

ESPS Peer-review Report

Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 3904

Title: Efficacy of a novel auto-fluorescence imaging system with computer-assisted color analysis of colorectal lesions

Reviewer code: 00057299

Science editor: Song, Xiu-Xia

Date sent for review: 2013-06-02 12:48

Date reviewed: 2013-06-13 19:08

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input checked="" type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)		BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

COMMENTS TO AUTHORS

In this manuscript, Dr. Inomata et al. reported that the novel AFI system with their color tone analysis method could predict histopathological diagnosis and invasion depth of colorectal neoplasms. The results of present study appear overall sound and the manuscript is well written. However, there are some points that need to be re-written by the authors before warranting publication. Major comments 1. The authors have used NBI without magnification or chromoendoscopy before color-tone sampling from ROI. It would be helpful to provide data regarding the comparison with diagnostic accuracy (especially, depth of invasion) of NBI with/without magnification. 2. The authors selected the ROI determined using chromoendoscopy for color tone sampling. However, the authors didn't comment in detail which ROI was chosen. In addition, diagnostic accuracy for predicting histology according to the shape or size of the lesions was different? What is the difference from another studies using quantitative intensity of fluorescence? Discussion for these issues would be helpful.

ESPS Peer-review Report

Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 3904

Title: Efficacy of a novel auto-fluorescence imaging system with computer-assisted color analysis of colorectal lesions

Reviewer code: 01799429

Science editor: Song, Xiu-Xia

Date sent for review: 2013-06-02 12:48

Date reviewed: 2013-06-20 17:54

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input checked="" type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)		BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

COMMENTS TO AUTHORS

The authors conducted this prospective analysis to clarify the efficacy of new AFI system with computer-assisted color analysis to differentiate colorectal polyps. Their group had constantly reported the importance of AFI system, and this paper was an extension of it. Their study design was considered reasonable, but I believed some points should be reconsidered. My questions are as below:

1. Because of a lack of SM deep cancers, PPV for distinguishing SM deep cancers was extremely low. It was difficult to agree with their conclusion only from this data.
2. How did the authors calculate sample size?
3. Magnifying endoscopy with NBI and CE using crystal violet was performed to determine the treatment strategy, finally. Could the authors show us the comparison data between magnifying endoscopy and AFI with computer-assisted color analysis?
4. In this study, polyps ≥ 5 mm were enrolled. According to ASGE statements, such polyps were candidates for resection, irrespective of histology. Polyps < 5 mm were adequate as candidates to determine polyps which didn't need to be removed.

ESPS Peer-review Report

Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 3904

Title: Efficacy of a novel auto-fluorescence imaging system with computer-assisted color analysis of colorectal lesions

Reviewer code: 00068250

Science editor: Song, Xiu-Xia

Date sent for review: 2013-06-02 12:48

Date reviewed: 2013-06-22 19:26

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input checked="" type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)		BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

COMMENTS TO AUTHORS

1 This article is interesting in novelty for computer-assisted color analysis of colorectal lesions using a new system. 2 The mechanism and features of the new system should be introduced briefly for readership of the journal. 3 The technical and scientific basis needs explaining of the color tone analysis to predict the depth of invasion. 4 A table is suggested to compare the results of endoscopic diagnosis with that of histological diagnosis of the lesions. 5 Figures are redundant and should be simplified. Figure legends should be more detailed for the readers to know what is demonstrated. For example, in Figure 1, what are the features that the authors want to show?

ESPS Peer-review Report

Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 3904

Title: Efficacy of a novel auto-fluorescence imaging system with computer-assisted color analysis of colorectal lesions

Reviewer code: 02451548

Science editor: Song, Xiu-Xia

Date sent for review: 2013-06-02 12:48

Date reviewed: 2013-07-01 17:19

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input checked="" type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input checked="" type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)		BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

COMMENTS TO AUTHORS

This study prospectively evaluated the efficacy of computer-assisted color analysis of colorectal lesions by using the novel AFI system to distinguish non-neoplastic lesions from neoplastic lesions. In addition, the authors also evaluated the effectiveness of the system in diagnosing the depth of invasion of colorectal neoplasia. They found the novel AFI system with color analysis was effective in distinguishing non-neoplastic lesions from neoplastic lesions and may allow determination of the depth of invasion. The study is interesting and the manuscript is well written. I believe it will add useful information to readers.

