Real-World Persistency of Bulevirtide Therapy in Chronic Hepatitis D Patients in Germany: A Retrospective Observational Analysis

Dirk Nierhoff[1], Marianna Schwenken[2], Monika Weischenberg[3], Markus Cornberg[4], Mehtap Guendogdu[5], Kyung min Kwon[6], Amanda Singer[7], Michael Mertens[8], Jörg Petersen[9]

[1]University Hospital Cologne, Department of Gastroenterology and Hepatology, Germany; [2-3]Gilead Sciences GmbH, Munich, Germany; [4]Hannover Medical School, Department of Gastroenterology, Hepatology, Infectious Diseases and Endocrinology, Hannover, Germany; [5]Gilead Sciences GmbH, Munich, Germany; [6-7]Gilead Sciences, Inc., Foster City, USA; [8]Gilead Sciences Europe Ltd., Stockley Park, UK; [9]IFI Institute for Interdisciplinary Medicine, Hamburg, Germany

Poster #2273

Real-World Bulevirtide Persistency in Germany

Conclusions

- This analysis showed real-world bulevirtide (BLV) persistency rate (PR) of 81% at 12 months and 73% at 24 months in Germany, demonstrating sustained use in clinical care as monotherapy, despite daily injections.
- PRs were generally consistent across demographics, with older adults (36+) showing numerically higher PRs than younger adults.
- PRs were similar across commonly prescribed comedications; notably, nucleos(t)ide analogues (NUCs) were positively linked to 12-month PR in regression analysis.
- These findings highlight the sustained use of BLV in clinical care, while co-treatment with NUCs, as recommended by guidelines, may be associated with greater therapy persistency; however, the findings warrant further validation.

Plain Language Summary

- This analysis looked at bulevirtide (BLV) treatment continuation (TC) for hepatitis D in everyday care in Germany.
- 8 out of 10 patients were still prescribed BLV after one year, and about 3 out of 4 after two years, showing regular use as monotherapy, despite daily injections.
- BLV TC was similar across age groups, genders, and care settings. Older adults (36+) had a slightly higher TC than younger adults.
- BLV was continued in patients taking other medications; notably nucleos(t)ide analogues (NUCs) for hepatitis B were positively associated with TC.
- The findings shed light on BLV TC in routine care; NUC co-treatment may be linked to longer TC. However, more research is needed to verify the findings of the study.

Limitations

- Only prescriptions from statutory health insurance (SHI) were analyzed; no data on diagnoses or sociodemographic data were available.
- IQVIA™ LRx covers about 40% of HIV-focused pharmacies due to data access restrictions. Small cohort size reduced subgroup analysis power and lack of randomization limited cohort comparability.

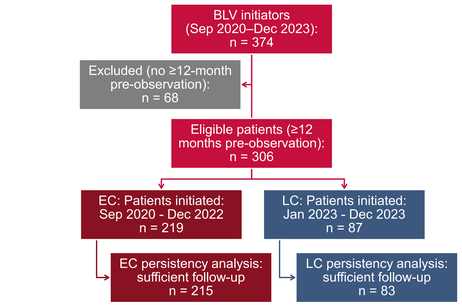
Introduction

- Bulevirtide (BLV) is the first and only approved therapy for chronic hepatitis D (CHD) in the EU. As an entry inhibitor, it blocks viral entry by binding to sodium taurocholate co-transporting polypeptide (NTCP) on liver cells [1].
- In the MYR301 Phase III trial, 144 weeks of BLV monotherapy showed sustained efficacy and safety [2].
- BLV is administered daily via subcutaneous injection without a fixed treatment duration [1]. Long-term persistency may be important for sustaining therapeutic benefit.
- Real-world (RW) BLV persistency data are scarce.
- No RW persistency data exist for Germany, despite early access since 2020.
- This study aimed to assess BLV treatment persistency rates (PRs) over a 12- and 24-month period in Germany. Additional objectives included describing patient characteristics, discontinuation patterns and predictors of persistency.

