

**Conclusions:** A targeted educational intervention improved QoL and reduced caregiver burden. Educational support should be integrated into comprehensive cirrhosis care in Latin America.

**Conflict of interest:** None

Table 1. Impact of the Educational Strategy on Patient Quality of Life and Caregiver Burden				
Measure	Before	After	95% CI	p-value
Overall CLDQ score	133,1	162,1	24 – 34	<0.001
Overall Zarit caregiver burden score	21,2	11,5	12 – 7.5	<0.001

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#15

THE RELATIONSHIP BETWEEN QUALITY OF LIFE IN ADULT SUBJECTS WITH COMPENSATED LIVER CIRRHOSIS AND BACTERIAL OVERGROWTH

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**Introduction and Objectives:** Small intestinal bacterial overgrowth (SIBO) has been associated with greater severity of cirrhosis, as measured by the Child-Pugh classification, and with an increased incidence of complications. However, its impact on quality of life and on the progression of compensated liver cirrhosis has been scarcely studied.

To evaluate the relationship between SIBO and quality of life in patients with compensated liver cirrhosis treated at an outpatient Hepatology center in Cartagena de Indias, Colombia.

**Materials and Methods:** A cross-sectional and analytical study was conducted. Adult patients diagnosed with compensated liver cirrhosis and evaluated in the outpatient Hepatology clinic were included. A hydrogen breath test was used to detect SIBO, and the Chronic Liver Disease Questionnaire (CLDQ) was applied to assess quality of life. Patients with a positive SIBO result were treated with rifaximin according to clinical guidelines. A univariate linear regression analysis was used to examine the relationship between SIBO (independent variable) and CLDQ scores (dependent variable).

**Results:** Most participants were male (62.5%) with a mean age of 65 years. Hypertension was present in 53.1%, and 42.2% had type 2 diabetes. SIBO was detected in 29.7% of patients. The average CLDQ scores across evaluated domains did not show statistically significant differences between patients with and without SIBO: abdominal (p=1.21), fatigue (p=1.46), systemic (p=1.09), activity (p=1.18), emotional (p=0.87), and worry (p=1.00).

**Conclusions:** So far, no significant differences in quality of life have been found between patients with and without SIBO in compensated liver cirrhosis.

**Conflict of interest:** None

Tabla 1. Factores asociados a SIBO

Variable	SIBO n:39	NO SIBO n:45	p
Edad	68	62	0,006
Sexo femenino	50(29)	50(29)	0,32
Estrato			0,36
1	14,3(1)	85,7(6)	
2	44(11)	56(14)	
3	55,9(19)	44,1(15)	
4	54,5(6)	45,5(5)	
5	75(3)	25(1)	
6	33,3(1)	66,7(2)	
Etiología			0,173
Alcohólica	40(2)	60(3)	
Autoinmune	22,2(2)	77,8(7)	
Cirrosis biliar	0(0)	100(4)	
Criptogénica	63,6(14)	36,4(8)	
Hemocromatosis	0(0)	100(1)	
Hepatitis B	33,3(1)	66,7(2)	
Hepatitis C	63,6(7)	36,4(4)	
Lesión quirúrgica	0(0)	100(1)	
MASLD	46,4(13)	53,6(15)	
Diabetes mellitus 2	50(16)	50(16)	0,607
IMC	27,03	27,85	0,411
BT	0,99	1,10	0,558
BI	0,59	0,60	0,913
GOT	39,56	45,48	0,206
GPT	40,77	42,73	0,790
INR	1,12	1,16	0,165
PLT	194,578	201,368	0,892
CR	0,81	0,80	0,842
Albúmina	3,92	3,92	0,967

Tabla 2. Factores asociados a Calidad de vida

Variable	b	IC95	p
Sexo	0,07	-1,28-2,43	0,53
Edad	-0,05	-0,10-0,06	0,67
Estrato	0,04	-0,53-0,84	0,65
MASLD	-0,09	-2,91-1,30	0,44
IMC	-0,14	-0,29-0,06	0,20
BT	-0,09	-2,26-1,40	0,64
BI	0,14	-2,00-4,29	0,46
GOT	-0,02	-0,05-0,04	0,84
GPT	-0,02	-0,04-0,03	0,88
INR	0,04	-4,99-7,66	0,67
PLT	-0,07	0,00-0,00	0,58
Cr	0,28	0,98-7,37	0,01
Albúmina	0,10	-1,00-2,72	0,35
HTA	0,17	-0,38-3,11	0,12
DM2	-0,14	-2,95-0,71	0,22
Síntomas	-0,56	-5,93 a -2,71	0,00

Tabla 3. Relación calidad de vida y SIBO

Dominio	SIBO	NO SIBO
Dominio abdominal	4,74	4,72
Dominio fatiga*	3,76	4,28
Dominio sistémico	4,21	4,00
Dominio actividad	5,01	4,85
Dominio emocional	4,87	4,72
Dominio preocupación	4,50	4,07
CLDQ	27,22	26,51

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#17

IMPROVEMENT OF CARDIOVASCULAR RISK ASSESSMENT ON A COHORT OF PATIENTS WITH METABOLIC DYSFUNCTION-ASSOCIATED STEATOTIC LIVER DISEASE (MASLD)

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**Introduction and Objectives:** Pulse Wave Velocity (PWV) and ultrasound analysis of the carotid and femoral arteries (CA/FA) may offer a more accurate estimation of the cardiovascular risk (CVR) than traditional scores beyond the Coronary Calcium Score. The aim was to evaluate the impact of PWV and Doppler examinations of the CA/FA as modifiers of CVR in MASLD-patients in whom traditional scores were calculated.