ESPS Peer-review Report

Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 3904

Title: Efficacy of a novel auto-fluorescence imaging system with computer-assisted color analysis of colorectal lesions

Reviewer code: 00069461

Science editor: Song, Xiu-Xia

Date sent for review: 2013-06-02 12:48

Date reviewed: 2013-07-02 03:23

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input checked="" type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)		BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

COMMENTS TO AUTHORS

To the Authors,

01.07.2013

This original article entitled "Efficacy of a novel auto-fluorescence imaging system with computer-assisted color analysis of colorectal lesions" (Manuscript Number: 3904) investigates the efficacy of computer-assisted color analysis of colorectal lesions by using the novel AFI system to distinguish non-neoplastic lesions from neoplastic lesions and it also evaluates the effectiveness of the system in diagnosing the depth of invasion of colorectal neoplasia. Accurate computer aided diagnosis of colorectal polyps could prevent unnecessary polypectomies or allow a "resect and discard" strategy with surveillance intervals determined based on the results of the optical biopsy; this could be less expensive than histopathologic analysis of polyps. This approach can be used in screening colorectal neoplasia. Overall study appears to be contributory to the current literature and the manuscript is quite well-written. The language is good, grammatical and spelling errors are rare. Total length of the manuscript appears to be optimum. The number of tables is sufficient. However, it requires a number of revisions. 1. The authors should add further explanations to the figure legend with respect to the image in Figure 1. 2. Physical principles regarding this procedure should be explained in "materials and methods" section. As a conclusion, the manuscript could be accepted in order to be published in your journal after completing the above revisions. Yours sincerely.

ESPS Peer-review Report

Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 3904

Title: Efficacy of a novel auto-fluorescence imaging system with computer-assisted color analysis of colorectal lesions

Reviewer code: 00069139

Science editor: Song, Xiu-Xia

Date sent for review: 2013-06-02 12:48

Date reviewed: 2013-07-03 23:38

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input checked="" type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input checked="" type="checkbox"/> Grade B (Very good)	<input type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input checked="" type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)		<input type="checkbox"/> No records	<input type="checkbox"/> Major revision

COMMENTS TO AUTHORS

This manuscript is a well prepared report of a prospective study of a novel endoscopic technology 'auto-fluorescence system + image processing method G/R comparison'. The study is well designed and used good statistics. Only minor points that may improve the manuscript are; 1. On exclusion criteria, it might be more comprehensive for a reader with less knowledge on colonic polyps if the authors could explain why serrated polyps needed to be excluded. 2. Each Figures' legend should be complete by itself. For examples; What are differences between the two pictures in the Fig 1. The abbreviation ROI on Fig 2 might be replaced by the full words. Fig 3 is interesting but the legend contained no details about what program and what is it doing? 3. The ROC curves did not depict any cut-off points, but rather area under the curve. (see the legends). And it would be better if they were stated that 'The ROC curve sensitivity and 1-specificity of G/R ratio in discriminating between ... and...'

ESPS Peer-review Report

Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 3904

Title: Efficacy of a novel auto-fluorescence imaging system with computer-assisted color analysis of colorectal lesions

Reviewer code: 01588319

Science editor: Song, Xiu-Xia

Date sent for review: 2013-06-02 12:48

Date reviewed: 2013-07-05 18:02

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input checked="" type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input checked="" type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)		BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

COMMENTS TO AUTHORS

This manuscript entitled Efficacy of a novel auto-fluorescence imaging system with computer-assisted color analysis of colorectal lesions is an interesting report in this area of clinical image. My recommendation is that the manuscript would need minor revision before being considered further for possible publication. Specific Comments: 1. The content of "Methods" in the "Abstract" should be present in a concise description. 2. Regarding the "Histological assessment", the authors should make a description of who are responsible for the diagnosis? 3. In "Statistical analysis", what's the SD? 4. In "Results", the sentences "A total of 191 patients were recruited for this study. Ninety patients refused to participate to this study, 9 patients had the lesions diagnosed as SSA/P pathologically and 5 patients had been diagnosed as IBD." are difficult to readers. Especially for the case numbers, please explain how to get the final number of 88. 5. The "Table 1" should be modified and displayed in a separate page. 6. How about the difference in efficiency of this novel AFI system with computer-assisted color analysis between trainees and experts?