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P24
Poster for you

VIROLOGICAL AND CLINICAL OUTCOMES OF PATIENTS WITH HDV CIRRHOSIS TREATED WITH BULEVIRTIDE MONOTHERAPY FOR UP TO 96 WEEKS: A MULTICENTER EUROPEAN STUDY (SAVE-D)

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Introduction/Summary

- Bulevirtide (BLV) 2 mg/day is EMA approved for treatment of compensated chronic hepatitis due to Delta virus (HDV) infection, however real-life data in large cohorts of patients with cirrhosis are lacking.

Study Design

- Consecutive HDV-infected patients with cirrhosis starting BLV 2 mg/day since September 2019 were included in a European retrospective multicenter real-life study (SAVE-D).

Methods

- Patient characteristics before and during BLV treatment were collected. Virological, biochemical, combined responses, adverse events and liver-related events (HCC, decompensation, liver transplant) were assessed.

Results

- A total of 244 patients with HDV-related cirrhosis receiving BLV monotherapy for a median of 92 (IQR 71-96) weeks were included. Patients' characteristics at BLV start (baseline) are shown in **Table 1**

Table 1. *Baseline demographic, clinical and virological features of the 244 patients enrolled*

Variables	Overall (n=244)
Age, years	49 (40-58)
Males	148 (61%)
Caucasians	201 (82%)
HDV genotype 1*	77 (94%)
HIV coinfection°	24 (10%)
Anti-HCV positive**	18 (7%)
BMI, Kg/m^2	25 (23-28)
CPT score A§	233 (95%)
Spleen diameter, cm	15 (12-17)
Esophageal varices@	91 (54%)
Previous decompensation+	37 (15%)
History of HCC#	18 (7%)
Previous IFN treatment	142 (58%)
NUC treatment for HBV	224 (92%)
LSM, kPa	18.3 (13.0-26.3)
Bilirubin, mg/dL	0.9 (0.6-1.4)
AST, U/L	75 (54-113)
ALT, U/L	80 (55-130)
GGT, U/L	68 (39-114)
Albumin, g/dL	3.9 (3.5-4.3)
Creatinine, mg/dL	0.8 (0.7-0.9)
PLT, 10^3/mm^3	94 (67-145)
Bile acids, µmol/L	15 (9-32)
HBsAg, log$_{10}$ IU/mL	3.8 (3.4-4.1)
HBeAg negative	227 (93%)
HBV DNA detectable°°	52 (21%)
HDV RNA, log$_{10}$ IU/mL	5.4 (4.1-6.5)

