Sub-optimal biochemical and health related quality of life outcomes with off-label bezafibrate use in patients with PBC: Analysis of a real-world dataset

Poster RWD140

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Conclusions

- Many patients taking off-label bezafibrate presented with PBC-related symptoms and had a low rate of biomarker normalization.
- Some of these patients were also impaired at performing daily activities and less productive at work.
- These data highlight the need for alternative second line treatments to improve biochemical response, provide adequate relief of symptoms, especially pruritus, and improve ability to work and perform activities.

Plain Language Summary

- Primary biliary cholangitis (PBC) is a long-term liver disease that can lead to scarring of the liver and in some instances the need for liver transplant.
- High levels of alkaline phosphatase (a routine blood test that reflects disease activity) are a sign that PBC may be getting worse.
- All patients in this study were taking bezafibrate, most were also taking standard first-line treatment UDCA, and some were taking additional treatments to treat itch.
- Most patients experienced itch and moderate or severe itch which was not getting better. They also had other liver blood test results higher than normal.
- Their daily activities and work productivity were impaired by 40% on average due to their PBC.
- These finding show the need for a more effective treatment to improve their blood test results, symptoms and quality of life.

Introduction

- Primary biliary cholangitis (PBC) is a chronic, progressive autoimmune disease that damages the liver and can negatively impact quality of life as a secondary effect[1].
- A key marker of disease activity in PBC is elevated levels of alkaline phosphatase (ALP) which is associated with the development of cirrhosis and need for a liver transplant[2].
- Off-label bezafibrate can be added to ursodeoxycholic acid or used as a monotherapy to manage PBC[3].
- With new second line PBC treatments recently approved[4], it is important to understand bezafibrate's efficacy in biochemical response and health related quality of life in patients with PBC.

Objective

To evaluate level of biochemical response and unmet need among patients receiving bezafibrate as off-label second line treatment by describing symptomology, patient reported outcomes (PROs), alkaline phosphatase (ALP) and total bilirubin (TB).

Methods

Figure 1. DSP Methodology

Data were drawn from the Adelphi Real World PBC I Disease Specific Programme[5,6,7,8] (DSP), a cross-sectional survey, with retrospective data collection of physicians and their patients with PBC in France, Germany, Italy, Spain, and UK.

Data collection occurred between Q4 2024 and Q2 2025.

Physicians collected data about their next four consulting patients with PBC and an additional two with moderate/severe itch. Physicians completed questionnaires about their patients with PBC including demographics, current treatment and biochemical test results.

These same patients with PBC were invited to complete a voluntary questionnaire including the Work Productivity and Activity Index (WPAI), PBC-40, Itch-Numerical Rating Scale (NRS), 5D-Itch, and EuroQol Visual Analogue Scale (EQ-VAS). Physician and patient-reported data were linked and matched.

Analyses included patients currently receiving bezafibrate for ≥3 months and not receiving seladelpar or elafibranor (n=105). Biochemical response was assessed by ALP and TB levels. Analyses were descriptive.

Results

Data for 105 patients were available (mean [SD] age of 55.4 [9.52] years, 89% female). Treatment duration was 3.2 [3.87] years and patients had been diagnosed for 4.8 [4.43] years (**Table 1**).

Table 1: Patient demographics

	(n=105)
Age, years, mean [SD]	55.4 [9.52]
Sex, Female, n (%)	93 (89%)
Ethnicity*	*n=73*
White, n (%)	70 (96%)
Years since PBC diagnosis	*n=101*
Mean [SD]	4.8 [4.43]
Years on current treatment	*n=105*
Mean [SD]	3.2 [3.87]

Ethnicity not collected in France

Most patients were also taking UDCA alongside bezafibrate **(Figure 2).** The mean (SD) number of treatments taken per patient to prevent PBC progression was 2.1 (0.42)

Figure 2: Current treatments to prevent PBC progression alongside bezafibrate (n=105)



*OCA was still available at the time of data capture

Some patients were prescribed itch treatments for their PBC (**Figure 3a)** with cholestyramine the most common (**Figure 3b).** The mean (SD) number of itch treatments taken per person was 1.5 (0.82).

