

Patient Characteristics and Treatment Patterns Amongst Hepatitis Delta Patients: Results From a Real-World Survey in Europe

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Conclusions

- Half of patients with chronic hepatitis delta (CHD) experienced a high comorbidity burden
- According to physicians, most patients for whom they prescribed bulevirtide (BLV) received treatment as a monotherapy and were adherent to their regimen
- Reduction in hepatitis delta virus (HDV) transmission was shown to be an important consideration when prescribing BLV in clinical settings, alongside its long-term efficacy and reduction in viral shedding
- One-third of patients with CHD were not on HDV treatment, yet nearly one-fifth of these patients had cirrhosis and/or moderate or severe liver disease
- Real-world evidence on HDV treatment options may complement current and future treatment outcomes among patients prescribed BLV as monotherapy

Plain Language Summary

- Chronic hepatitis delta is a disease in the liver caused by a virus, which can be treated with an antiviral drug called bulevirtide
- Patients with chronic hepatitis delta also frequently experience co-occurring problems with anxiety and depression
- Doctors chose bulevirtide because the treatment can work in the long term
- Most patients took the correct dose of bulevirtide at the correct times, as instructed by their doctors

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INTRODUCTION

- HDV, which requires the presence of hepatitis B virus (HBV) for transmission, results in the most severe form of viral hepatitis^{1,2}
- CHD infection is associated with rapid progression to cirrhosis, hepatic decompensation, and hepatocellular carcinoma, and is associated with increased morbidity and mortality compared with HBV mono-infection²
- BLV, an entry inhibitor of HDV, is approved in the European Union, Great Britain, Switzerland, the Russian Federation, and Australia at 2 mg/day for the treatment of CHD³
- BLV has been shown to reduce the likelihood of transmitting HDV by clearing its RNA from the blood³
- Although data are readily available on antiviral drugs treating HBV, real-world evidence on BLV for the treatment of HDV is lacking

OBJECTIVE

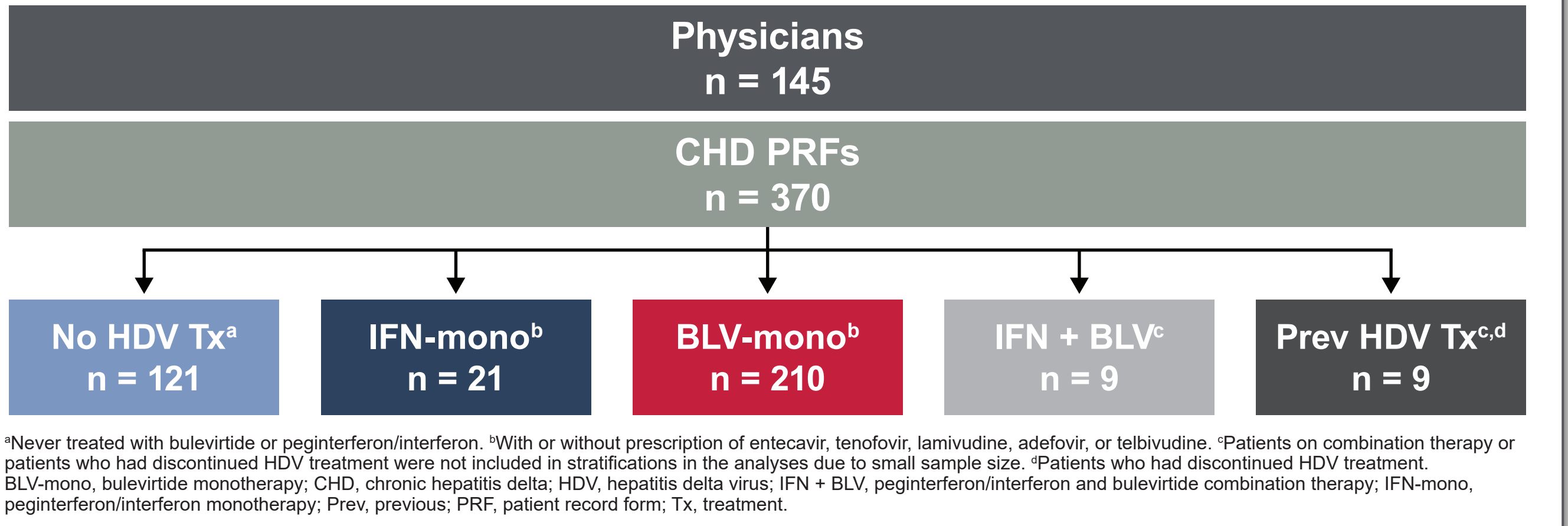
- To describe the demographics, clinical characteristics, and physician-perceived treatment adherence of patients with CHD who were prescribed antiviral treatments, including BLV

