Method: The prospective ANRS CO22 HEPATHER cohort was enriched with individual data until December 2018 from the French National Health Insurance Database (SNDS), which contains medical information regarding ambulatory care and hospital admissions. CHC patients were enrolled between August 2012 and December 2015 in 32 French hepatology centers. A total of 8148 CHC adults were selected. Cardiovascular events (stroke, acute coronary syndrome, pulmonary embolism, heart failure, arrhythmias and conduction disorders [ACD], peripheral arterial disease [PAD]) and cancers (colorectal, bladder, prostate, kidney, lung, pancreas, thyroid, head/neck, breast) were derived from the SNDS. Associations between DAAs and extrahepatic events were estimated using marginal structural models, with adjustments for clinical confounders and medications.

Outcomes	Adjusted hazard ratios associated with DAAs (95% Confidence Interval)
Total population (n = 8148)	
Acute stroke	1.30 (0.82, 2.08)
Acute coronary syndrome	1.00 (0.63, 1.60)
Acute pulmonary embolism	2.10 (0.64, 6.85)
Acute heart failure	1.15 (0.74, 1.78)
Arrhythmias and conduction disorders	1.46 (1.04, 2.04)
Peripheral arterial disease	0.54 (0.33, 0.89)
Major cardiovascular events	1.03 (0.81, 1.31)
Any cardiovascular event	1.10 (0.90, 1.36)
Any extrahepatic solid cancer	1.23 (0.50, 3.03)
Patients with advanced fibrosis (n = 3586)	
Acute stroke	0.58 (0.29, 1.18)
Acute coronary syndrome	0.59 (0.29, 1.19)
Acute pulmonary embolism	0.79 (0.16, 3.97)
Acute heart failure	0.47 (0.27, 0.81)
Arrhythmias and conduction disorders	1.02 (0.57, 1.84)
Peripheral arterial disease	0.36 (0.17, 0.73)
Major cardiovascular events	0.50 (0.36, 0.71)
Any cardiovascular events	0.58 (0.42, 0.79)
Any extrahepatic solid cancer[c]	0.39 (0.09, 1.71)

Results: Analyses of 12 905 person-years (PY) of no DAA exposure and 22 326 PY following DAA exposure showed a reduced risk of PAD after DAAs (HR, 0.54; 95% CI, 0.33 to 0.89), a beneficial effect of DAAs on overall cardiovascular outcomes in patients with advanced fibrosis (aHR, 0.58; 95% CI, 0.42 to 0.79), and an increased risk of ACD (hazard ratio [HR], 1.46; 95% CI, 1.04 to 2.04) predominant after the first year following DAA initiation. There was no association between DAAs and extrahepatic cancer (HR, 1.23; 95% CI, 0.50 to 3.03).
Conclusion: DAAs were associated with a decreased risk of cardiovascular outcomes in patients with advanced fibrosis, a decreased risk of PAD regardless of the fibrosis stage, and an increased risk of ACD, supporting long-term cardiac monitoring after DAA therapy. DAAs were not associated with extrahepatic cancer development or reduction.

Cirrhosis and its complications: Other clinical complications except ACLF and critical illness

OS007
Etiological cure prevents further decompensation and mortality in cirrhotic patients with ascites as the single first decompensating event