Figure 3a: Current itch treatment for PBC status (n=64)

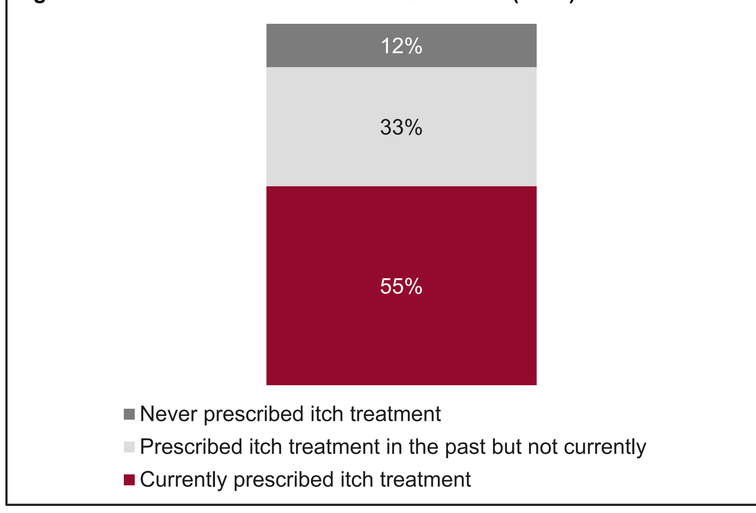
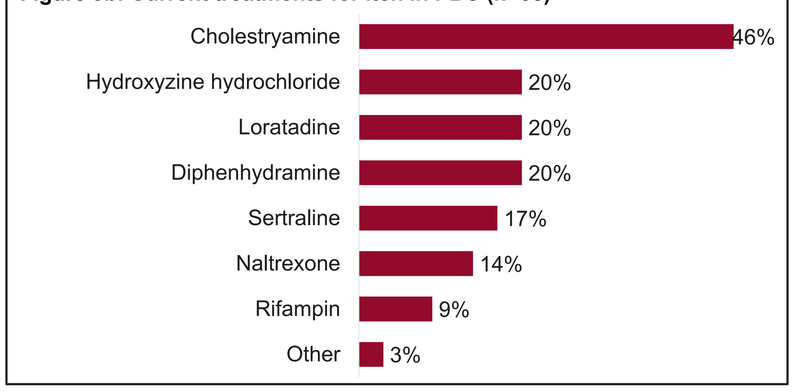
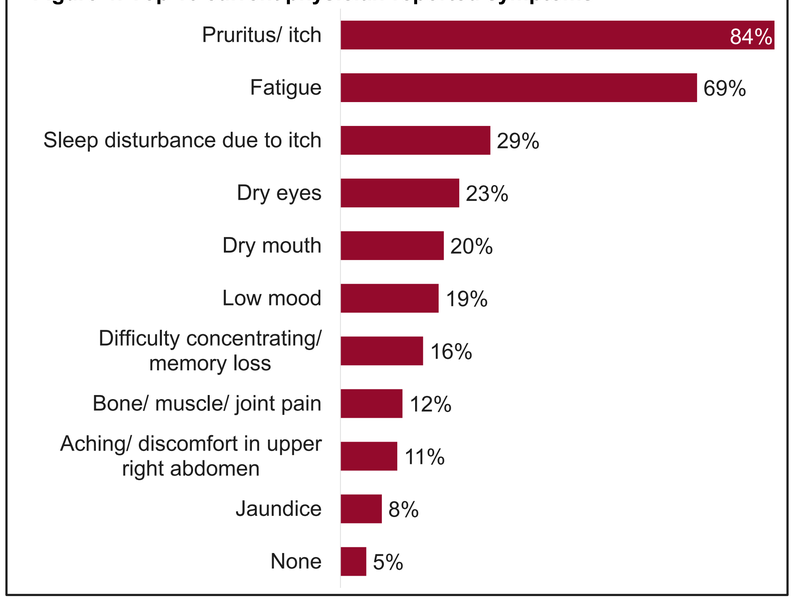


Figure 3b: Current treatments for itch in PBC (n=35)



