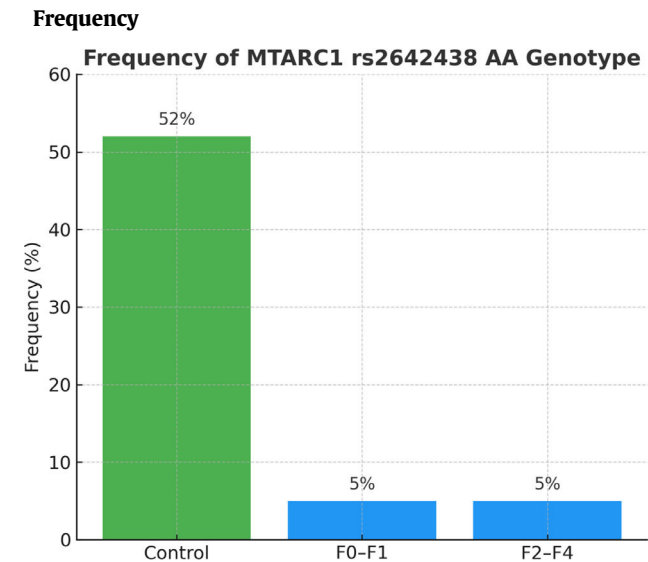




<https://doi.org/10.1016/j.aohep.2025.101976>

#6

INFLUENCE OF GLYCEMIC CONTROL ON THE SEVERITY OF HEPATIC STEATOLOGY IN PATIENTS WITH TYPE 2 DIABETES MELLITUS

Yenni Joseline Cruz Ramírez¹,
Reyna Sarai Velez Ramirez¹,
Luis Erick Cardona Rodriguez¹,
Mayra Virginia Ramos Gómez¹

¹ Centro Médico Nacional “Hospital 20 de Noviembre”, México.

Introduction and Objectives: Type 2 diabetes mellitus (T2DM) has a prevalence of 18.3% in Mexico and is associated with metabolic dysfunction-associated steatotic liver disease (MASLD), which has a prevalence of 30%. Considering glycosylated hemoglobin (HbA1c) a relevant biomarker in the evaluation of glycemic control.

The objective of the study was to analyze the association between HbA1c levels and the degree of hepatic steatosis in patients with type 2 diabetes mellitus (DM2).

Materials and Methods: Observational, descriptive, and retrospective study in 90 patients over 18 years old with DM2 attended in the outpatient gastroenterology clinic at a tertiary care center, between February 2024 and February 2025. All patients underwent hepatic elastography using FibroScan® and HbA1c determination. Using non-parametric statistics (Kolmogorov-Smirnov, Kruskal-Wallis, and Mann-Whitney U with Bonferroni correction).

Results: The patients were compared according to the degree of hepatic steatosis and the levels of (HbA1c), and a statistically significant difference was observed (Kruskal-Wallis, $H=9.75$, $p=0.008$), indicating differences in glycemic control in 2 groups. The average HbA1c ranges were: grade I hepatic steatosis 39.42%; grade II, 64.00%; and grade III 51.96%, suggesting a progressive increase in HbA1c as the severity of hepatic steatosis increases. The post hoc analysis using the Mann-Whitney U test, with Bonferroni correction, revealed significant differences between patients without steatosis and those with grade II steatosis ($p < 0.005$).

Conclusions: Patients with type 2 diabetes who have moderate or severe hepatic steatosis show worse glycemic control compared to patients without steatosis or with mild steatosis.

Conflict of interest: None

Table No. 1 The following table represents the relationship between the degree of steatosis and the levels of glycated hemoglobin, a statistically significant difference is observed (Kruskal-Wallis, $H=9.75$, $p=0.008$), indicating differences in 2 groups in glycemic control. The average ranges of HbA1c were: grade I hepatic steatosis 39.42%; grade II, 64.00% and grade III 51.96% suggesting a progressive increase in HbA1c as the severity of hepatic steatosis increases. The Mann-Whitney U test, with Bonferroni correction, revealed significant differences between patients without steatosis and those with grade II steatosis ($p < 0.005$)

Grade hepatic steatosis	N	Average HbA1c Range
Without Hepatic Steatosis	40	36.98
Grade I hepatic steatosis	12	39.42
Grade II hepatic steatosis	14	64.96
Grade III hepatic steatosis	24	51.96
N		
P VALUE <0.005	U de Man Whitney	CHI SQUARED <0.005
	P=0.005	
H. de Kruskal Wallis	95% Confidence Interval	
9.75 P=0.008		

<https://doi.org/10.1016/j.aohep.2025.101977>

#8

BIOACTIVE COFFEE COMPOUNDS SYNERGISTICALLY ENHANCE THE ANTITUMOR EFFECTS OF CHEMO AND IMMUNOTHERAPY FOR HEPATOCELLULAR CARCINOMA IN VITRO

Leticia Valente Cardoso¹,
Luana Casarin Riechelmann¹,
Luis Barbisan Fernando²,
Guilherme Romualdo Ribeiro¹

¹ Experimental Research Unit (UNIPLEX). Medical School. São Paulo State University UNESP, Brasil.

² Department of Structural and Functional Biology. Biosciences Institute. São Paulo State University (UNESP), Brasil.

Introduction and Objectives: Hepatocellular Carcinoma (HCC) yields high global incidence and mortality rates and an unfavorable prognosis. Although current therapies for advanced HCC are promising, their outcomes remain limited. In this context, there is increasing interest in innovative strategies, such as combining bioactive compounds (BCs) with chemo- and immunotherapies. BCs in coffee have stood out due to their chemopreventive effects reported in epidemiological and experimental studies. However, their antitumor potential, particularly in combination with conventional therapies, remains incompletely understood. In this study, we investigated whether coffee-derived compounds could enhance the antitumor effects of sorafenib (SOR) and atezolizumab plus bevacizumab (ATZ+BVZ) in vitro.

Materials and Methods: LX2 hepatic stellate cells and HepG2/C3A (HCC) cells were cultured in 3D (spheroids) and 2D (transwell)