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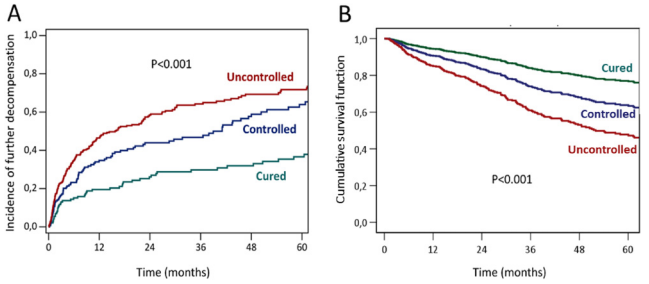
Background and aims: Etiologic treatment reduces the risk of decompensation and mortality in compensated cirrhosis. However, in the setting of decompensated cirrhosis the impact of etiologic treatment is less predictable, in particular in patients with ascites, who remain at high risk of developing further decompensating events and death. The aim of the study was to evaluate the impact of etiological treatment in decompensated patients with cirrhosis and ascites as the single index decompensating event. The end points were the occurrence of further decompensation (i.e. refractory ascites, spontaneous bacterial peritonitis [SBP], hepatorenal syndrome [HRS-AKI], variceal bleeding [VB] and hepatic encephalopathy [HE]) and mortality.
Method: Cirrhotic patients with ascites as single first decompensation event at the University Hospital of Padova or the Vienna General Hospital between 2003–2021 were included and followed until death, liver transplantation or September 2021. The etiology was considered as "cured" in case of removal of the primary etiological factor (e.g. HCV: virological cure, HBV: virological suppression, ALD: alcohol abstinence) and as "controlled" in case of partial removal of etiologic factor (e.g. HBV: partial suppression of HBV-DNA, ALD: mostly abstinent but with drinking episodes).
Results: We included 622 patients (mean age: 57 ± 11 years, male 68%, mean MELD 15 ± 6), the most common etiology were ALD (59%) and HCV (23%). Etiology was "cured" in 146 patients (24%), "controlled" in 170 (27%) and uncontrolled in 306 (49%). During a median follow-up of 33months, 350 patients (56%) developed further decompensation (33%refractory ascites, 29% HE, 17% SBP, 13% HRS-AKI, 9% VB). The incidence of further decompensation at 5 years was significantly lower in patients with "cured" vs "controlled" vs uncontrolled etiology (38% vs 64% vs 72%, respectively; $p < 0.001$; Fig. 1A). In multivariable analysis (adjusted for age, varices, etiology, Child Pugh class, creatinine and sodium), "cured" (aHR = 0.52; $p < 0.001$) and "controlled" etiology (aHR = 0.60; $p < 0.001$) were both independently associated with a lower risk of further decompensation. Considering response to etiological treatment as time-dependent covariates, 5-year cumulative incidence of survival was significantly higher in patients with cured vs controlled vs uncontrolled etiology (83% vs 58% vs40%, respectively; $p < 0.001$; Fig. 1B). In multivariable analysis, etiological cure (aHR = 0.35, $p < 0.001$) and controlled etiology (aHR = 0.61, $p = 0.003$) were independently associated with lower mortality.



Conclusion: In cirrhotic patients with ascites as single first decompensating event, the cure or control of etiology of liver disease reduces the risk of further decompensations and mortality.

OS008

Risk factors for short-term post discharge clinical outcomes in patients hospitalized with decompensated chronic liver disease: interim results from Global CLEARED study

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Background and aims: Decompensated chronic liver disease (DCLD) is associated with poor outcomes, but no global study has addressed this after hospitalization. We prospectively evaluated non-elective hospitalized patients with DCLD to determine disease profile, predictors of readmission and 30 days mortality post discharge following index hospital admission under "***C***hronic ***L***iver disease ***E***volution ***A***nd ***R***egistry for ***E***vents and ***D***ecompensation (CLEARED) consortium.

Method: Data were prospectively collected from 49 centres from 6 continents of non-elective admissions in DCLD patients with or without cirrhosis, aged ≥18 years. We performed an interim analysis to predict readmission and mortality within 30 days following index hospital discharge. World Bank data were used to stratify countries according to income.

Results: 1383 patients, mean age 54.97 ± 13.55 years; 64% male; diverse ethnicity [White 39%, Asian 30%, Hispanic 10%, Black 9%] were analyzed. Alcohol was the most common etiology (46%), followed by NASH (23%), HBV (13%) and HCV (11%). Admissions were almost exclusively for liver related complications i.e. GI bleed (30%), HE (34%), AKI (33%), and anasarca (24%). Mean admission CTP was 10 (5–14) and MELD-Na 23 (6–40). Only 11% were listed for transplant. 51% had hospitalization in previous six months. 24% were infected at admission and another 13% developed infections subsequently. During hospitalization, organ failures were: AKI 46%; as brain 16%, circulatory 14%, and respiratory 13%; 25% needed ICU admission. Median hospital stay was 7 days (1–140) and 11% lost to follow-up after discharge. 33% were readmitted, 3% were transplanted while 26% of patients died within 30 days. The most significant independent factors predicting readmission within 30 days were being in low/lower middle income country ($p < 0.0001$), a high discharge MELD-Na ($p = 0.0005$), and hospitalization ≤6 M ($p = 0.006$). The most significant independent predictors of 30-day-mortality post index discharge were age, discharge MELD-Na ($p < 0.0001$ for both), and various organ failures during index admission ($p < 0.01$).

Conclusion: The clinical outcomes of patients with DCLD following index hospital admission vary widely around the world. Mortality within 30 days post discharge is largely dependent on patient and disease factors. Readmission post discharge, however, is variable across continents and inversely correlates socio-economic status. Global characterization of patients at high risk of readmission should include further study of socio-economic factors in addition to severity of liver disease.