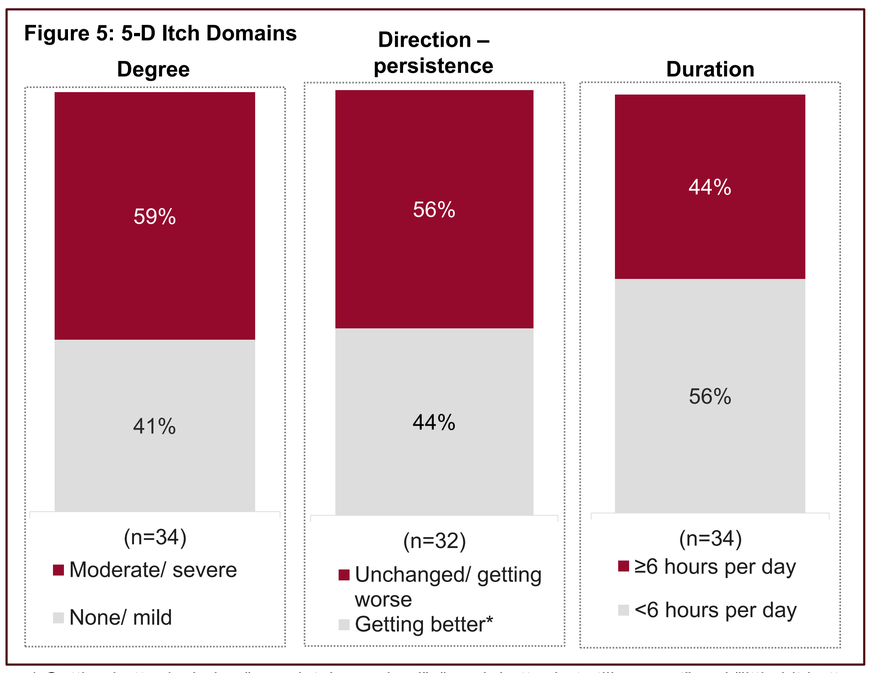
The most common physician-reported current symptoms were itch (84%), fatigue (69%) and sleep disturbance due to itch (29%) **(Figure 4).**

Figure 4: Top 10 current physician-reported symptoms



5-D Itch scale was completed by 32% of patients. For those that completed 5-D Itch scale, 59% reported having moderate/severe itch (n=34); 56% reported it being unchanged/getting worse (n=32) and 44% were affected ≥6 hours per day (n=34) **(Figure 5)**.

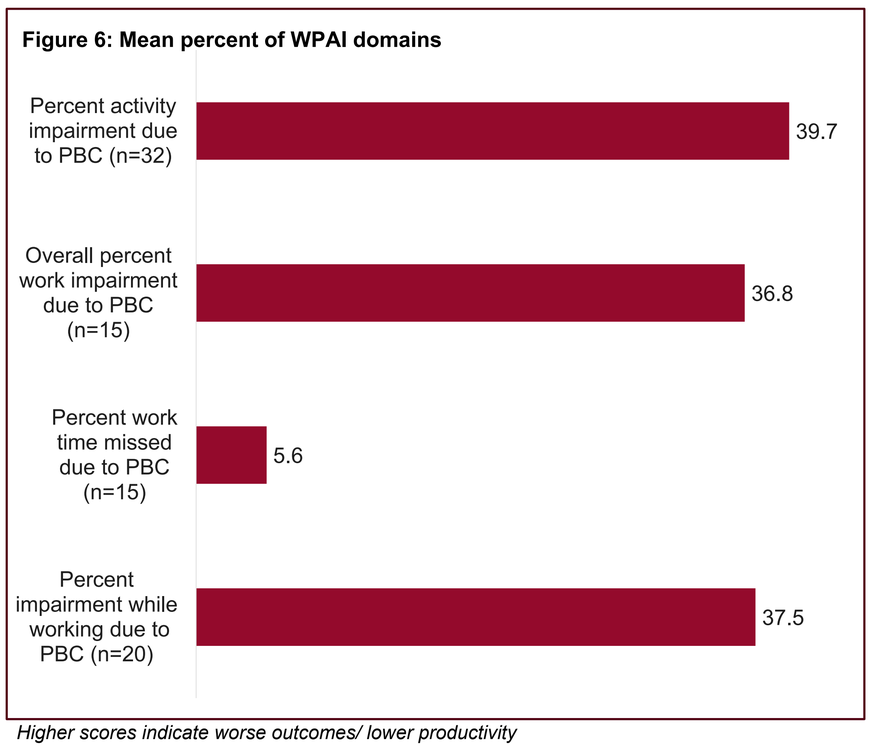
Figure 5: 5-D Itch Domains



** Getting better includes "completely resolved", "much better but still present" and "little bit better but still present"*

WPAI activity impairment was completed by 30% of patients with a mean [SD] of 39.7% [26.3] (n=32). 14% of patients had results for overall work impairment due to PBC with a mean [SD] of 36.8% [28.6] (n=15) **(Figure 6)**.

