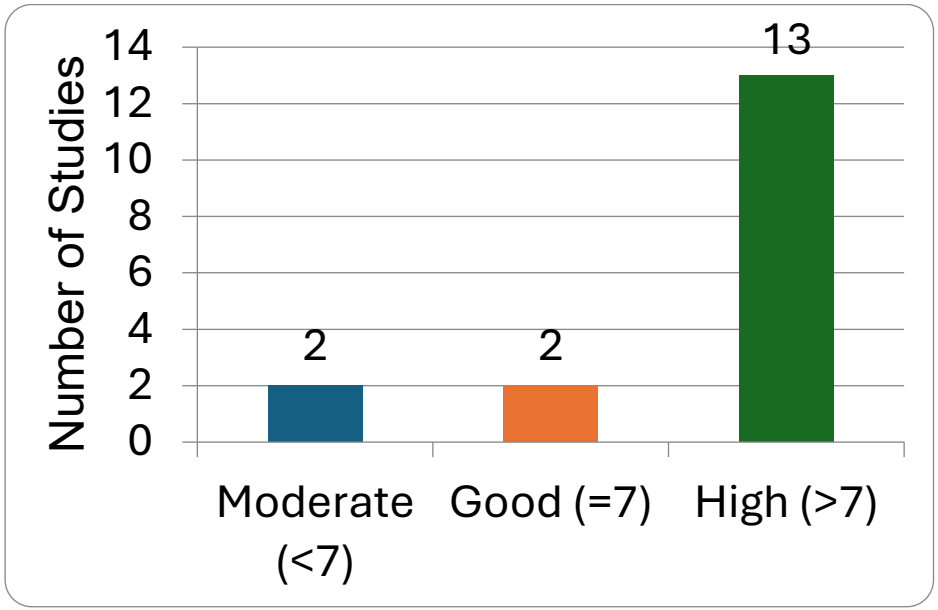
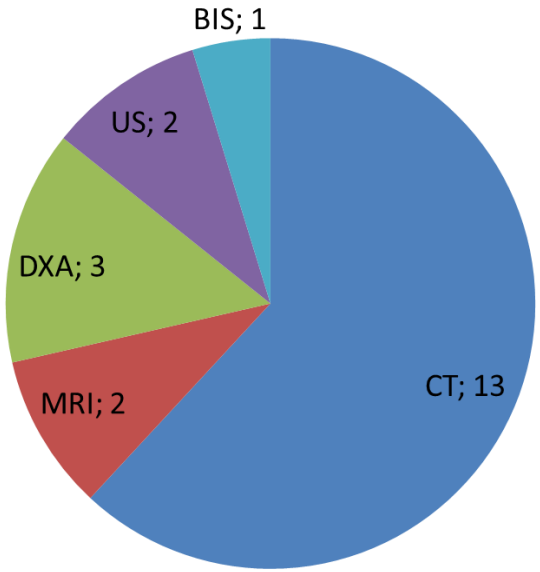


Supplementary Figure 1 Study quality appraisal using the Newcastle–Ottawa Scale (NOS). Bar chart illustrating the methodological quality of the 17 included studies. Thirteen studies (76%) were rated as high quality (NOS ≥ 7), two as good quality (= 7), and two as moderate quality (< 7). These results indicate that the majority of evidence synthesized in this review derives from studies of high methodological rigor.



Supplementary Figure 2 Distribution of imaging modalities in included studies. Pie chart summarizing the imaging techniques used across the 17 studies included in this systematic review. Computed tomography (CT) was the most frequently employed modality (13 studies), followed by dual-energy X-ray absorptiometry (DXA, 3 studies), magnetic resonance imaging (MRI, 2 studies), ultrasound (US, 2 studies), and bioelectrical impedance spectroscopy (BIS, 1 study). CT, computed tomography; MRI, magnetic resonance imaging; DXA, dual-energy X-ray absorptiometry; US, ultrasound; BIS, bioelectrical impedance spectroscopy.

