

PEER-REVIEW REPORT

Name of journal: *World Journal of Gastrointestinal Oncology*

Manuscript NO: 87250

Title: Application of convolutional neural network-based endoscopic imaging in esophageal cancer or high-grade dysplasia: A systematic review and meta-analysis

Provenance and peer review: Unsolicited manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 06259610

Position: Peer Reviewer

Academic degree: N/A

Professional title: N/A

Reviewer's Country/Territory: United States

Author's Country/Territory: China

Manuscript submission date: 2023-08-01

Reviewer chosen by: AI Technique

Reviewer accepted review: 2023-08-02 18:30

Reviewer performed review: 2023-08-14 02:39

Review time: 11 Days and 8 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Novelty of this manuscript	<input checked="" type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No novelty
Creativity or innovation of this manuscript	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No creativity or innovation

Scientific significance of the conclusion in this manuscript	<input checked="" type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No scientific significance
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous
	Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

Thank you for the opportunity to review your interesting paper "A meta-analysis of the diagnostic accuracy of CNN models for the diagnosis of esophageal cancer and high-grade dysplasia". The paper is well-written and easy to follow. I have a few comments/suggestions: - How confident are you with the method used to pool the studies given the high heterogeneity? Does the method take into consideration variance between studies? - The left side of the flowchart is empty - Nationality: Asia, Europe...It will be more informative to provide the name of the country or change to Continent. -"These data were derived from the previously studies, which have been cited." I think you meant "from previous studies".

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Provenance and peer review: Unsolicited manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05548742

Position: Peer Reviewer

Academic degree: MD, PhD

Professional title: Assistant Professor

Reviewer's Country/Territory: Japan

Author's Country/Territory: China

Manuscript submission date: 2023-08-01

Reviewer chosen by: AI Technique

Reviewer accepted review: 2023-08-15 04:11

Reviewer performed review: 2023-08-21 11:37

Review time: 6 Days and 7 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Novelty of this manuscript	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No novelty
Creativity or innovation of this manuscript	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No creativity or innovation

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Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input checked="" type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous
	Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

The authors show “Application of convolutional neural network-based endoscopic image in diagnosis, treatment and prognosis of esophageal cancer and high-grade dysplasia patients”. The authors present a variety of data, and the manuscript is presented in a timely fashion. However, there are several concerns regarding this article that the authors need to clarify. Listed below are my specific comments. 1. Have you considered the model of endoscope? Because I believe that there will be differences in what can be done depending on the model, such as using Endocytoscopy, etc. What do you think? 2. You mention low grade dysplasia in the introduction, but did you not include it in this study? If so, shouldn't it be included in the introduction? 3. The endoscopic images of adenocarcinoma and SCC are completely different. Shouldn't they be considered separately? Also, there are some fundamental differences in pathological diagnosis between regions. What are your thoughts on this? In light of this, wouldn't it be better to consider obvious cancer and dysplasia separately? 4. The authors stated that CNN based on still images can be applied to a wide range of gastrointestinal diseases and endoscopic functions. If you state this, you should present references to CNNs for



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the detection and function of other diseases. 5. The authors stated that “The CNN model should therefore allow WLI to have a stronger therapeutic impact in places where medical resources are limited and where only WLI technology is available”. It has been more than 20 years since the development of NBI and other methods. While I understand the authors' opinion, I do not believe that facilities that make decisions based solely on WLI are required to perform a thorough examination for esophageal cancer, nor are they facilities that use CNN. In addition, I believe that a certain level of endoscope model is required to use CNN, and it is unlikely that technologies such as NBI cannot be used. I think this sentence is unnecessary.