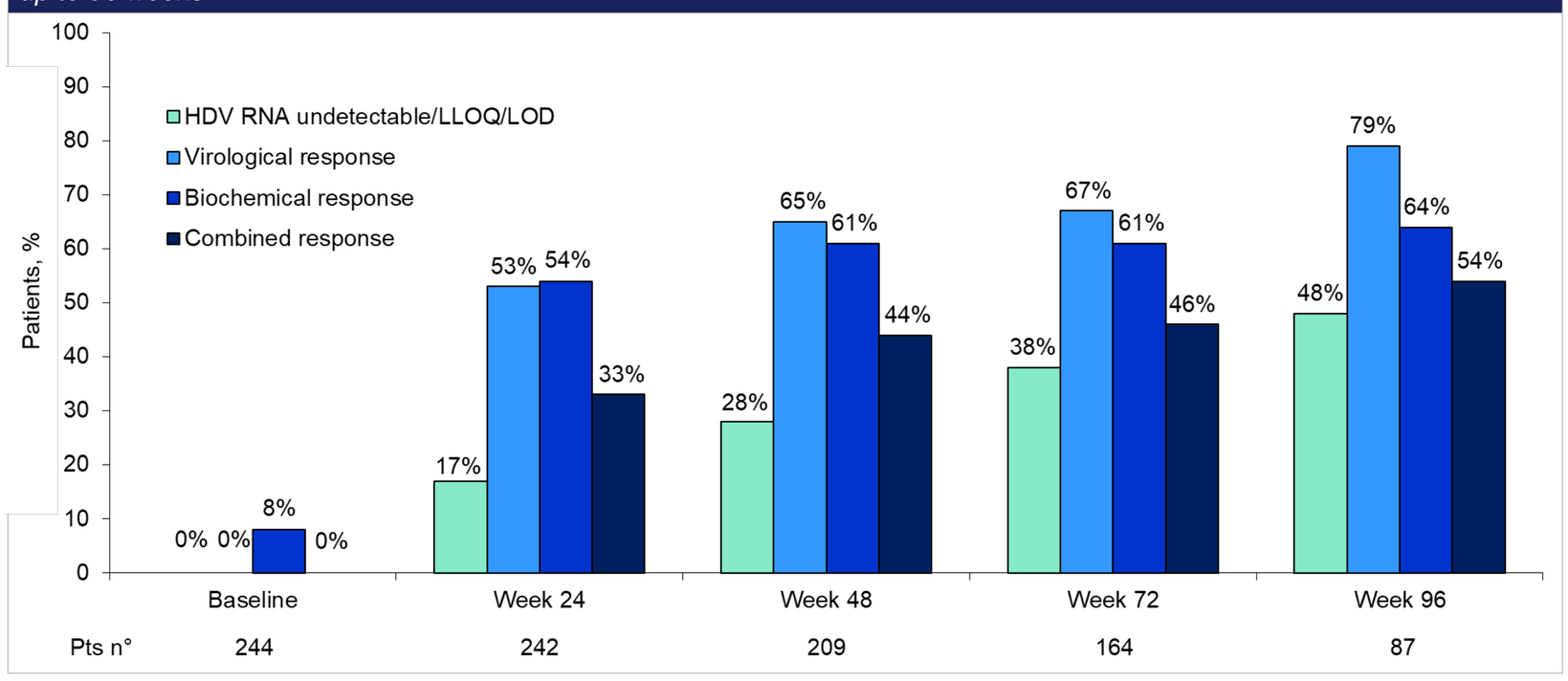
Values are expressed as number (percentage), median (IQR); *available in 82 patients; ° all patients HIV RNA undetectable; **all patients HCV RNA undetectable; § CPT A6 in 59 (24%); CPT B7 in 11 (5%); @EGD available in 169 (69%), 62 (37%) on prophylaxis; +ascites in 30 (12%), bleeding in 7 (3%); #active HCC in 14 (6%): °° according to local laboratory, median 1.4 (1.0-1.5) logIU/mL

HDV: Hepatitis D Virus; HIV: Human Immunodeficiency Virus; HCV: hepatitis C Virus; BMI: body mass index; CPT: Child Pugh score; IFN: Interferon; NUC: nucleos(t)ige analogue HCC: Hepatocellular Carcinoma; LSM: Liver stiffness measurement; AST: Aspartate Aminotransferase; ALT: Alanine Aminotransferase; GGT: Gamma Glutamyl Transferase; PLT: platelets; HBsAg: Hepatitis B surface Antigen; HBeAg: Hepatitis B e Antigen; HBV: Hepatitis B Virus; EGD: esophagogastroduodenoscopy

Results (Continued)

- At weeks 48 and 96, virological, biochemical and combined responses were observed in 65% and 79%, 61% and 64%, 44% and 54% of patients, respectively (**Figure 1**).
- AST, GGT, albumin, IgG and LSM values significantly improved throughout treatment. Serum bile acid levels increased in most patients, only 10% patients reported mild and transient pruritus, independently of bile acid levels.
- Lower baseline HDV RNA was the only predictor of HDV RNA undetectability at week 48 (OR per 1 log$_{10}$ IU/mL: 0.74, 95% CI 0.60-0.92, p=0.01).

