

SUPPLEMENTARY MATERIAL

TABLE S1: Overall changes in frailty category based on the Liver Frailty Index and the Subjective Clinician Assessment. at 3- and 6-months after liver transplantation (LT) compared to pretransplant.

Frailty changes*		3-months post-transplant (n=118)	6-months post-transplant (n=140)
<i>Liver Frailty Index</i>			
Changes in frailty category compared to pre-LT	Improvement	29 (25%)	29 (21%)
	Stability	73 (62%)	101 (72%)
	Worsening	16 (14%)	10 (7%)
<i>Subjective Clinician Assessment</i>			
Changes in frailty category compared to pre-LT	Improvement	46 (39%)	52 (37%)
	Stability	67 (57%)	82 (59%)
	Worsening	5 (4%)	6 (4%)

TABLE S2: Association between pretransplant frailty (LFI score vs “poor” SCA) and post-transplant outcomes. Results from Cox regression (Hazard ratio-HR-), linear regression (beta coefficient - β -) and logistic regression (Odds ratio -OR-), 95% confidence interval (95%CI) and p-value[†].

Post-transplant outcomes	Pretransplant LFI			“Poor” pretransplant SCA		
	β coefficient/OR/HR	95%CI	p-value	β coefficient/OR/HR	95%CI	p-value
Length of intensive care unit stay						
Univariable	$\beta = 1,24$	0,70-1,78	<0,001	$\beta = 2,26$	0,89-3,62	0,001
Multivariable*	$\beta = 0,85$	0,26-1,44	0,005	$\beta = 1,11$	-0,45-2,67	0,163
Length of transplant hospitalization						
Univariable	$\beta = 1,69$	0,47-2,91	0,007	$\beta = 3,20$	0,30-6,10	0,031
Multivariable*	$\beta = 1,69$	0,47-2,91	0,007	$\beta = 2,77$	-0,70-6,23	0,117
Early(<30days) post-LT complications						
Univariable	OR=2,05	1,29-3,26	0,002	OR=3,46	1,07-11,2	0,038
Multivariable*	OR=2,05	1,29-3,26	0,002	OR=3,32	1,02-10,8	0,046
Severe (\geq grade IIIA) early post-LT complications¹¹						
Univariable	OR=1,38	0,80-2,38	0,251	OR=1,29	0,41-4,10	0,664
Multivariable*	OR=1,31	0,75-2,31	0,345	OR=1,16	0,36-3,78	0,802
Late (30-90days) post-LT complications						
Univariable	OR=1,85	1,13-3,03	0,014	OR=1,04	0,34-3,20	0,943
Multivariable*	OR=2,60	1,47-4,59	0,001	OR=0,75	0,34-4,55	0,745
Retransplant within 6 months post-LT						
Univariable	OR=1,96	0,89-4,31	0,095	OR=1,70	0,47-6,12	0,419
Multivariable**	-	-	-	-	-	-

Cardiovascular events within 6 months post-LT						
Univariable	OR=1,69	0,70-4,10	0,243	OR=2,82	0,48-16,6	0,251
Multivariable**	-	-	-	-	-	-
Death within 6 months post-LT						
Univariable	OR=1,46 HR=1,14	0,73-2,90 0,54-2,42	0,283 0,730	OR=1,35	0,26-6,93	0,717
Multivariable**	-	-	-	-	-	-

† Adapted from *Puchades L. et al, JHEP Reports*, <https://doi.org/10.1016/j.jhepr.2023.100840>. Values in bold denote statistically significant results (p <0.05).

* Multivariable adjustment for covariables associated with frailty status in univariable analysis (MELD-Na and Child-Pugh scores at transplant, recipient age, female sex, and cardiovascular risk factors).

**Results from univariable models concluded there were no significant variables to adjust for in multivariable analysis.

TABLE S3: Association between pretransplant “poor” SCA and waitlist mortality. Results from Cox regression (Hazard ratio-HR-), 95% confidence interval (95%CI) and p-value[†].