METHODS

- Data were drawn from the Adelphi Real World Hepatitis Disease Specific Programme,[™] a cross-sectional survey with retrospective data collection of physicians and their patients with HDV in France, Italy, Spain, and the UK from May 2024 to Nov 2024⁴⁻⁷
- Primary care physicians, infectious disease specialists, gastroenterologists, and hepatologists provided data on patient demographics, clinical characteristics, and adherence through patient record forms for up to four consecutively consulting patients with HDV, two of whom were prescribed BLV — Analyses were descriptive
- Physicians who saw ≥2 patients with HDV in a typical month were eligible for inclusion in the study
- Physicians reported on patients ≥18 years of age with a physician-confirmed diagnosis of HDV. Patients involved in a clinical trial for any condition at the time of consultation were not eligible for inclusion

RESULTS

Figure 1. Study Flow Chart



- Overall, 145 physicians reported data on 370 patients with CHD

Table 1. Physician Characteristics

| Physician Characteristics | Physicians n = 145 |
|---|-----------------------|
| Physician specialty, n (%) | |
| Hepatologists | 66 (46) |
| Infectious disease specialists | 52 (36) |
| Primary care physicians | 25 (17) |
| Gastroenterologists | 2 (1) |
| Average patient distribution across each setting, % | |
| Academic hospital | 58 |
| Community hospital | 20 |
| Office | 16 |
| Community clinic | 5 |
| Other | <1 |

