OCTOBER 11-12, 2024 MILAN, ITALY
DeltaCure 3rd International Meeting
P23
Poster for you

BULEVIRTIDE FOR PATIENTS WITH CHRONIC HEPATITIS D (CHD) IN ITALY: A MULTICENTER PROSPECTIVE NATIONWIDE REAL-LIFE STUDY (D-SHIELD)

Maria Paola Anolli[1], Elisabetta Degasperi[1], Gianpiero D'Offizi[2], Alessia Rianda[2], Alessandro Loglio[3], Mauro Viganò[3], Alessia Ciancio[4], Yulia Troshina[4], Maurizia R Brunetto[5], Barbara Coco[5], Serena Zaltron[6], Michele Milella[7], Pierluigi Toniutto[8], Letizia Marinaro[9], Andrea Gori[10], Alessandro Federico[11], Teresa A Santantonio[12], Gabriella Verucchi[13], Filomena Morisco[14], Alessandra Mangia[15], Stella De Nicola[16], Monia Maracci[17], Antonietta Romano[18], Pietro Gatti†[19], Rosa Zampino[20], Marcello Persico[21], Pietro Pozzoni[22], Adriano Pellicelli[23], Nicola Coppola[24], Francesca Pileri[25], Matteo Tonnini[26], Massimo Puoti[27], Pietro Lampertico[1,28]

1 Division of Gastroenterology and Hepatology, Foundation IRCCS Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy 2 Division of Infectious Diseases - Hepatology, Department of Transplantation and General Surgery, Istituto Nazionale per le Malattie Infettive "L. Spallanzani" IRCCS, Rome Italy 3 Gastroenterology, Hepatology and Transplantation Division, ASST Papa Giovanni XXIII, Bergamo, Italy 4 Department of Medical Sciences, University of Turin, Gastroenterology Division of Città della Salute e della Scienza of Turin, University Hospital, Turin, Italy 5 Department of Clinical and Experimental Medicine, University of Pisa and Hepatology Unit, University Hospital of Pisa, Pisa, Italy 6 Infectious Disease Department, Spedali Civili Brescia, Brescia, Italy 7 Infectious Diseases Unit, Department of Biomedical Sciences and Human Oncology, University of Bari, Bari, Italy 8 Hepatology and Liver Transplantation Unit, Academic Hospital, University of Udine, 33100 Udine, Italy 9 SCDU Infectious Diseases, Amedeo di Savoia Hospital, ASL Città di Torino, 10149 Turin, Italy 10 Infectious Disease Unit II, Ospedale Luigi Sacco, ASST Fatebenefratelli Sacco, Milano, Italy 11 Division of Hepatogastroenterology, Department of Precision Medicine, Università della Campania "Luigi Vanvitelli", Naples, Italy 12 Department of Medical and Surgical Sciences, Infectious Diseases Unit, University of Foggia, Foggia, Italy 13 Department of Medical and Surgical Sciences, Unit of Infectious Diseases, "Alma Mater Studiorum" University of Bologna, S. Orsola-Malpighi Hospital, Bologna, Italy 14 Department of Clinical Medicine and Surgery, Diseases of the Liver and Biliary System Unit, University of Naples "Federico II", Naples, Italy 15 Liver Unit, Fondazione IRCCS "Casa Sollievo della Sofferenza", San Giovanni Rotondo, Italy 16 Division of Internal Medicine and Hepatology, Department of Gastroenterology, IRCCS Humanitas Research Hospital, Rozzano, MI, Italy 17 Institute of Infectious Diseases and Public Health, Università Politecnica delle Marche, Ancona, Italy 18 Unit of Internal Medicine and Hepatology (UIMH), Department of Medicine, University of Padova, Padova, Italy 19 Internal Medicine Unit, Brindisi General Hospital, Brindisi, Italy 20 Department of Advanced Medical and Surgical Sciences, University of Campania Luigi Vanvitelli, Naples, Italy 21 Department of Medicine, Surgery and Dentistry, University of Salerno, Baronissi, Italy 22 General Medicine Unit, Presidio Ospedaliero, Azienda Socio Sanitaria Territoriale di Lecco, Lecco, Italy 23 Liver Unit, San Camillo Hospital, Department of Transplantation and General Surgery, Rome, Italy 24 Department of Mental Health and Public Medicine - Infectious Diseases Unit, University of Campania Luigi Vanvitelli, Naples, Italy 25 Division of Internal Medicine and Center for Hemochromatosis, University of Modena and Reggio Emilia, Modena, Italy 26 Division of Internal Medicine, Hepatobiliary and Immunoallergic Diseases, IRCCS Azienda Ospedaliero-Universitaria di Bologna, Bologna, Italy 27 School of Medicine and Surgery University of Milano Bicocca 28 CRC "A. M. and A. Migliavacca" Center for Liver Disease, Department of Pathophysiology and Transplantation, University of Milan, Milan, Italy

Introduction/Summary

- Bulevirtide (BLV) is the only approved drug for patients with chronic hepatitis Delta (CHD) in EU. In Italy this drug has been available since May 2023, but no studies so far have addressed the demographic, virological and clinical features of patients treated with BLV as well as they response to treatment.

