourge sounds weird (maybe it is an idiom that I don't know). In line 343 the word "now" seems redundant.

Authors' response: In the conclusion section, we have edited the language for clarity and removed redundant phrases to improve the conciseness