RESULTS

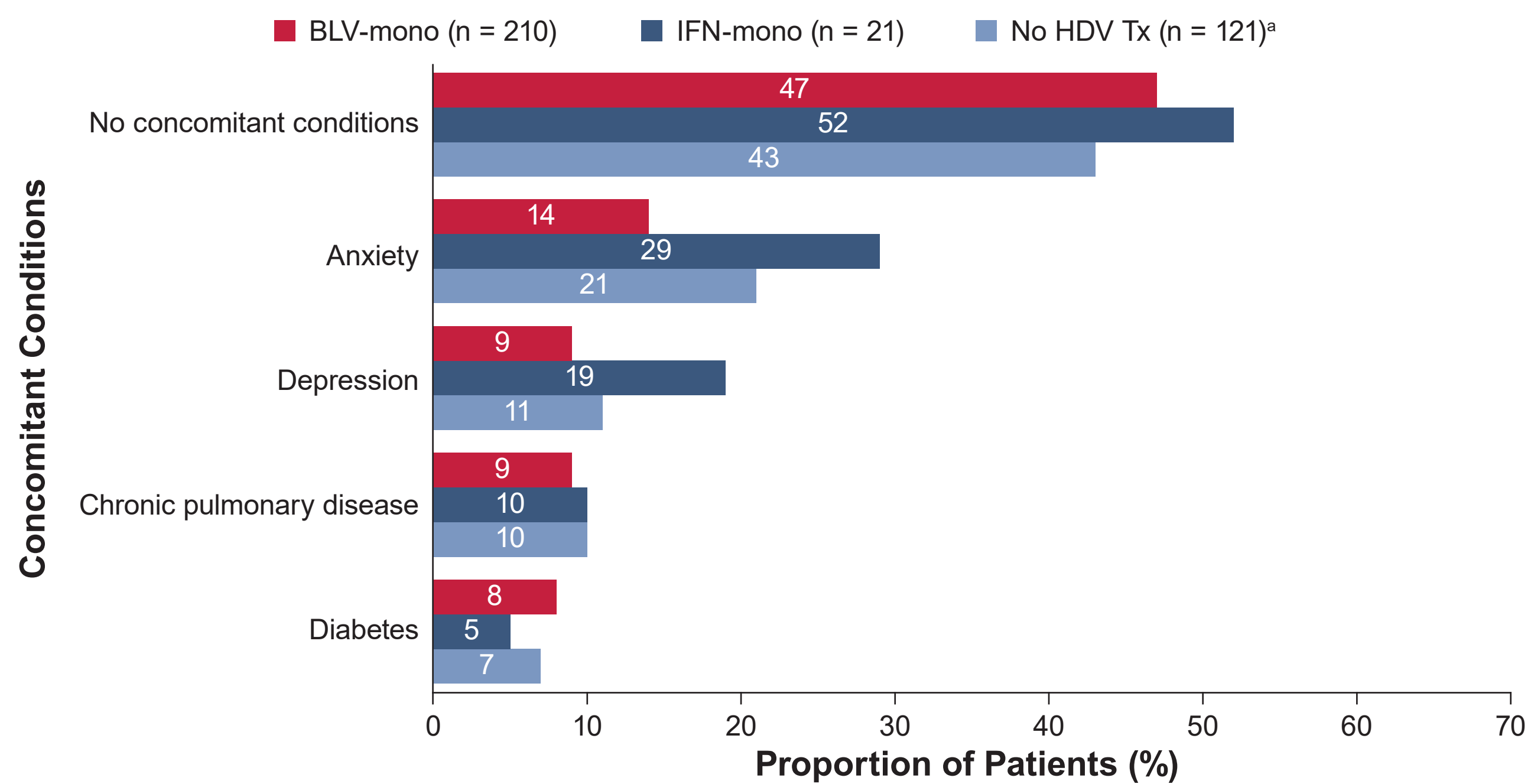
Table 2. Physician-Reported Patient Demographics and Disease Characteristics

| Patient Characteristics | BLV-Mono Patients n = 210 | IFN-Mono Patients n = 21 | No HDV Tx Patients* n = 121 | All Patients With CHD N = 370 |
|---|------------------------------|-----------------------------|--------------------------------|----------------------------------|
| Age, years | n = 209 | n = 21 | n = 121 | n = 369 |
| Mean (SD) | 45.4 (12.66) | 43.6 (11.66) | 46.7 (12.90) | 45.9 (12.95) |
| Sex, n (%) | n = 210 | n = 21 | n = 121 | n = 370 |
| Male | 141 (67) | 14 (67) | 77 (64) | 245 (66) |
| Ethnicity, ^{b,c} n (%) | n = 137 | n = 17 | n = 106 | n = 270 |
| White | 97 (71) | 9 (53) | 73 (69) | 188 (70) |
| Black African or Caribbean | 16 (12) | 6 (35) | 15 (14) | 37 (14) |
| East or Southeast Asian | 21 (15) | 2 (12) | 6 (6) | 29 (11) |
| Other | 3 (2) | 0 (0) | 12 (11) | 16 (6) |
| High-risk HBV region, ^c n (%) | n = 210 | n = 21 | n = 121 | n = 370 |
| Born in high-risk region | 86 (41) | 9 (43) | 44 (36) | 148 (40) |
