



Is magnetic resonance elastography superior to transient elastography for the diagnosis of liver fibrosis?

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Comment on: Bi J, Liu L, Qin T. Comparison of magnetic resonance elastography and transient elastography in the diagnosis of hepatic fibrosis: a systematic review and meta-analysis. *Ann Palliat Med* 2021;10:8692-700.

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We read with great interest the recent meta-analysis written by Bi and colleagues entitled “*comparison of magnetic resonance elastography (MRE) and transient elastography (TE) in the diagnosis of hepatic fibrosis: a systematic review and meta-analysis*” (1). The authors highlight MRE may be a useful, noninvasive method for the assessment of liver fibrosis in patients with chronic liver disease. We strongly agree with the views expressed by the authors, but we have several comments on this study.

First, in the methods section of the abstract, Bi *et al.* depicted that pooled sensitivity (SEN), specificity (SPE), positive and negative likelihood ratios (PLR and NLR), and diagnostic odds ratio (DOR) were calculated. But, in this meta-analysis, the pooled outcome variable was odds ratios (ORs) that were referred in the statistical analysis section and the combined SEN, SPE, PLR, and NLR were not referred in this study. So, we think that the unnecessary indicators depicted in the abstract would undoubtedly result in misunderstanding.

Second, according to the results, MRE showed higher sensitivity than TE ($P=0.03$) in the diagnosis of stage F0–F1 liver fibrosis and showed higher specificity for diagnosing stage F2–F4 liver fibrosis ($P<0.0001$), while there was no difference regarding SEN of MRE and TE to F2–F4 liver fibrosis ($P=0.19$) and the SPE of MRE and TE to F0–F1 liver fibrosis ($P=0.70$). Furthermore, in the conclusions section, the authors revealed that MRE is superior to TE in diagnosing hepatic fibrosis of different stages in the field of SEN and SPE. We believe that the interpretation of the

results is not appropriate. The rational interpretation of the results is that MRE is superior to TE in diagnosing stage F0–F1 hepatic fibrosis in the field of sensitivity and stage F2–F4 hepatic fibrosis in the field of specificity.

Finally, sensitivity analysis is carried out by excluding one study at a time to evaluate the effect on the pooled results (2). In the results of sensitivity and publication bias analyses section, the authors performed the sensitivity analysis by omitting Tafur’s 2020 study (3) and did not further exclude the other included studies. Then, we consider that the sensitivity analysis was incomplete.

We highlight these issues merely to promote the clinical utility and relevance of Bi *et al.*’s study and recommend that the authors of similar such studies may consider replicating these additional points.

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of interest to declare.

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