Study Design

- Consecutive HDV patients with chronic hepatitis Delta (CHD) starting BLV 2 mg/day as monotherapy or in combination with pegIFNα were included in a multicenter real-life Italian study (D-SHIELD).

Methods

- Patients' characteristics before and during BLV treatment were collected
- Virological, biochemical, clinical features were assessed.

Results

Table 1. *Baseline features of the study cohort*

Baseline Variables	Overall (n=315)
Age, years	54 (28-82)
Males	177 (56%)
BMI, Kg/m^2	24 (17-39)
European origin	302 (96%)
Receiving NUC therapy	304 (97%)
Previous IFN	149 (47%)
Cirrosis	245 (78%)
CPT-B	14 (6%)
Esophageal varices	91 (29%)
History of HCC	27 (9%)
Active HCC	18 (67%)
History of ascites	26 (8%)
Ascites ongoing	13 (50%)
Variceal hemorrage	8 (3%)
Anti HCV+	36 (11%)
HCV RNA +	0 (0%)
Anti HIV +	22 (7%)
HIV RNA +	2 (9%)
LSM, kPa	13.3 (3.6-68.1)
PLT, 10^3/mm^3	118 (14-377)
ALT, U/l	75 (16-1,074)
GGT, U/l	53 (10-707)
Albumin, g/dl	4.0 (2.9-5.6)
Creatinine, mg/dl	0.8 (0.4-2.2)
qHBsAg, Log IU/ml	3.7 (0.6-4.7)
HBeAg negative	282 (90%)
HBV DNA detectable	32 (10%)
HDV RNA, Log IU/ml	5.3 (1.5-8.2)

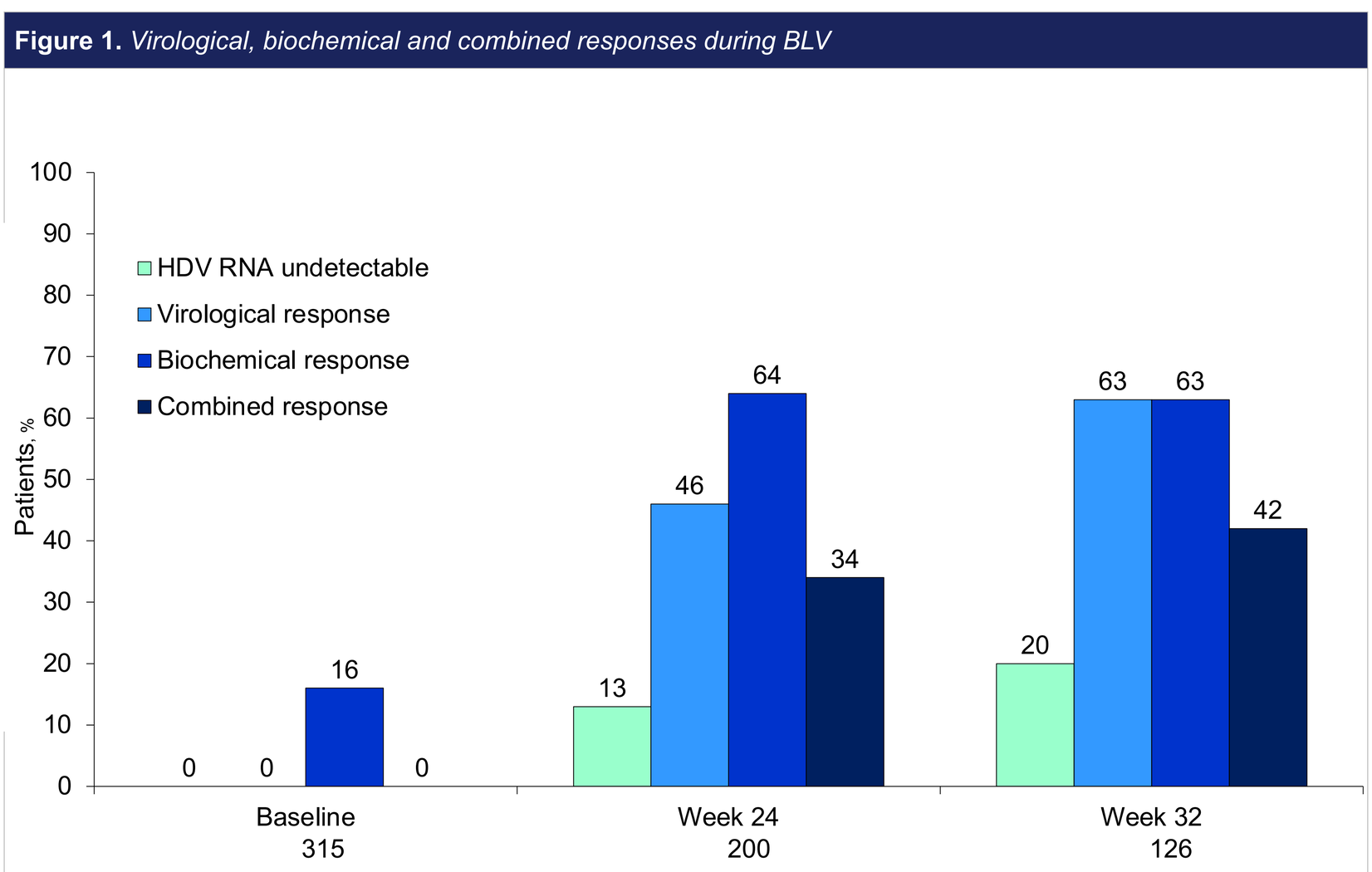
Values are expressed as number (percentage) or median (IQR);