| Lived in high-risk region | 48 (23) | 3 (14) | 33 (27) | 88 (24) |
| Time since diagnosis of HBV, years | n = 156 | n = 13 | n = 88 | n = 271 |
| Mean (SD) | 6.0 (8.14) | 8.8 (12.11) | 7.2 (9.92) | 6.8 (9.10) |
| Time since diagnosis of HDV, years | n = 177 | n = 17 | n = 98 | n = 307 |
| Mean (SD) | 4.0 (5.12) | 5.3 (9.62) | 5.2 (7.97) | 4.7 (6.70) |
| Physician-stated severity at survey date, n (%) | n = 210 | n = 21 | n = 121 | n = 370 |
| Mild | 136 (65) | 14 (67) | 80 (66) | 240 (65) |
| Moderate | 65 (31) | 6 (29) | 30 (25) | 107 (29) |
| Severe | 9 (4) | 1 (5) | 11 (9) | 23 (6) |
| Liver fibrosis score, n (%) | n = 210 | n = 21 | n = 121 | n = 370 |
| F4 (compensated or decompensated cirrhosis) | 31 (15) | 4 (19) | 21 (17) | 61 (16) |
| Liver disease, n (%) | n = 210 | n = 21 | n = 121 | n = 370 |
| Moderate or severe | 16 (8) | 1 (5) | 23 (19) | 43 (12) |
| Time receiving HDV treatment line, months | n = 193 | n = 16 | – | n = 306 |
| Mean (SD) | 18.3 (31.19) | 46.2 (87.22) | – | 28.7 (47.98) |