Methods

- This retrospective observational study analyzed BLV persistency using the German IQVIA™ LRx prescription database. Two cohorts were defined:
  - early cohort (EC): September 2020 – December 2022 initiators, 24 months follow-up.
  - late cohort (LC): 2023 initiators, 12 months follow-up.
- Two distinct cohorts were selected based on assumed differences in clinical practice in Germany, initially prioritizing patients with higher disease burden for BLV initiation.
- Persistency (probability of remaining on treatment) was estimated via Kaplan-Meier, allowing up to 3-month treatment gaps to account for care setting changes or cross-border medication access.
- Patient characteristics and discontinuation rates were reported descriptively.
- Predictors of long-term persistency were assessed using logistic regression.
- The patient flow through the inclusion steps is demonstrated in **Figure 1**.

Figure 1. Flow chart of study population



EC, early cohort; LC, late cohort.

Results

- Males represented the majority in both cohorts (56% in EC, 57% in LC).
- Most patients were older adults (36–55 and 56+) – 82% in EC and 86 % in LC with M (Mean) age ≈ 47 years.
- More patients were initiated by the prescribing specialty (PS) – hospital-based outpatient centers (EC: 67%, LC: 59%) – while LC showed a slight increase in initiations by office-based physicians (33% in EC vs. 41% in LC).
- **Table 1** outlines the demographic characteristics of the two cohorts.

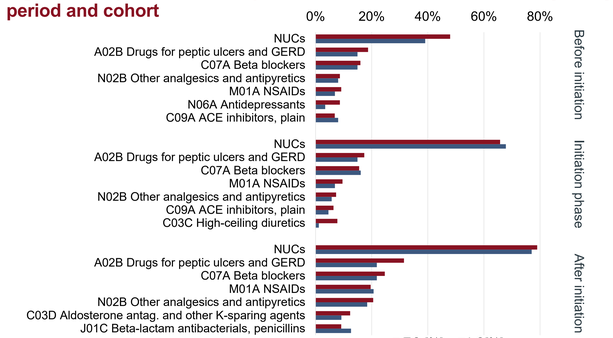
Table 1. Demographic characteristics and prescribing sector of BLV patients, by cohort

		EC		LC	
		n	%	n	%
Total		219	100%	87	100%
Gender	Female	71	32%	21	24%
	Male	122	56%	50	57%
	Unknown	26	12%	16	18%
Age	Mean (SD)	46.9 (11.14)		46.6 (10.85)	
	Median (Q1–Q3)	46 (39–55)		47 (39–53)	
Age group	18-35	38	17%	12	14%
	36-55	130	59%	56	64%
	>55	51	23%	19	22%
PS	Hospital-based outpatient centers	147	67%	51	59%
	Office-based physicians	72	33%	36	41%

BLV, bulevirtide; EC, early cohort; LC, late cohort, PS, prescribing specialty

- **Figure 2** shows the most prescribed comedication classes by study period and cohort.
- Nucleos(t)ide analogues (NUCs) were the most frequent comedication, with prescription rates rising with BLV initiation – from 48% to 79% in EC and from 39% to 77% in LC (before vs. after initiation phase). Pegylated Interferon Alpha (PEG-IFNα) (off-label for CHD) was rarely prescribed (under 5% before initiation and under 2% after), with no prescriptions recorded beyond the initiation phase.

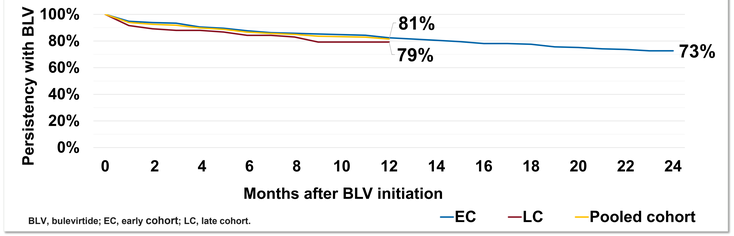
Figure 2. Proportion of most prescribed comedication classes by study period and cohort



Besides NUCs, comedication classes are reported according to the World Health Organization Anatomical Therapeutic Chemical (WHO ATC) Classification System at Level 3. Assessment time windows: Before initiation = from 3 months pre-index to index date (exclusive), Initiation phase = from index date to 3 months post-index, After initiation = from 3 to 12 months post-index.
ACE, angiotensin-converting enzyme; BLV, bulevirtide; EC, early cohort; GERD, gastro-esophageal reflux disease; LC, late cohort; NSAIDs, non-steroidal anti-inflammatory drugs; NUCs nucleos(t)ide analogues

- The 12-month PR across the study population was 82% for EC, pooled: 81%, LC: 79%. At 24 months, LC retained a PR of 73%. (**Figure 3**).
- Being in LC vs. EC was not significantly associated with 12-month persistency (OR = 0.68; 95% CI: 0.36 – 1.31; p = 0.251).
- Overall, discontinuation rates during the study were 19.8% (N = 59), while additional 11.1% (N = 33) interrupted and later restarted the therapy.

