| Fibrosis characteristics obtained by liver elastography in the study population (N = 899) | |
|---|---|
| Fibrosis Stage | Number of Patients (%) |
| F0-F1 | 704 (78.3%) |
| F2 | 105 (11.7%) |
| F2-F3 | 31 (3.4%) |
| F3-F4 | 29 (3.2%) |
| F4 | 30 (3.3%) |

https://doi.org/10.1016/j.aohep.2025.102029

**#88**

## CLINICAL CHARACTERIZATION OF HCC IN A SILENT REGION: REAL-WORLD DATA FROM A PROSPECTIVE COHORT IN CENTRAL AMERICA

Francisco Vargas-Navarro[1], Maria Lynch-Mejía[1], Wagner Ramírez-Quesada[1], Maria Soto-Echeverri[2], Daniel Pérez-Muñoz[2], Alejandra Ochoa-Palominos[2], Pablo Coste[3]

[1] *Liver Lab CR / Calderón Guardia Hospital, Costa Rica.*
[2] *Calderón Guardia Hospital, Costa Rica.*
[3] *Liver Lab CR / Calderón Guardia Hospital, Costa Rica.*

**Introduction and Objectives:** Hepatocellular carcinoma (HCC) is a leading cause of cancer-related mortality worldwide. However, clinical data from Central America and the Caribbean are scarce, limiting the development of region-specific public health strategies and clinical guidelines.

Describe the clinical and demographic characteristics of patients diagnosed with HCC, providing the first prospective dataset from this underrepresented region.

**Materials and Methods:** This observational cohort study included all patients diagnosed with or referred for HCC between September 2018 and June 2024. Clinical data were extracted from medical records, anonymized, and recorded electronically. Patients with incomplete or unverifiable data were excluded.

**Results:** A total of 260 patients were included (mean age 67 years; 38.5% women). Cirrhosis was present in 92.7%, and 95% met at least one metabolic syndrome (MS) criterion; 54.6% met full MS criteria. MASLD or alcohol-related liver disease accounted for 85% of underlying etiologies. Nineteen patients (7.3%) had non-cirrhotic HCC, predominantly MASLD-related. HCC diagnoses increased by 90.5% between 2017–2018 and 2023–2024. Screening detected 43.5% of cases. Ultrasound was the first imaging modality in 90.4%, with an average delay of 70 days to confirmatory imaging. AFP levels ≥20 IU/mL and ≥400 IU/mL were seen in 42.1% and 21.2%, respectively. At diagnosis, 60.6% were Child-Pugh A and 66.9% had MELD <15. BCLC staging: 0 (1.9%), A (48.8%), B (16.9%), C (20.4%), D (11.9%).

**Conclusions:** This first prospective characterization of HCC in Central America shows high rates of metabolic dysfunction and cirrhosis. Increasing incidence and diagnostic delays highlight the urgent need for structured screening and better resource allocation.

**Conflict of interest:** None

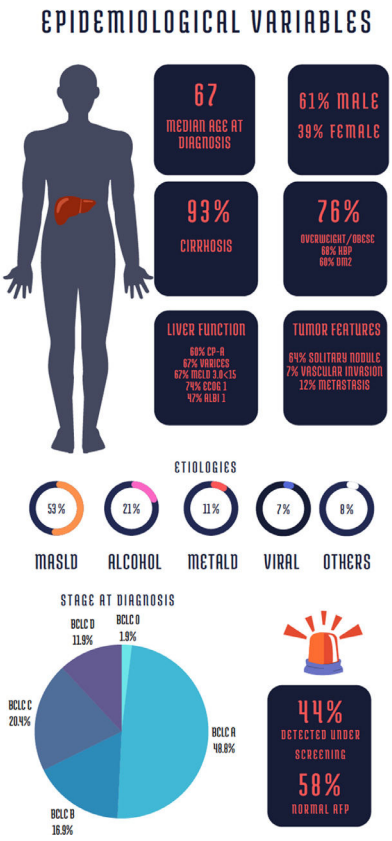



Figure 1: Clinical and demographic characteristics of patients at diagnosis (MASLD: metabolic dysfunction-associated steatosis liver disease. MetALD metabolic and alcohol related/associated liver disease, MELD: Model for End-stage Liver Disease score; ECOG-PS: Eastern Cooperative Oncology Group Performance Status; DM2: Type 2 diabetes mellitus, ALBI: Albumin-Bilirubin, HBP: High blood pressur

