**PEER-REVIEW REPORT**

**Name of journal:** World Journal of Gastroenterology  

**Manuscript NO:** 67567  

**Title:** Application of endoscopic ultrasonography for detecting the esophageal lesion based on convolutional neural network  

**Provenance and peer review:** Invited Manuscript; Externally peer reviewed  

**Peer-review model:** Single blind  

**Reviewer’s code:** 00722786  

**Position:** Editorial Board  

**Academic degree:** MD, PhD  

**Professional title:** Assistant Professor, Chief Doctor, Research Assistant Professor  

**Reviewer’s Country/Territory:** Serbia  

**Author’s Country/Territory:** China  

**Manuscript submission date:** 2021-04-27  

**Reviewer chosen by:** Jin-Lei Wang  

**Reviewer accepted review:** 2021-05-04 18:51  

**Reviewer performed review:** 2021-05-04 19:44  

**Review time:** 1 Hour

<table>
<thead>
<tr>
<th>Scientific quality</th>
<th>[ ] Grade A: Excellent</th>
<th>[Y] Grade B: Very good</th>
<th>[ ] Grade C: Good</th>
<th>[ ] Grade D: Fair</th>
<th>[ ] Grade E: Do not publish</th>
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</thead>
<tbody>
<tr>
<td>Language quality</td>
<td>[ ] Grade A: Priority publishing</td>
<td>[Y] Grade B: Minor language polishing</td>
<td>[ ] Grade C: A great deal of language polishing</td>
<td>[ ] Grade D: Rejection</td>
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<tr>
<td>Conclusion</td>
<td>[ ] Accept (High priority)</td>
<td>[Y] Accept (General priority)</td>
<td>[ ] Minor revision</td>
<td>[ ] Major revision</td>
<td>[ ] Rejection</td>
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<tr>
<td>Re-review</td>
<td>[ ] Yes</td>
<td>[Y] No</td>
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SPECIFIC COMMENTS TO AUTHORS
Dear Authors, The manuscript "Application of endoscopic ultrasonography for detecting the invasion depth and origin of esophageal lesion based on convolutional neural network" is concise, clear, comprehensive and interesting for readers of the WJG. Thank you
Name of journal: World Journal of Gastroenterology
Manuscript NO: 67567
Title: Application of endoscopic ultrasonography for detecting the esophageal lesion based on convolutional neural network
Provenance and peer review: Invited Manuscript; Externally peer reviewed
Peer-review model: Single blind
Reviewer’s code: 04761670
Position: Peer Reviewer
Academic degree: MBBS, MD, MSc
Professional title: Senior Lecturer
Reviewer’s Country/Territory: Egypt
Author’s Country/Territory: China
Manuscript submission date: 2021-04-27
Reviewer chosen by: Jin-Lei Wang
Reviewer accepted review: 2021-05-01 09:02
Reviewer performed review: 2021-05-13 23:50
Review time: 12 Days and 14 Hours

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SPECIFIC COMMENTS TO AUTHORS
The authors are investigating deep learning network as a model of artificial intelligence application in classification of SEL in the esophagus and they have done great efforts. The AI is increasing in applications in various fields of endoscopy and in EUS with long learning curve, a lot of expectations are crossed upon. The deep learning network is one of the methods used in machine learning and the results shown here are optimistic but the authors should have correlated accuracy to the tumor site and size. I believe that they could have got better accuracy with larger tumors. Correlation to the final diagnosis either benign or malignant would be an addition to their valuable work. The haziness of images in the first three layers attributed to pressure of the balloon could be addressed in further prospective work either by taking images at variable pressures and it should be clear from your work this was a problem at which level in the esophagus upper, mid or lower or by the nature of the tumor itself. The variability in image quality was addressed in the study limitations. Also, the number of images per lesion should be optimized.