

Evidence Summary – Liver Lesion Characterization (AB 29.1)

For further characterization of a liver lesion seen on other imaging, CT offers high spatial resolution and rapid image acquisition, making it suitable for initial characterization of liver lesions. CT can be highly accurate in establishing whether or not a liver lesion is benign.^{1,2}

MRI provides superior soft tissue contrast and multi-parametric capabilities, facilitating further tissue characterization when needed (particularly small lesions). Nonetheless, the use of gadolinium-based contrast agents in MRI poses safety concerns, including the risk of nephrogenic systemic fibrosis (NSF) in patients with impaired renal function. For patients with a history of malignancy outside the liver, MRI is more accurate at differentiating between benign and malignant lesions. Thus, CT is not recommended over MRI in this scenario.¹

References

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3. Marrero JA, Ahn J, Reddy KR. ACG Clinical Guideline: The Diagnosis and Management of Focal Liver Lesions. *The American Journal of Gastroenterology*. 2014;109(9):1328-1347. doi:10.1038/ajg.2014.213.
4. National Institute for Health and Care Excellence (NICE-UK). Liver Multiscan for Liver Diagnosis. Medtech Innovation Briefing 26April2019