https://doi.org/10.1016/j.aohep.2025.102030

**#89**

## VIRULENCE–HOST GENE INTERACTION OF H. PYLORI CAGA AND NOD1 ELEVATES NON-INVASIVE FIBROSIS MARKERS IN MASLD

Facundo Maiorana[1], Kiara Czajkowski[2], Enzo Gabriel Maidana[2], Maria Virginia Caronia[3], Pedro Dario Zapata[4], Fernando Javier Barreyro[4]

[1] *Insituto Universitario en Ciencias de la Salud, Argentina.*
[2] *Instituto de Biotecnología Misiones, Argentina.*
[3] *Instituto de Patología Integral, Argentina.*
[4] *CONICET, Argentina.*

**Introduction and Objectives:** Recent studies have suggested an association between H. pylori (Hp) active gastric infection and metabolic dysfunction associated steatotic liver disease (MASLD We evaluated whether the H. pylori virulence gene cagA and the host sensor NOD1 (rs2075820) correlate with non-invasive markers of liver injury and fibrosis in patients with MASLD.

**Patients / Materials and Methods:** In a prospective study (2021–2024, northeast Argentina), 494 adults with Rome IV functional dyspepsia underwent gastroscopy. Biochemical, clinical parameters,

ultrasound, FIB-4 score, liver stiffness measurement (LSM) by vibration-controlled transient elastography, gastric biopsies, and H. pylori cagA and NOD1 single nucleotide polymorphism (rs2075820) were evaluated.Associations were analysed with $\chi^2$, ANOVA/Tukey and multivariable logistic regression (*p<0.05).

**Results:** Participants were 60 % women; mean age 49 years; BMI 27.9 kg/m$^2$. MASLD was present in 209 (42 %) and Hp in 252 (51 %). Hp positivity coincided with higher BMI and MASLD prevalence (52 % vs 32 %). Among MASLD subgroup, Hp +/cagA + infection was associated with higher AST ($25 \pm 11$ vs $33 \pm 14$ U/L), FIB-4 ($1.0 \pm 0.5$ vs $1.5 \pm 0.8$), and LSM ($5.7 \pm 2.8$ vs $7.8 \pm 5.2$ kPa) compared with Hp-negative patients ($p < 0.05$ for all), without significant differences in ALT or GGT.The combined cagA +/NOD1-GG genotype displayed the greatest FIB-4 (1.5) and LSM (8.5 kPa); 41 % of carriers exceeded the ≥8 kPa threshold for advanced fibrosis, yielding an an odds ratio (OR) of 3.99 (95 % CI 1.6–10.0; p = 0.003), which remained significant after adjustment for metabolic comorbidities (adjusted OR 4.98; 95 % CI 1.9 –13.5).

**Conclusions:** In dyspeptic adults with MASLD, Hp cagA carriage is linked to worse non-invasive liver indices. The cagA +/NOD1-GG genotype independently predicts significant fibrosis, underscoring a bacterial–host genetic synergy that may accelerate MASLD progression.

**Conflict of interest:** Yes, Fundacion HA Barcelo

https://doi.org/10.1016/j.aohep.2025.102031

**#90**

## CONCORDANCE BETWEEN EXPERT GASTROENTEROLOGISTS AND ARTIFICIAL INTELLIGENCE TOOLS IN SOLVING HEPATOLOGY CLINICAL CASES

Jesús Ignacio Mazadiego Cid[1],
María del Rosario Herrero Maceda[1],
Paloma Montserrat Diego Salazar[2],
Rogelio Zapata Arenas[2],
Scherezada María Isabel Mejía Loza[1],
Juanita Pérez Escobar[1],
María Fátima Higuera de la Tijera[2],
Elías Artemio San Vicente Parada[1],
Raquel Yazmín López Pérez[2],
Felipe Zamarripa Dorsey[3],
Yoali Maribel Velasco Santiago[2],
Adriana López Luria[3], Moises Coutiño Flores[1],
Alejandra Díaz García[1]

[1] *Hospital Juárez de México.*
[2] *Hospital General de México.*
[3] *Hospital Ángeles Lomas, México.*

**Introduction and Objectives:** Evidence regarding the utility of artificial intelligences (AI) for the diagnosis of clinical cases in gastroenterology is limited, and is even scarcer in hepatology.

