Materials and Methods: Thirty C57BL/6J male mice were divided into three groups: 1) control group: normal diet. 2) HF group: high fat diet (60%) and water with sucrose and fructose and 3) MexMix group (MexMix): HF diet until week 10 and for 8 additional weeks; HF diet pellets supplemented with 6.7% nopal, 8.7% cocoa and 8.7% cricket.

Results: Mice treated with MexMix decreased body weight, visceral and epididymal fat, and adipocyte size, as well as serum levels of triglycerides, insulin, leptin, and PAI-1; while adiponectin levels increased. Using 16S rRNA gene sequencing, MexMix was shown to increase phylogenetic diversity, Firmicutes abundance, and enrichment of 10 genera, including Lachnospiraceae, Ruminococcaceae, Akkermansia, and Eubacterium_coprostanoligenes_group, associated with multiple beneficial effects such as short-chain fatty acids (SCFAs) production. In the gut, MexMix supplementation increased significantly fecal SCFAs concentration, intestinal crypts depth, Ocln and Cldn1 expression, and decreased Il6 and Tnf-a expression. In liver, MexMix significantly reduced steatosis. Liver transcriptome in MexMix group showed an enrichment in histone H3K14 acetylation pathway. Using qPCR, we confirmed higher hepatic expression of Cat, Sod and lower expression of Tnfa and Pparg. In addition, MexMix diet decreased hepatic expression of miRNA-34a, miRNA-103, and miRNA-33a.

Conclusions: Supplementation with MexMix demonstrated its efficacy as a prebiotic, promoting growth of beneficial genera improving intestinal health. This suggests that MexMix could be a potential therapeutic strategy for treating MAFLD in patients, as well as other conditions linked to excessive consumption of fats and sugars.

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O-22 EFFICACY OF ATEZOLIZUMAB BEVACIZUMAB TREATMENT FOR HEPATOCELLULAR CARCINOMA IN REAL-WORLD CLINICAL PRACTICE AT TWO TERTIARY HEALTHCARE CENTERS IN SOUTHERN BRASIL: FIRST INTERIM ANALYSIS

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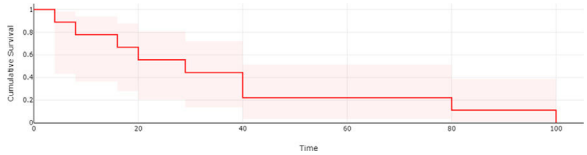
Introduction and Objectives: Atezolizumab and bevacizumab (Atez/Bev) are the new standard of care for first-line systemic therapy of hepatocellular carcinoma (HCC). Real-world data on safety and efficacy of Atez/Bev are scarce in Latin America. We aimed to describe safety and efficacy of Atez/Bev in patients with HCC Barcelona Clinic Liver Cancer (BCLC) B and C stages.

Materials and Methods: Prospective cohort study at two tertiary healthcare centers in Porto Alegre, Southern Brazil, included consecutive HCC patients within BCLC B or C stages started with Atez/Bev as first line therapy between 2020-2023. Demographics, tumor response, overall survival (OS), and adverse events were assessed.

Results: A total of 20 patients, 16 males (80%), all with cirrhosis (HCV 13, HBV 3, NASH 3, alcohol 1). Child-Pugh were A and B (17 and 3, respectively). Median MELD was 8 (IQR 7-10.5) and median age 70.5 years-old (IQR 61-72.8). Median baseline alfa-fetoprotein was 36.8 (IQR 6.6-2.696). Esophageal varices in 11 individuals (65%). Majority (19/20) was BCLC stage C and ECOG 0/1. Previous HCC treatment was surgery (n=2, 10%), radiofrequency ablation (n=1, 5%) or transarterial chemoembolization (n=10, 50%). Macrovascular invasion and extra-hepatic metastasis were detected in 9 (45%) and 5 (25%) patients, respectively. Median Atez/Bev cycles were 5.5 (IQR 3-8.8) and dose reduction occurred in 5 patients (25%). Tumor response was evaluated in 13 patients: partial response in 3 (23.1%), stable disease in 1 (7.6%), and progressive disease in 9 (69.3%). Median follow-up (last visit or death) was 31.5 weeks (IQR 16-47.5). Median OS was 55% (Fig 1). Cirrhosis decompensation occurred in 11/20 individuals (55%) with variceal bleeding in 5/20 (25%), which was the only significant variable associated with mortality (p=0.04).

Conclusions: Atez-Bev in a real-world cohort of intermediary and advanced HCC patients showed efficacy and safety comparable to published studies with similar inclusion criteria.



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O- 23 STRATEGIES TO ELIMINATE HEPATITIS C VIRUS INFECTION IN THE AMERICAS

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