Waitlist mortality*	Hazard ratio	IC 95%	Valor-p
<i>pretransplant SCA</i>			
<i>Univariable</i>			
“Good-Fair” SCA	HR=1	-	-
“Poor” SCA	HR= 9,35	1,55-56,2	0,015
<i>Multivariable</i> [∧]			
“Good-Fair” SCA	HR=1	-	-
“Poor” SCA	HR=9,46	1,04-86,4	0,047

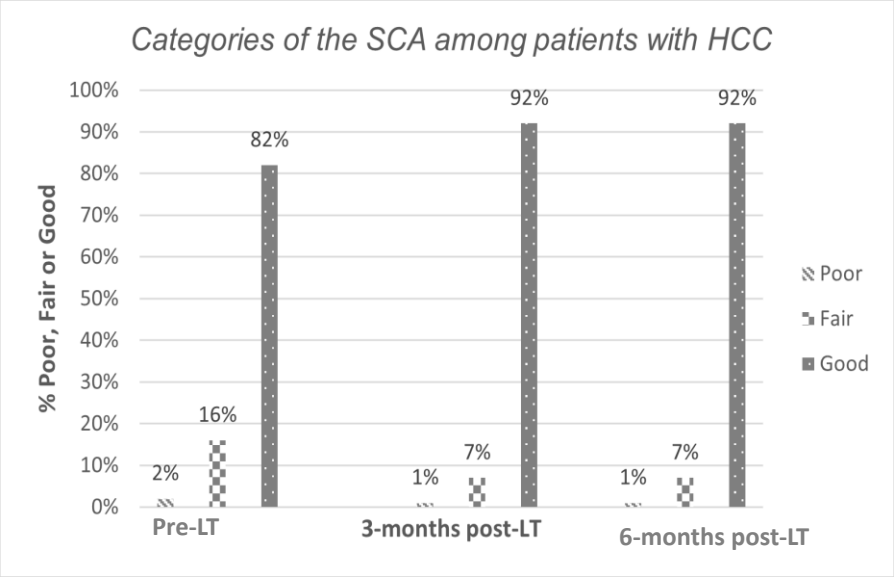
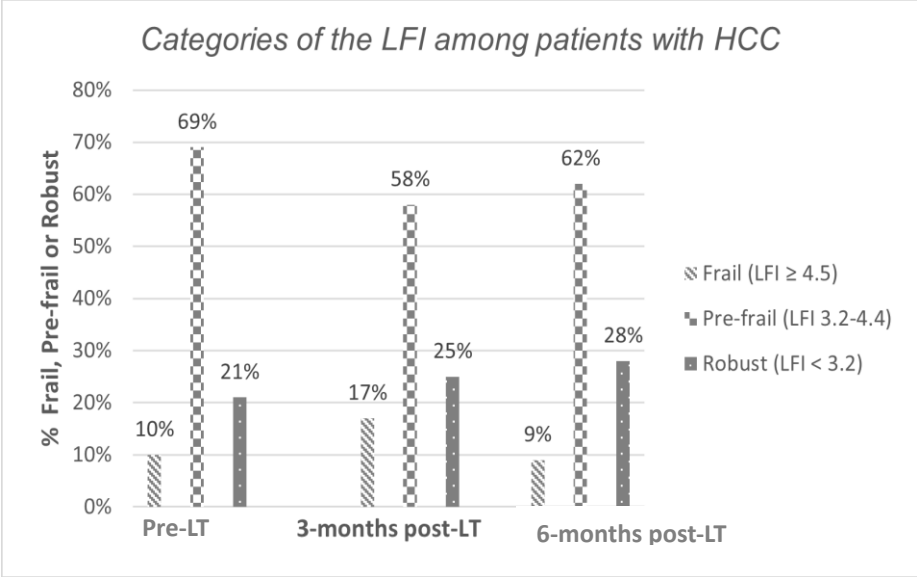
[†] Unpublished results from a multicentre Spanish cohort of 212 patients with cirrhosis awaiting liver transplantation enrolled between November 2018 and December 2020, with at least 1 SCA while on the waiting list. Values in bold denote statistically significant results (p <0.05).