*Never treated with bulevirtide or peginterferon/interferon. ^bEthnicity data not collected in France. ^cRespondents were able to select multiple responses. BLV-mono, bulevirtide monotherapy; CHD, chronic hepatitis delta; HBV, hepatitis B virus; HDV, hepatitis delta virus; IFN-mono, peginterferon/interferon monotherapy; Tx, treatment.

- Among all patients with CHD, mean (SD) age was 45.9 (13.0) years; 70% were White, and 66% were male
- Almost one-fifth (19%) of No HDV Tx patients had moderate or severe liver disease (BLV monotherapy [BLV-mono]: 8%; IFN monotherapy [IFN-mono]: 5%)

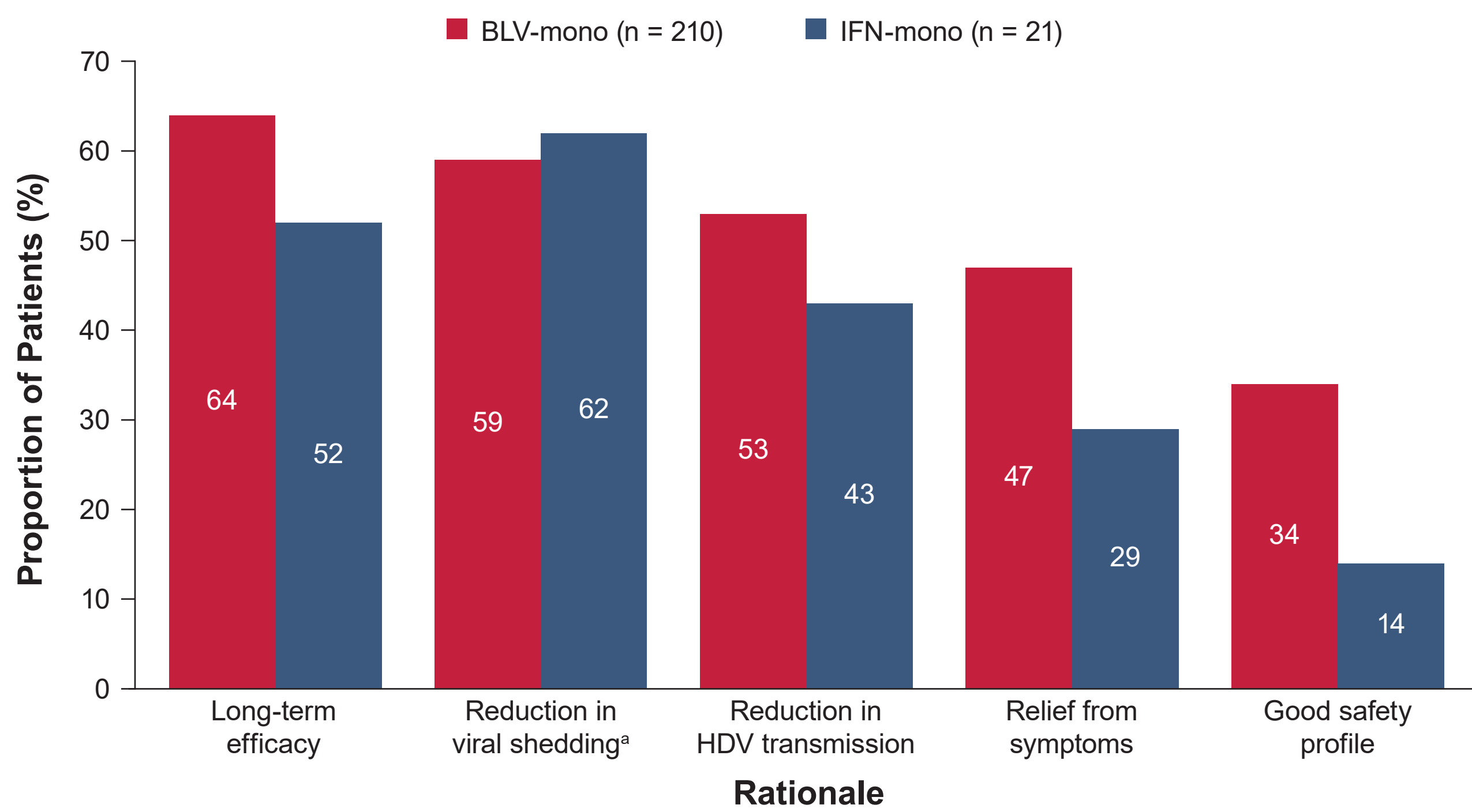
Figure 2. Concomitant Disease Burden



^aNever treated with bulevirtide or peginterferon/interferon. BLV-mono, bulevirtide monotherapy; HDV, hepatitis delta virus; IFN-mono, peginterferon/interferon monotherapy; Tx, treatment.

- For patients who were never prescribed HDV antiviral treatment (No HDV Tx; n = 37), the top physician-reported reasons were patient's choice not to use treatment (51%), the patient did not want to take a daily medication (27%), and the physician thought treatment was not needed (16%)