BLV: Bulevirtide; BMI, Body Mass Index; NUC, Nucleos(t)ide Analogue; IFN, Interferon, CPT: Child-Pugh Turcotte; HCC: Hepatocellular Carcinoma; LSM, Liver Stiffness Measurement; PLT, platelets; ALT: Alanine Aminotransferase; GGT; Gamma Glutamyl Transferase; qHBsAg, quantitative Hepatitis B surface Antigen; HBeAg, Hepatitis B e Antigen

Results (Continued)

- 315 patients with CHD from 27 centers were enrolled in this ongoing study.
- 99% received BLV 2 mg/day monotherapy: median age 54 (28-82) years, 56% men, 96% of European origin, 78% with cirrhosis, 7% HIV-coinfected. Among patients with cirrhosis, 29% had varices, 9% had a history of HCC (active in 67%), 8% had a history of ascites (50% persistent), 3% with previous varices hemorrhage, 6% had decompensated (CPT-B) cirrhosis (**Table 1**).
- At BLV start, median ALT were 75 (16-1,074) U/L, liver stiffness measurement (LSM) 13.3 (3.6-68.1) kPa, platelets 118 (14-377) 103/mm^3, 97% patients were on NUC therapy, 90% HBeAg negative. Median HDV RNA was 5.3 (1.5-8.2) log IU/mL and HBsAg 3.7 (0.6-4.7) log IU/mL

Figure 1. *Virological, biochemical and combined responses during BLV*



Virological response: ≥2 log decline from baseline or HDV RNA TND/<LOD; **Biochemical response**: ALT <40 U/L; **Combined response**: virological and biochemical response

- As of June 2024, 126 patients have reached week 32 of treatment. ALT and HDV RNA levels significantly declined: ALT from 75 (16-1,074) at baseline to 37 (11-173) at week 24 and 36 (12-213) U/L at week 32 and HDV RNA from 5.3 (1.5-8.2) to 3.3 (0.3-7.0) and 2.7 (0.2-7.2) Log IU/mL, respectively (p<0.0001) (**Figure 1**).
- Virological, biochemical and combined response were achieved by 46%, 64% and 34% of patients at week 24 of treatment, respectively.
- At week 32, these responses were achieved by 63%, 63% and 42% of patients, respectively.
- Among patients not achieving a virological response, 58% and 50% achieved a partial virological response (HDV RNA decline >1 but <2 Log IU/mL, compared to baseline) at week 24 and 32, respectively.
- Moreover, 13% and 20% of patients achieved HDV RNA undetectable at week 24 and 32, respectively.

Conclusion

- D-SHIELD is the largest single country study on BLV treatment for CHD in Europe. Almost all Italian patients started BLV as monotherapy. Virological, biochemical and combined response rates at week 32 compare favorably with previous small retrospective studies.

References

1. Wedemeyer H, Aleman S, Brunetto MR, Blank A, Andreone P, Bogomolov P, et al. A Phase 3, Randomized Trial of Bulevirtide in Chronic Hepatitis D. N Engl J Med. 2023 Jul 6;389(1):22-32