

SUPPLEMENTARY MATERIALS

Detailed Information on MRI and Ultrasound Scanners

Magnetic resonance (MR) images were obtained from 3T (n = 101) or 1.5T (n = 2) MR scanners as follows: Ingenia 3T (n = 43), Verio 3T (n = 11), and Achieva 3T (n = 6), Philips Healthcare; Skyra 3T (n = 28), Biograph mMR 3T (n = 5), Vida 3T (n = 1), Avanto 1.5T (n = 2), Siemens Healthcare; Discovery 750w 3T (n = 7); GE Healthcare.

Liver MRI protocols routinely involved heavily T2-weighted images, respiratory-triggered T2-weighted images, diffusion-weighted imaging using two b-values (0 and 800 s/mm²), dual echo image, 3 dimensional fat-suppressed T1-weighted gradient-echo precontrast, dynamic, and hepatobiliary phase images using gadoxetate disodium (Primovist or Eovist, Bayer).

Contrast-enhanced ultrasound was performed using a contrast-specific ultrasound platform: RS80A (n = 51; Samsung Medison), RS85A (n = 39; Samsung Medison), LOGIQ E9 (n = 11; GE Healthcare), or Aplio i800 (n = 2; Canon Medical System).

Detailed Information for the Statistical Analysis

Sample size estimation analysis showed that 102 participants would be needed with an 80% power ($\beta = 0.2$) and a significance level of 5% ($\alpha = 0.05$) to reveal statistically significant differences in the diagnostic performance for hepatocellular carcinoma between CEUS and gadoxetate disodium-enhanced MRI (Gd-EOB-MRI). To determine the sample size, we adopted the previously reported accuracy of CEUS and Gd-EOB-MRI (1, 2). Considering an approximately 5% dropout rate, we finally enrolled 107 participants. Interobserver agreement of the imaging features between the operators and reviewer was analyzed by weighted κ statistics: a $\kappa < 0.20$ indicated poor agreement; 0.21–0.40, fair agreement; 0.41–0.60, moderate agreement; 0.61–0.80, good agreement; and 0.81–1.00, excellent agreement.

REFERENCES

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2. Min JH, Kim JM, Kim YK, Kang TW, Lee SJ, Choi GS, et al. Prospective intraindividual comparison of magnetic resonance imaging with gadoxetic acid and extracellular contrast for diagnosis of hepatocellular carcinomas using the liver imaging reporting and data system. *Hepatology* 2018;68:2254-2266