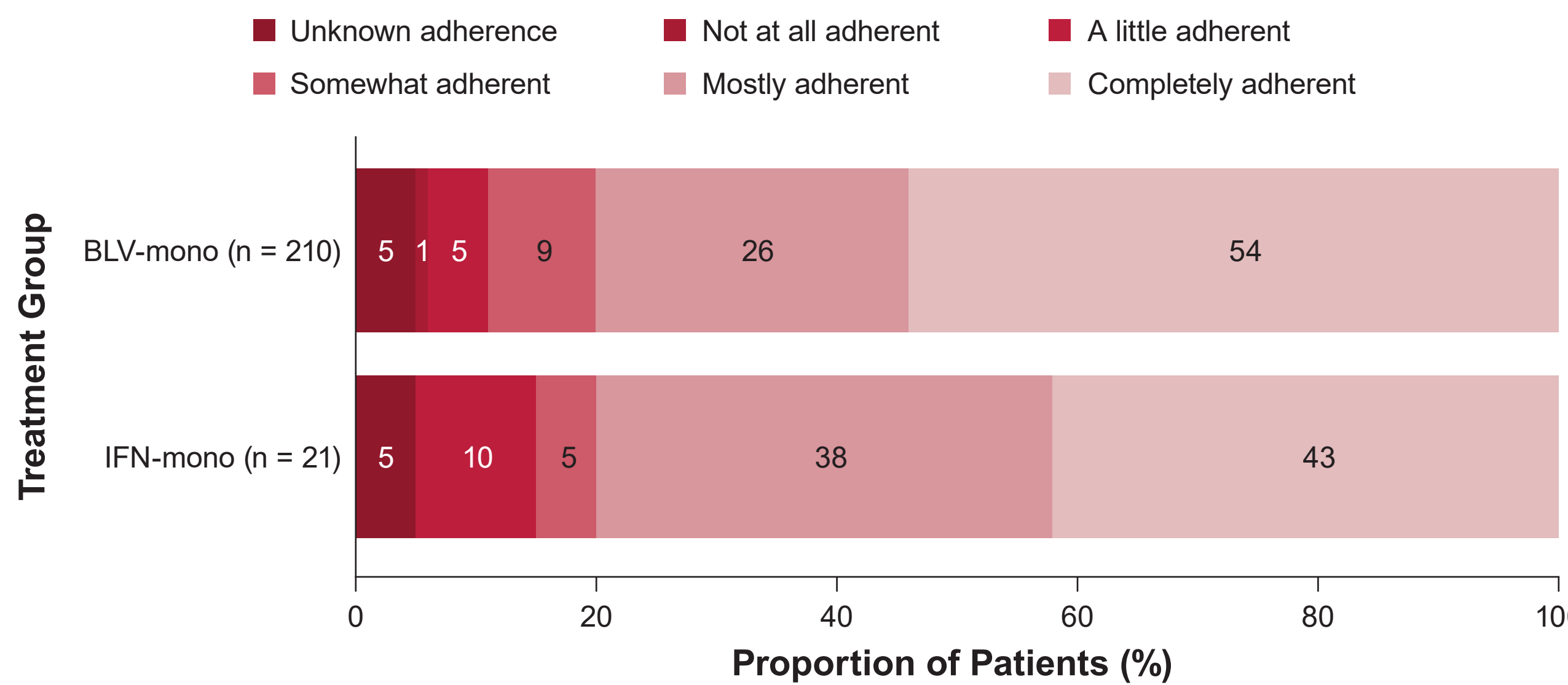
Figure 3. Primary Reasons Physicians Prescribed the Current HDV Treatment Regimen



^{*}The definition of "viral shedding" was not included in the questionnaire; it was up to the physicians' interpretation. BLV-mono, bulevirtide monotherapy; HDV, hepatitis delta virus; IFN-mono, peginterferon/interferon monotherapy.

- Physicians reported that increased likelihood of a functional cure (37%), longer-acting medication (24%), and less-frequent administration (23%) were the most common areas where treatment could be improved for BLV-mono patients
- Drug adverse events/side effect profile (38%), reduction in transmission (29%) and increased likelihood of a functional cure (24%) were common areas where treatment could be improved for IFN-mono patients

Figure 4. Physician-Perceived Treatment Adherence



The surveys defined adherence as, "taking medication exactly as agreed with their physician, for example, taking the prescribed amount at the time of day recommended." BLV-mono, bulevirtide monotherapy; IFN-mono, peginterferon/interferon monotherapy.

- Across both groups, physicians reported that patients were either completely or mostly adherent to their current treatment regimen (BLV-mono: 80%; IFN-mono: 81%)
- Of those who were not completely adherent (n = 86), physicians reported that difficulties integrating into daily routine (23%) and forgetting to take medication (21%) were the most common reasons for nonadherence among BLV-mono patients

LIMITATIONS

- Physicians and their patients were recruited from four European countries; therefore, results may not be generalisable to all patients with CHD
- Because data were captured for patients actively consulting with their physicians, findings may not be representative of the wider patient population, including nonconsulting patients
- Physicians were requested to capture patient information retrospectively, which may introduce recall bias
- Data on BLV use in Spain were not collected due to a lack of reimbursement at the time of data collection