

**Supplementary Table 1.** Comparison of diagnostic performance of ultrasound parameters for the assessment of hepatic steatosis grade

Hepatic steatosis grade	AUC (95% CI) <sup>a)</sup>				P-value for pairwise comparison of AUCs					
	(1) Visual score	(2) HRI	(3) TSI-p	(4) TAI-p	(1) vs. (2)	(1) vs. (3)	(1) vs. (4)	(2) vs. (3)	(2) vs. (4)	(3) vs. (4)
≥S1	0.658 (0.594–0.718)	0.629 (0.564–0.691)	0.839 (0.786–0.884)	0.853 (0.801–0.895)	0.235	<0.001 <sup>b)</sup>	<0.001 <sup>b)</sup>	<0.001 <sup>b)</sup>	<0.001 <sup>b)</sup>	0.705
≥S2	0.780 (0.722–0.831)	0.751 (0.692–0.805)	0.914 (0.871–0.946)	0.913 (0.870–0.946)	0.322	<0.001 <sup>b)</sup>	0.003 <sup>b)</sup>	<0.001 <sup>b)</sup>	<0.001 <sup>b)</sup>	0.985
S3	0.795 (0.738–0.845)	0.759 (0.700–0.812)	0.916 (0.873–0.948)	0.907 (0.863–0.948)	0.261	0.006 <sup>b)</sup>	0.029	<0.001 <sup>b)</sup>	0.002 <sup>b)</sup>	0.750

AUC, area under the receiver operating characteristics curve; CI, confidence interval; HRI, hepatorenal index; TSI-p, tissue scatter-distribution imaging parameter; TAI-p, tissue attenuation imaging parameter.

<sup>a)</sup>Data of 238 patients (S0, n=149; S1, n=52; S2, n=14; S3, n=23) who had available values all of visual score, HRI, TSI-p, and TAI-p. <sup>b)</sup>P-values indicate those are statistically significant (<0.008 [0.05/6, according to Bonferroni-correction]).

**Supplementary Table 2.** TSI-p and TAI-p for the assessment of hepatic steatosis grades according to accompanying significant hepatic fibrosis

Parameter	Hepatic steatosis grade	AUC (95% CI)		P-value
		Patients without significant hepatic fibrosis (F0 or F1, n=145)	Patients with significant hepatic fibrosis (≥F2, n=98)	
TSI-p	≥S1	0.897 (0.836–0.941)	0.705 (0.604–0.793)	0.003 <sup>a)</sup>
	≥S2	0.956 (0.908–0.983)	0.840 (0.752–0.906)	0.113
	S3	0.941 (0.889–0.973)	0.874 (0.792–0.933)	0.426
TAI-p (MHz/cm)	≥S1	0.876 (0.812–0.925)	0.797 (0.704–0.872)	0.464
	≥S2	0.953 (0.904–0.981)	0.847 (0.760–0.912)	0.922
	S3	0.939 (0.887–0.972)	0.848 (0.761–0.912)	0.419

AUC, area under the receiver operating characteristics curve; CI, confidence interval; TSI-p, tissue scatter-distribution imaging parameter; TAI-p, tissue attenuation imaging parameter.

<sup>a)</sup>P-values indicate those are statistically significant (<0.05).

**Supplementary Table 3.** Intra-observer and inter-observer reliability of TSI-p and TAI-p measurements

Parameter	TSI-p	TAI-p
Intra-observer reliability		
Intraclass correlation coefficient	0.989 (0.985–0.992)	0.968 (0.958–0.975)
Coefficient of variation (%)	2.9 (2.5–3.3)	13.0 (10.1–15.3)
Inter-observer reliability		
Intraclass correlation coefficient	0.944 (0.928–0.957)	0.945 (0.928–0.957)
Coefficient of variation (%)	11.4 (0.0–17.1)	23.6 (16.6–28.9)

Values in parentheses are 95% confidence intervals.

TSI-p, tissue scatter-distribution imaging parameter; TAI-p, tissue attenuation imaging parameter.