Supplementary Table 1 Search Strategy Used in PubMed for the Identification of Studies on Imaging-Based Sarcopenia Assessment in End-Stage Liver Disease. Search terms and Boolean operators used in the PubMed database to identify studies evaluating sarcopenia through imaging modalities (CT, MRI, DEXA, ultrasound) in patients with end-stage liver disease eligible for liver transplantation. Filters were applied to limit results to human studies published in the last 10 years and articles written in English

Database	Results
Pubmed	#1 Sarcopenia #2 "end-stage liver disease" OR "liver cirrhosis" OR "liver failure" OR "liver transplant candidates" #3 "radiologic evaluation" OR "imaging techniques" OR "ultrasonography" OR "computed tomography" OR "magnetic resonance imaging" OR "absorptiometry, photon" OR "DXA" #4 ((#1) AND (#2)) AND (#3) Filters: last 10 years, full text, English, humans
EMBASE	'sarcopenia'/exp AND 'end stage liver disease'/exp AND ('echography'/exp OR 'computer assisted tomography'/exp OR 'nuclear magnetic resonance imaging'/exp OR 'photon absorptiometry'/exp)
Scopus	(sarcopenia AND "end stage liver disease" AND (ultrasonography OR tomography OR "magnetic resonance" OR "photon absorptiometry" OR "radiologic evaluation"))

Supplementary Table 2 Methodological Quality Assessment of Included Studies Using the Newcastle–Ottawa Scale (NOS). Evaluation of the methodological quality of the 17 studies included in the systematic review, based on the Newcastle–Ottawa Scale (NOS). The assessment considered selection, comparability, and outcome domains. Studies were categorized as high quality (NOS score ≥ 7), good quality (score = 7), or moderate quality (score < 7). The adapted NOS version was used for cross-sectional studies where applicable

Ref.	Results
Woodward AJ *et al* [22], 2021	NOS adapted for cross-sectional studies
	Selection: 3* Comparability: 0* Outcome: 1
	Total: 4 (Moderate methodological quality)
Molwitz I *et al* [23], 2023	Selection: 3* Comparability: 2* Outcome: 2
	Total: 7 (High methodological quality)
Forsgren MF *et al* [24], 2024	Selection: 3* Comparability: 1* Outcome: 3*
	Total: 7 (High methodological quality)
Carey EJ *et al* [25], 2017	Selection: 3* Comparability: 1* Outcome: 2*
	Total: 6 (Good methodological quality)
Quinlan JI *et al* [26], 2023	Selection: 3* Comparability: 2* Outcome: 1
	Total: 6 (Good methodological quality)
Golse N *et al* [27], 2017	Selection: 3* Comparability: 2* Outcome: 2*
	Total: 7 (High methodological quality)

Bot D *et al* [28], 2023	Selection: 3* Comparability: 2* Outcome: 2* Total: 7 (High methodological quality)
Sinclair M *et al* [29], 2019	Selection: 3* Comparability: 2* Outcome: 2* Total: 7 (High methodological quality)
Kappus MR *et al* [30], 2020	Selection: 3* Comparability: 2* Outcome: 2* Total: 7 (High methodological quality)
Lee J *et al* [31], 2021	Selection: 3* Comparability: 2* Outcome: 2* Total: 7 (High methodological quality)
Kyselova D *et al* [32], 2025	Selection: 3* Comparability: 2* Outcome: 2* Total: 7 (High methodological quality)
Chae MS *et al* [33], 2018	Selection: 3* Comparability: 2* Outcome: 2* Total: 7 (High methodological quality)
Ebadi M *et al* [34], 2018	Selection: 3* Comparability: 2* Outcome: 2* Total: 7 (High methodological quality)
Alconchel F *et al* [35], 2020	Selection: 3* Comparability: 0* Outcome: 2 Total: 5 (Moderate methodological quality)
Hey P *et al* [36], 2022	Selection: 4* Comparability: 2* Outcome: 2 Total: 8 (High methodological quality)
Van Vugt JLA *et al* [37], 2018	Selection: 4* Comparability: 2* Outcome: 3*

	Total: 9 (High methodological quality)
Kuo SZ *et al* [38], 2019	Selection: 3* Comparability: 2* Outcome: 2*
	Total: 7 (High methodological quality)