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Professional title: Doctor

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Author’s Country/Territory: Canada

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<table>
<thead>
<tr>
<th>Scientific quality</th>
<th>Grade A: Excellent</th>
<th>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Grade E: Do not publish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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<td>Language quality</td>
<td>Grade A: Priority publishing</td>
<td>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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<td>Conclusion</td>
<td>Accept (High priority)</td>
<td>Accept (General priority)</td>
<td>Minor revision</td>
<td>Major revision</td>
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<td>Re-review</td>
<td>Yes</td>
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SPECIFIC COMMENTS TO AUTHORS
This is a very well written review article on the available AI technology for colonoscopy, and it adequately addresses the intricacies and nuances related to AI integration in real world practice, that many comparative studies often gloss over. The authors make good reference to the ASGE PIVI document on thresholds for adopting real-time endoscopic assessment of the histology of diminutive colorectal polyps throughout the report, and appropriately set it as a benchmark for assessment of AI systems. The article breaks down and details the mechanics underlying these AI systems, which should be mandatory learning for all physicians anticipating use of this technology in the future. The language used throughout the report is good, save for a couple typos. Suggestions for areas of improvement/clarification as below: . At times the authors mention statistical and machine learning terms, which may not be common place and familiar with the intended audience of this journal. Its is suggested that these terms are followed by a brief explanation, apt for the lay physician. These include; Deep neural network (DNN), Bag-of-features, and model overfitting. The authors mention that the study by Klare et al, assessing the CADe system, used "colonoscopy videos". However, the researchers were employing real time CADe technology during live colonoscopies and this was blinded from the sight of the endoscopist. Prior studies have used pre-recorded videos of colonoscopies. When describing the CADx system, the authors illustrate how in a trial, using nine polyp features significantly improved the system's performance compared to three features, and how this performance was comparable between CADx and experts but superior to non-experts. Please define experts and non-experts in this context. In the paragraph following the subheading of Metadata - it is not clear what
message the authors are trying to convey? Do they mean that for most studies the meta
data is not available which is why it has not been assessed? Addition of
pictures/videos of the AI technology in question would elevate the rank of the article
Consider mentioning the CAD system (CADe and CADx) in the abstract as it is the meat
of the article.