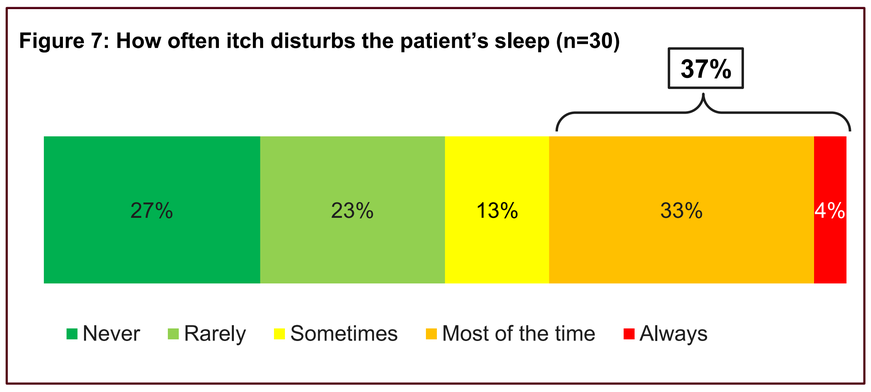
Figure 6: Mean percent of WPAI domains



Higher scores indicate worse outcomes/ lower productivity

PBC-40 was completed by 29% of patients. For those, 37% reported their itch affecting their sleep most/all the time (n=30) (**Figure 7**).

Figure 7: How often itch disturbs the patient's sleep (n=30)



Mean [SD] ALP was 185.0 [92.4] U/L (n=98) and only 23% of patients had achieved ALP normalization (<1xULN threshold)
Similarly, TB levels were 2.4 [4.3] mg/dL (n=95) and 21% of patients achieved TB normalization (<0.6xULN threshold) **(Table 2).**

Table 2: ALP and total bilirubin results

Test results, mean [SD] (n)	At diagnosis	At treatment initiation	Currently
ALP	n=93	n=100	n=98
Mean [SD] (U/L)	348.9 [207.08]	264.6 [135.28]	185.0 [92.37]
<1xULN, n (%)	0 (0%)	8 (8%)	23 (23%)
Total Bilirubin	n=94	n=99	n=95
Mean [SD] (mg/dL)	2.0 [3.48]	1.5 [1.73]	2.4 [4.29]
<0.6xULN, n (%)	13 (14%)	19 (19%)	20 (21%)

ULN for ALP = 116U/L[10]
ULN for total bilirubin = 1.1mg/dL

Limitations

- Participants from the PBC DSP do not constitute a true random sample, and represent a more pragmatic sample, and although minimal selection criteria were imposed to identify physicians for inclusion, participation is influenced by the willingness of physicians and patients to complete the survey.
- The study design required physicians to recruit consecutive patients and complete the physician survey on the day of the visit to mitigate against selection and recall bias. However, some selection bias remains as more frequently consulting patients and those with more severe disease activity were more likely to be captured.
- The cross-sectional design of the DSP prevented any conclusions about causal relationships.
- A moderate-severe itch oversample was included in this analysis which may show a higher proportion of patients with itch compared to the general PBC population.

Abbreviations ALP: Alkaline Phosphatase, DSP: Disease Specific Programme, EQ-VAS: EuroQol-Visual Analogue Scale, EUR: France, Germany, Italy, Spain and UK, HRQoL: Health-Related Quality of Life, PBC: Primary Biliary Cholangitis, PRO: patient-reported outcomes, SD: standard deviation, TB: total bilirubin, UDCA: ursodeoxycholic acid, UK: United Kingdom, ULN: Upper Limit of Normal, WPAI: Work Productivity and Activity Impairment, 2L: Second Line

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