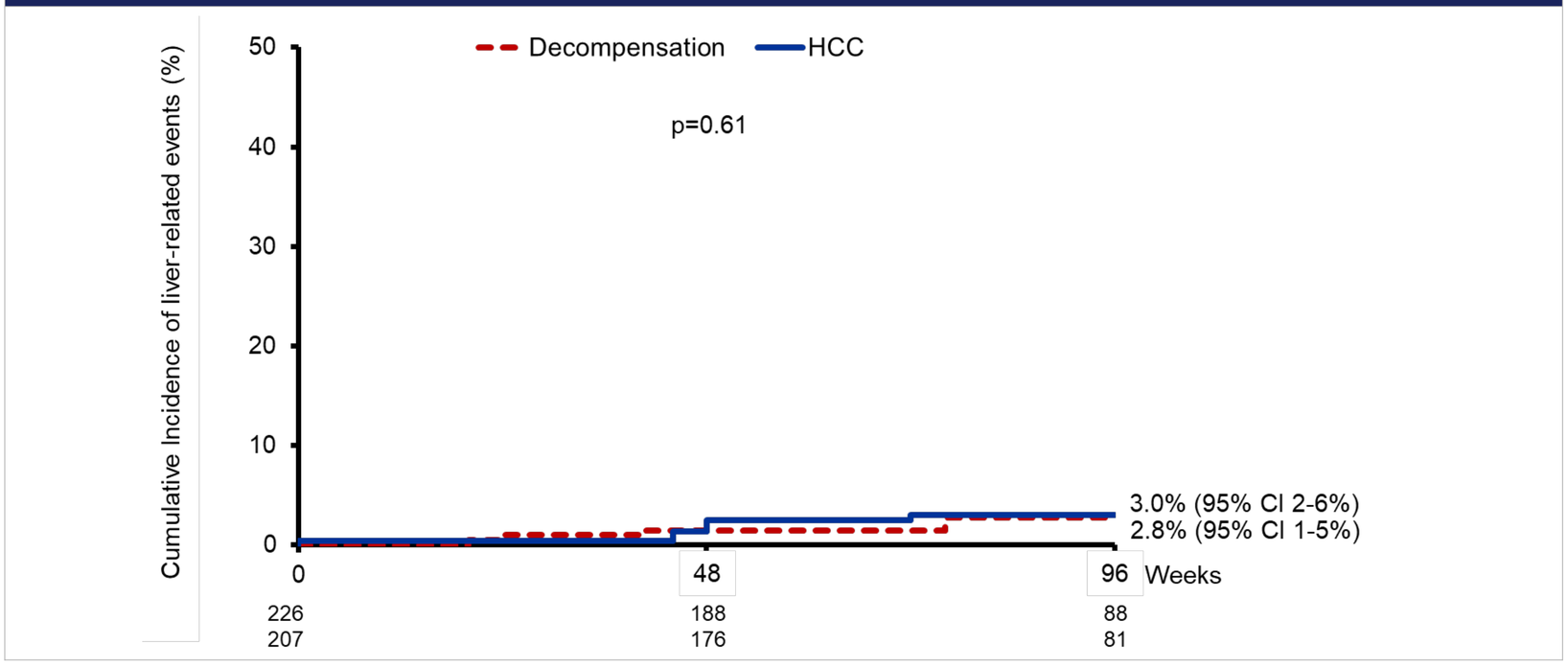
Figure 1. *Rates of HDV RNA undetectability, virological, biochemical and combined responses to BLV 2 mg/day monotherapy up to 96 weeks*



Virological response: Undetectable HDV RNA or ≥2 log decline from baseline; **Biochemical response**: ALT <40 U/L; **Combined response**: Virological and biochemical; **Undetectable**: TND (Target Not Detected), <LLOQ (Lower Limit of Quantification) or <LOD (Lower Limit of Detection)

- The W96 cumulative risk of de-novo HCC and decompensation was 3.0% (95% CI 2-6%) and 2.8% (95% CI 1-5%), respectively (**Figure 2**). Thirteen (5%) patients underwent liver transplantation (n=11 for HCC, n=2 for decompensation).

Figure 2. *96-week cumulative incidence of liver-related events during BLV monotherapy*



Conclusion

- BLV 2 mg/day monotherapy up to 96 weeks was safe and effective in patients with HDV-related cirrhosis.
- Virological and clinical responses increased over time.
- Liver-related complications were few.

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