

ESPS Peer-review Report

Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 4470

Title: Application of quantitative estimates of fecal hemoglobin concentration for risk prediction of colorectal neoplasia

Reviewer code: 00253959

Science editor: Wang, Jin-Lei

Date sent for review: 2013-07-02 09:47

Date reviewed: 2013-07-11 18:16

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 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 type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)		<input type="checkbox"/> No records	<input type="checkbox"/> Major revision

COMMENTS TO AUTHORS

In this retrospective study, the authors evaluated the quality of colonoscopy in the screening programme and determined the association between the immuno-chemical test (FIT) and colorectal neoplasia with the aim to determine whether the risk of CRC could be used from the quantitated value of the FIT. They demonstrated a dose-dependent relationship between the FIT level and the risk of colorectal tumors. The study was performed in 17,881 participants who were enrolled in a single medical center from January 2010 through October 2011. They concluded that risk prediction for colorectal neoplasia based on individual FIT concentrations may help to improve performance of screening programmes. Specific points: Both in the results section and in the abstract, the authors should state the number of false positive fecal immuno-chemical tests. Introduction: Page 3, second paragraph: The phrase "A study by Chen et al. suggested baseline FIT concentration ..." should be more elaborated. It is hard to understand how a baseline FIT concentration can be used to predict incidence colorectal neoplasia in people with a "negative" FIT. Please explain in more details. Results: Page 5, Baseline characteristics ...: In this paragraph you describe an adenoma detection rate of 38.2 % corresponding to 469 adenomas. In the paragraph Age, gender, and FIT in association with histologic grade of colorectal tumors you describe altogether 422 adenomas. Please explain this discrepancy. Table 1: The polyp detection rate should be listed in Table 1.

ESPS Peer-review Report

Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 4470

Title: Application of quantitative estimates of fecal hemoglobin concentration for risk prediction of colorectal neoplasia

Reviewer code: 02534468

Science editor: Wang, Jin-Lei

Date sent for review: 2013-07-02 09:47

Date reviewed: 2013-07-17 20:10

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 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 type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)		<input type="checkbox"/> No records	<input type="checkbox"/> Major revision

COMMENTS TO AUTHORS

The paper by Liao et al. is aimed at understanding if the quantitative fecal immunochemical test (FIT) concentration could be useful to predict histological grade and risk of colorectal cancers (CRC). To this end, authors present a retrospective study that considers 17881 individuals who attended a two-step colorectal cancer screening program. Subjects underwent colonoscopy if FIT concentration was ≥ 12 ng Hb/mL buffer and colorectal lesions were classified as cancer, advanced adenoma, adenoma, and other (normal, hemorrhoids, colitis, ulcers, diverticulum, and submucosal lesions) on the basis of colonoscopic and histological findings. Positivity for FIT was found in 1948/17881 individuals and 1229/1948 attended a colonoscopy. The main conclusion of this work is that FIT concentrations are associated with histological grades and that can improve risk prediction for colorectal neoplasia of screening programs. The present paper is nice written and topic addressed in the study is relevant to the topics addressed in World Journal of Gastroenterology. In my opinion, the major pitfall of this study is the lack of data regarding life styles, BMI, and family history of CRC that have a strong effect on the CRC risk. Otherwise, the paper contains interesting results and, even if it is well known that FIT is more reliable than guaiac fecal occult blood test in the detection of early stage tumors, authors reported a linear relationship between quantitative level and positive predictive value of FIT for predicting colorectal adenomatous polyps and cancers. Furthermore, this study includes a very large cohort of individuals and it is therefore possible to assume that the results actually reflect the trend of the general population. Therefore I think that the paper can be suitable for publication after minor revisions that concern figures and tables captions. I strongly recommend authors to better explain what is reported in Table2, Figure2 (x-axis and y-axis), Figure3 (3b, x-axis



Baishideng Publishing Group Co., Limited

Flat C, 23/F., Lucky Plaza,
315-321 Lockhart Road,
Wan Chai, Hong Kong, China

and y-axis) and Figure4.