Figure 3. BLV persistency overall and by cohort

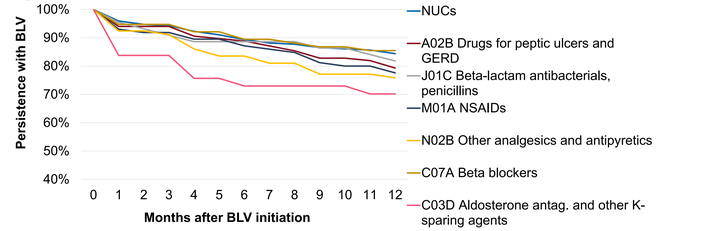


BLV, bulevirtide; EC, early cohort; LC, late cohort.

- PRs were in stratified analyses were generally consistent:
  - **Gender:** males and females had similar 12-month PRs in the pooled cohort (82% vs. 83%). At 24 months, males had a numerically higher PR than females (75% vs. 68%).
  - **Age:** older adults (36–55 and 56+) had numerically higher PRs than younger adults (18–35) – 12-month pooled PR: 83% vs. 73%; 24-month PR: 73 – 76% vs. 65%.
  - **PS:** Hospital-based outpatient centers showed comparable PRs to those of office-based physicians – 12-month pooled PR: 83% vs. 81%; 24-month PR: 75% vs. 71%.
- **Figure 4** displays the persistency curves for the pooled cohort, stratified by comedication class with PRs of 70 – 85%.
- In the univariable regression analysis*, NUCs after initiation (pooled PR: 87%) were positively associated with 12-month persistency (OR = 7.78; 95% CI: 2.64 – 22.93; p < 0.001) while N02B analgesics and antipyretics were negatively associated (OR = 0.38; 95% CI: 0.19 – 0.79; p = 0.009).

* Exploratory regressions without alpha adjustment

Figure 4. BLV 12-month PRs, by most prescribed comedication classes during the study



BLV, bulevirtide; GERD, gastro-esophageal reflux disease; NSAIDs, non-steroidal anti-inflammatory drugs; NUCs, nucleos(t)ide analogues

References 1. European Medicines Agency. *Hecludex SmPC. 2025.* Available from: https://www.ema.europa.eu/en/medicines/human/EPAR/hecludex. Accessed October 2025. **2.** Lampertico P, et al. EASL Congress. 2024; Poster #LBP-029. *Efficacy and safety of 144 weeks of Bulevirtide 2 mg or 10 mg monotherapy from the ongoing phase 3 Study MYR301.* Presented at: EASL Congress; June 2024; Milan, Italy.

Acknowledgments: Medical Writing: JLR Life Sciences LTD, data provider and statistical analysis: IQVIA Commercial GmbH & Co. OHG, funding: Gilead Sciences GmbH

Correspondence: Marianna Schwenken, Marianna.Schwenken@gilead.com

Disclosures: **DN** receives honoraria for lectures and or consulting from Abbvie, Astra Zeneca, Gilead, Intercept, Ipsen. **MS** is an employee of Gilead Sciences GmbH, Germany; holds equity in Gilead. **MW** is an employee of Gilead Sciences GmbH, Germany; holds equity in Gilead. **MC** receives honoraria for lectures and/or consulting from Abbvie, AiCuris, Falk, Gilead, GSK, MSD Sharp&Dohme, Roche. **MG** is an employee of Gilead Sciences GmbH, Germany; holds equity in Gilead. **KmK** is an employee of Gilead Sciences, Inc., USA; holds equity in Gilead. **AS** is an employee of Gilead Sciences, Inc., USA; holds equity in Gilead. **MM** is an employee of Gilead Sciences Europe Ltd., UK; holds equity in Gilead. **JP** receives honoraria for lectures and/or advisory boards from AbbVie, Assembly Pharma, Contravir, Falk Pharma, Gilead Sciences, GSK, Intercept, Ipsen, Janssen J&J, Merck/MSD, Merz, Novo Nordisk, Shire, Takeda

Liver Meeting, American Association for the Study of Liver Diseases; November 7–11; Washington DC