



Does contrast-enhanced intraoperative ultrasound improve the sensitivity and predictive value of colorectal cancer liver metastasis detection?

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Comment on: Chen JY, Dai HY, Li CY, *et al.* Improved sensitivity and positive predictive value of contrast-enhanced intraoperative ultrasound in colorectal cancer liver metastasis: a systematic review and meta-analysis. *J Gastrointest Oncol* 2022;13:221-30.

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We read the recent published paper in this journal of *J Gastrointest Oncol* by Chen and colleagues entitled “Improved sensitivity and positive predictive value of contrast-enhanced intraoperative ultrasound in colorectal cancer liver metastasis: a systematic review and meta-analysis” (1). They performed a systematic review and meta-analysis to assess the sensitivity and predictive value of contrast-enhanced intraoperative ultrasound (CE-IOUS) in colorectal cancer liver metastasis (CRLM) patients undergoing surgery. We appreciate Chen *et al.* (1) for the valuable study, however, after a careful learning of the literature, several limitations should be noticed.

First, in the overall analyses of CE-IOUS section of the article, the summary receiver operating characteristics curve revealed a higher accuracy with area under the curve (AUC) 0.9753. The authors believed that the closer the AUC is to 1.0, the higher the sensitivity and predictive value of CE-IOUS and the more benefit. However, we believe that the interpretation of the results was false, as the AUC displayed the performance of CE-IOUS in the detection of CRLM not the accuracy, sensitivity, predictive value, and benefit. Furthermore, the same issues exist in the overall analyses of overall analyses of IOUS section of the article.

Second, in the statistical analysis section of the article,

the authors stated that all analyses were carried out by Stata 15.0 software (StataCorp LLC, College Station, TX, USA). However, in this study, figures 3 to 8 were plotted by Meta-DiSc software (2) and the mainly meta-analysis was also performed using this software. Furthermore, Chen *et al.* (1) stated a sensitivity analysis would be performed on the basis of the Cochrane systematic review method. Whereas, it was not reported in the main text. So, we believe the study requires further revision.

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Footnote

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Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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