PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 54644

Title: Chronic atrophic gastritis detection with a convolutional neural network considering stomach regions

Reviewer's code: 03009411

Position: Editorial Board

Academic degree: MD

Professional title: Associate Professor, Chief Physician, Doctor

Reviewer's Country/Territory: China

Author's Country/Territory: Japan

Manuscript submission date: 2020-02-17

Reviewer chosen by: AI Technique

Reviewer accepted review: 2020-02-17 05:40

Reviewer performed review: 2020-02-17 05:49

Review time: 1 Hour

Scientific quality	[ ] Grade A: Excellent [ ] Grade B: Very good [Y] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Language quality	[Y] Grade A: Priority publishing [ ] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[ ] Accept (High priority) [Y] Accept (General priority) [ ] Minor revision [ ] Major revision [ ] Rejection
Re-review	[ ] Yes [ ] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

Helicobacter pylori associated gastritis is a common clinical disease, especially in Asia. The risk of gastric cancer is increased in patients with Helicobacter pylori associated gastritis, especially in patients with atrophic gastritis. Gastroscopy is the most direct way to find and diagnose Helicobacter pylori associated gastritis, but for patients who are not willing to accept gastroscopy or in countries and regions where gastroscopy screening has not been widely used, X-ray examination has advantages and has better clinical value to improve the accuracy of the examination.   To evaluate the effectiveness of stomach regions that are automatically estimated by a deep learning-based model for gastritis detection, the authors used 815 GXIs (200 for training and 615 for evaluation) obtained from 815 subjects. By using GXIs with the stomach regions for training, the proposed method realizes accurate gastritis detection that automatically excludes the effect of regions outside the stomach.   As a preliminary exploration, this study has better clinical value and application prospects, but more multi angle samples and clinical centers are needed to further explore.

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Language quality	[ ] Grade A: Priority publishing [Y] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[ ] Accept (High priority) [Y] Accept (General priority) [ ] Minor revision [ ] Major revision [ ] Rejection
Re-review	[ ] Yes [ ] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

This indeed is a useful study, especially in regions such as Japan where early detection of pre-cancerous lesions is indicated. However, I suggest the following inputs: 1. Please state in detail how the X-ray studies were performed, i.e., contrast used, amount used, technique of fluoroscopy / exposure details 2. The term 'gastritis' suggests inflammation, an entity that obviously cannot be seen on X-ray. Can the authors find a better term? For example, are they looking for stages of atrophy, as the Kimura-Takemoto classification suggests? 3. Please mention the specific features on X-ray that you looked for 4. A statement that this is a complement to endoscopy should be made. How this fits in in clinical practice can be stated

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Language quality	[Y] Grade A: Priority publishing [ ] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[ ] Accept (High priority) [Y] Accept (General priority) [ ] Minor revision [ ] Major revision [ ] Rejection
Re-review	[ ] Yes [ ] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

The manuscript can be accepted for publication

RE-REVIEW REPORT OF REVISED MANUSCRIPT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 54644

Title: Chronic atrophic gastritis detection with a convolutional neural network considering stomach regions

Reviewer's code: 02505493

Position: Editorial Board

Academic degree: DPhil

Professional title: Professor

Reviewer's Country/Territory: Greece

Author's Country/Territory: Japan

Manuscript submission date: 2020-02-17

Reviewer chosen by: Jin-Zhou Tang (Quit in 2020)

Reviewer accepted review: 2020-04-15 05:58

Reviewer performed review: 2020-04-15 07:17

Review time: 1 Hour

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Language quality	[Y] Grade A: Priority publishing [ ] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[ ] Accept (High priority) [Y] Accept (General priority) [ ] Minor revision [ ] Major revision [ ] Rejection

Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous
	Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

The authors have followed the suggestions of the reviewers, so the manuscript can be accepted for publication.

Scientific quality	[ ] Grade A: Excellent [ ] Grade B: Very good [Y] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Language quality	[Y] Grade A: Priority publishing [ ] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[ ] Accept (High priority) [Y] Accept (General priority) [ ] Minor revision [ ] Major revision [ ] Rejection
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

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Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Language quality	[Y] Grade A: Priority publishing [ ] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[ ] Accept (High priority) [Y] Accept (General priority) [ ] Minor revision [ ] Major revision [ ] Rejection
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

Helicobacter pylori associated gastritis is a common clinical disease, especially in Asia. The risk of gastric cancer is increased in patients with Helicobacter pylori associated gastritis, especially in patients with atrophic gastritis. Gastroscopy is the most direct way to find and diagnose Helicobacter pylori associated gastritis, but for patients who are not willing to accept gastroscopy or in countries and regions where gastroscopy screening has not been widely used, X-ray examination has advantages and has better clinical value to improve the accuracy of the examination.   After revision of the manuscrip , readers can better understand the content of the article.