**Patients and Methods:** This was a sectional study in MASLD-outpatients without clinical atherosclerotic disease. The AHA/ACC, Framingham and PREVENT scores were calculated, with a value  $\geq 20\%$  considered high-risk. PWV index (patient-PWV/median PWV of the National CVR standard) was assessed (Arteris® AOP), and if  $\geq 1$  was considered as high-risk. CA/FA Doppler (Affiniti-70, Philips, USA) identified atherosclerotic plaques. The prevalence of high-risk patients was first calculated according to each score and reassessed after PWV and Doppler of CA/FA.

**Results:** One hundred fifty-three patients were evaluated between Oct-2023 and Mar-2025 (78% women,  $60.2 \pm 9.4$  yrs., 68% obese, 79% SAH, 67% T2DM, 77% dyslipidemia). Regarding overall scores, 32% of patients were classified as high risk (Prevent 15%, AHA/ACC 18%, Framingham 26%). Notably, a high PWV-index was observed in 33%, and 76% had atherosclerotic plaques, characterizing established atherosclerotic disease. The risk reclassification by the PWV-index occurred in 21%, 25%, and 28%, and by the Doppler 53%, 60%, and 62%, respectively, for the Framingham, AHA/ACC, and Prevent scores.

**Conclusions:** Patients with MASLD have a high prevalence of subclinical atherosclerosis. Traditional scores underestimated CVR, highlighting the need for additional methods for better risk stratification.

**Conflict of interest:** None

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#18

CHANGES IN BODY COMPOSITION AND HEPATIC ELASTOGRAPHY VALUES IN PATIENTS WITH METABOLIC DYSFUNCTION-ASSOCIATED STEATOTIC LIVER DISEASE AT A MEDICAL CENTER IN CARTAGENA – COLOMBIA, DURING THE PERIOD FROM OCTOBER 2023 TO JANUARY 2025

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**Introduction and Objectives:** Metabolic dysfunction-associated steatotic liver disease (MASLD) is characterized by the accumulation of triglycerides in the liver, linked to cardiometabolic risk factors. Its global prevalence exceeds 30%, rising in parallel with overweight and type 2 diabetes. Visceral fat is associated with systemic inflammation and hepatic fat accumulation. Although elastography is useful for assessing disease progression, its high cost and limited availability necessitate the

exploration of alternative tools. The use of body composition parameters has been proposed as potential predictors of disease progression.

To determine the relationship between changes in body composition and hepatic elastography values in patients with liver disease associated with metabolic dysfunction.

**Materials and Methods:** This was an analytical, observational, and prospective study. Patients over 18 years old with a previous diagnosis of steatotic liver disease were included. All underwent elastography and bioelectrical impedance analysis at baseline and after one year to assess progression risk factors. The patients signed the informed consent.

**Results:** A total of 88 patients were included, 52.3% of whom were women. Initial elastography readings averaged 9.2 kPa; the controlled attenuation parameter (CAP) was 269 dB/m. Factors associated with elevated liver stiffness included type 2 diabetes, chronic kidney disease, AST, APRI, and FIB-4 scores. During follow-up, smoking, alcohol consumption, CAP, and changes in body fat were linked to disease progression. In multivariate analysis, only smoking and baseline CAP were independent predictors.

**Conclusions:** Smoking and baseline CAP were significantly associated with the risk of MASLD progression, suggesting their potential utility in guiding timely interventions.

**Conflict of interest:** None

Variable	b	IC 95%	p-value
Female sex	-0,209	(-3,681 - 0,535)	0,14
Arterial hypertension	-0,099	(-2,916 - 1,415)	0,49
Overweight	0,084	(-2,205 - 4,037)	0,558
Prediabetes/Type 2 diabetes mellitus	0,069	(-1,629 - 2,672)	0,628
Smoking	0,483	(2,2 - 7,2)	<0,001
Alcohol consumption	0,311	(0,002 - 0,032)	0,026
Changes in BMI	0,18	(-0,272 - 1,173)	0,216
Changes in waist circumference	0,047	(-0,060 - 0,083)	0,754
CAP	0,346	(0,005 - 0,041)	0,013
Changes in CAP	0,265	(-0,001 - 0,033)	0,06
Changes in body fat mass	0,274	(-0,013 - 0,634)	0,06
Changes in skeletal muscle mass	-0,1	(-1,423 - 0,696)	0,493
Changes in body fat percentage	0,345	(0,089 - 0,799)	0,015
Changes in waist-to-hip ratio	0,051	(-19,025 - 26,984)	0,729
Changes in visceral fat	0,217	(-0,147 - 1,066)	0,134

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#19

PLANT-DERIVED MONOTERPENE SYNERGIZES WITH SORAFENIB TO SUPPRESS DRUG-TRIGGERED HEPATOCELLULAR CARCINOMA IN ANIMALS

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**Introduction and Objectives:** Sorafenib (SB), while established as a first-line multikinase inhibitor for advanced hepatocellular carcinoma (HCC), demonstrates constrained clinical utility due to significant adverse effects and the emergence of drug resistance. To potentially enhance its therapeutic profile, we explored combination therapy with natural compounds. Previous investigations from our group identified safranal (SF), a major bioactive monoterpene constituent of saffron, as exhibiting notable anti-HCC properties.

This study aimed to investigate potential synergistic interactions between SB and SF that might improve HCC treatment outcomes.

**Materials and Methods:** We employed a chemically-induced cirrhotic HCC rat model to evaluate both SF monotherapy and SB-SF