* Waitlist mortality was defined as a combined outcome of death or delisting for being too sick for liver transplantation. Results of Cox regression models where “good” and “fair” pretransplant assessments were added and then compared to “poor” pretransplant assessments.

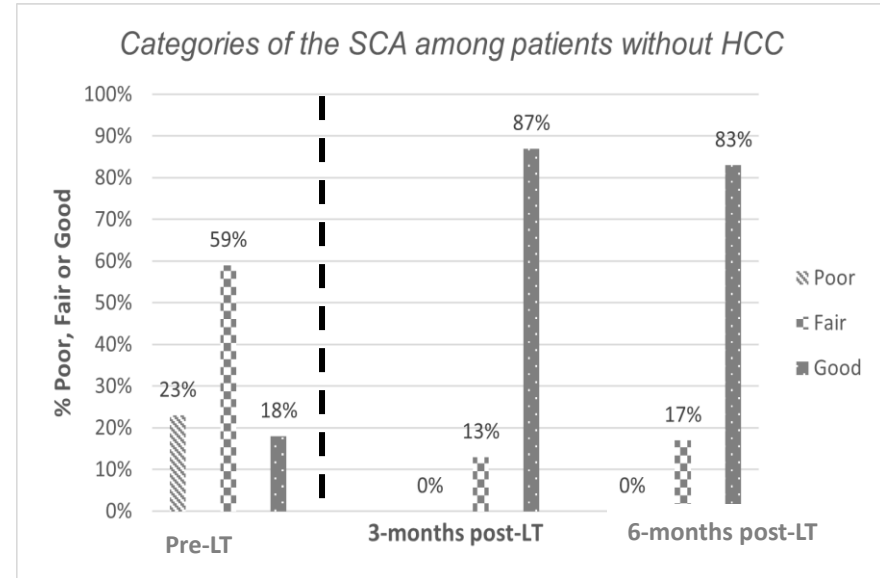
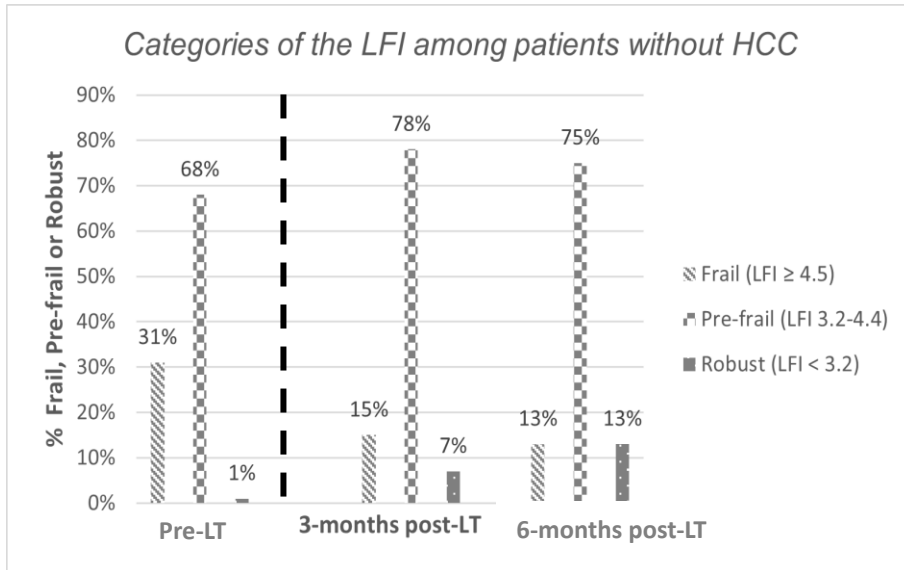
[∧] Multivariable adjustment for age and MELD score,

FIGURE S1: Categories of the Liver Frailty Index (LFI) and the Subjective Clinician Assessment (SCA) among patients with hepatocellular carcinoma -HCC- (A) and without HCC (B) both before and after liver transplantation (LT)*.

A)



B)



*Adapted from Lai JC et al. *Am J Transplant.* 2018 August; 18(8): 1986–1994.