Determine the concordance between the responses of various AI models and those of specialist physicians in the resolution of hepatology clinical cases.

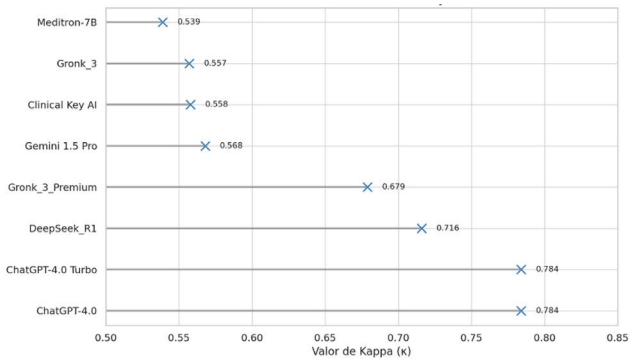
**Materials and Methods:** This was a clinical, observational, analytical, and prospective study. The assessment instrument comprised six hepatology clinical cases, each featuring five questions. A panel of eight experts from different institutions was convened; and their individual responses were subjected to calculation of the kappa coefficient ($\kappa$) and Cronbach's alpha. Items that failed to meet the validation threshold (≥ 80 % agreement and $\kappa \geq 0.6$) were reviewed through iterative rounds of a modified Delphi method. Finally, $\kappa$ was calculated to evaluate concordance between responses generated by the AI models and the expert consensus.

**Results:** The expert consensus demonstrated a high overall concordance ($\kappa = 0.901$; 95 % CI [0.860, 0.943]; z = 61.57; $p < 0.001$). Individual model concordance ranged from moderate to substantial, with $\kappa$ values between 0.539 (Meditron-7B) and 0.784 (ChatGPT-4.0 and ChatGPT-4.0 Turbo), all statistically significant. In terms of the percentage of correct responses, the highest performing models were ChatGPT-4.0, ChatGPT-4.0 Turbo, and Deepseek-R1 (figure 1).

**Conclusions:** A moderate to substantial concordance was observed between diagnoses generated by different AI models and expert judgment in hepatology clinical cases, although variations were noted among the evaluated systems.

**Conflict of interest:** None

**Figure 1**




https://doi.org/10.1016/j.aohep.2025.102032

**#91**

## HIGH RATE OF EARLY ALP NORMALIZATION WITH UDCA–BEZAFIBRATE COMBINATION THERAPY IN TREATMENT-NAÏVE PRIMARY BILIARY CHOLANGITIS: PRELIMINARY RESULTS

Juan Antonio Sorda[1], Fernando Javier Barreyro[2],
Matías Bori[1], Guillermo Fernández[3],
Esteban González Ballerga[1]

[1] *Hospital de Clínicas, Argentina.*
[2] *CONICET, Argentina.*
[3] *Hospital Teodoro Juan Schestakow, Argentina.*

**Introduction and Objectives:** Six-month alkaline phosphatase (ALP) normalisation predicts one-year response and survival in primary biliary cholangitis (PBC). Bezafibrate (BZF) benefits incomplete ursodeoxycholic-acid (UDCA) responders. We therefore assessed ALP normalization at six-month with UDCA alone versus UDCA+BZF at two different doses.

**Materials and Methods:** in an open-label trial (January 2022 –2025) antimitochondrial-antibody–positive, non-cirrhotic PBC patients were randomised 2 : 2 : 1 to UDCA 13–15 mg kg$^{-1}$ day$^{-1}$ (n=21), UDCA+BZF 400 mg (n=23) or UDCA+BZF 800 mg (n=8). Liver tests were obtained monthly for six months. The primary end point was ALP ≤ 1 × ULN at month 6; secondary end points were changes in other enzymes, pruritus and safety.