infiltration of immune cells that activate collagen-producing hepatic stellate cells (HSCs), leading to excessive ECM production, and causing uncontrolled scarring. Maresin1 is a derivative of -3 docosahexaenoic acid (DHA), which has been shown to have pro-resolving and anti-inflammatory effects in various organs like those observed for DHA. This study aimed Mar1+DHA supplementation would prevent the development of fibrosis and promote regeneration in an animal model of chronic liver damage.

**Materials and Methods:** FH was induced in Sprague-Dawley rats by injections of diethylnitrosamine (DEN, 50 mg/kg) and treated with MaR1 (4ng/g) and/or DHA (375 mg/kg) for five weeks. Transaminases, liver histology, and proteins were analyzed by western blot.

**Results:** the DHA+ MaR1 group showed a greater positive response (significant) than MaR1 in terms of normalization of AST and ALT levels, and architecture of the liver. Reducing inflammation and necrosis. Furthermore, both MaR1 and DHA reduced the levels of TGF-, its receptor TGFRII, and TIMP1, increasing MMP1. Results that coincide with the quantification of type I collagen fibers in tissue. On the other hand, they would promote liver regeneration by increasing Cyclin D1.

**Conclusions:** Both MaR1 and MaR1/DHA improve regeneration and DEN-induced liver fibrosis parameters, promoting regeneration and acting as an antifibrotic agent. Results that open the possibility that MaR1/DHA are potential therapeutic agents in fibrosis and other liver pathologies.

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## O-16 DIFFERENCES IN HEPATOCARCINOMA IN PATIENTS WITH CIRRHOSIS DUE TO NONALCOHOLIC FATTY LIVER DISEASE (NAFLD) VS. OTHER ETIOLOGIES

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**Introduction and Objectives:** Non-alcoholic fatty liver disease (NAFLD) is the fastest growing cause of hepatocarcinoma (HCC) in the USA and parts of Europe and is expected to increase exponentially in parallel with the global obesity epidemic. This study aimed to determine the differences in the characteristics of HCC in patients with NASH vs. other etiologies.

**Materials and Methods:** Observational, descriptive study of patients with a diagnosis of HCC presented to the HCC Committee and included in the local Research Registry between March and December 2022. Demographic, clinical and tumor variables at HCC diagnosis were collected. Survival was assessed based on death certificates. Chi2 was calculated considering p<0.05 significant.

**Results:** During the study period, 143 patients were presented to the HCC Committee; 109 of them fulfilled the criteria for this study, 66 with NAFLD etiology (61%) and 43 with cirrhosis due to other etiologies (39%). When comparing sociodemographic and clinical variables in relation to cirrhosis etiology, higher average age (67 vs. 63; p=0.027), lower frequency of men (51% vs. 73%, p=0.026), lower Child-Pugh (Child-Pugh A 55% vs. 40%, p=0.033) and lower average Meld-Na (10.5 vs. 12, p=0.075) were observed in the NAFLD groups vs. other etiologies. No differences were observed in laboratory analysis at HCC diagnosis. There were also no differences in tumor characteristics or recommended therapies. Survival was higher in the NAFLD group, although it was not significant (76% vs. 65%, p=0.228).

**Conclusions:** HCC in patients with NAFLD cirrhosis occurs more frequently in women, older patients and with better overall probably related to the severity of the chronic liver disease. No differences

were observed in tumor characteristics or suggested treatment options, with loco-regional therapy being the most indicated (45% of all patients).

	Total N = 109 (%)	NAFLD N = 66 (%)	Other etiologies N = 43 (%)	P value
HCC characteristics				
N° of lesions Single Multiple	53 (49) 56 (51)	32 (48) 34 (52)	21 (49) 22 (51)	0.971
Size of the largest lesion (mm)	37 (11 – 170)	36 (11 – 140)	45 (11 – 170)	0.267
Sum of lesions size (mm)	51 (11 – 190)	51 (12 – 190)	50 (11 – 175)	0.857
Portal vein involvement	16 (15)	6 (9)	10 (23)	0.053
Extrahepatic disease	5 (5)	4 (6)	2 (5)	1
HCC treatment suggestion				
Loco-regional therapy Surgery Liver transplant Systemic chemotherapy Palliative care Image and clinical follow-up	49 (45) 16 (15) 19 (17) 14 (13) 5 (5) 6 (6)	32 (48) 9 (14) 11 (17) 7 (11) 3 (5) 4 (6)	17 (40) 7 (16) 8 (19) 7 (16) 2 (5) 2 (5)	0.432 0.784 0.801 0.397 1
Survival				
Mortality	31 (28)	16 (24)	15 (35)	0.228

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## O-17 NUTRICIONAL AND PHYSICAL THERAPHY IMPROVES LIVER FRAILTY INDEX IN LISTED PATIENTS WITH CIRRHOSIS: RANDOMIZED CONTROLLED TRIAL. INTERIM ANALYSIS

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**Introduction and Objectives:** Frailty is independently associated with a lower survival in cirrhotic patients. Liver Frailty Index (LFI) determine frailty in listed patients predicting survival. This study aimed to evaluate the effect of a physical and nutritional therapy (intervention group) over LFI compared with a physical and nutritional counseling (control group).

**Materials and Methods:** Patients were recruited and randomized to an intervention group or a control group. Patients were followed for 12 weeks with evaluations every 4 weeks. We compared LFI and LFI at different time points between both groups during the follow-up.

**Results:** 46 patients were recruited, 27 of them in control group and 19 of them in the intervention group. 50% were women and the most common etiologies were metabolic associated fatty liver disease (37%) and alcoholic liver disease (19.6%), primary biliary cholangitis (6.52%), autoimmune hepatitis (6.52%) and hepatitis C virus (2.17%).

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