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Health-related quality of life and preference for treatment modalities of patients with paroxysmal nocturnal hemoglobinuria (PNH): results of a real-world study

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#### **KEY FINDINGS & CONCLUSIONS**

- In this real-world study, patients with PNH, including those treated with Ci, experienced various symptoms such as tiredness, shortness of breath, lack of focus, headaches, and blood in urine.
- Tiredness was the most common and bothersome symptom. The FACIT-Fatigue mean score was below the general population score in both overall and Ci-treated patients.
- Findings suggest unmet need remain for treatment which may lead to better patient outcomes and HRQoL.
- Patients preferred convenient treatments like oral medication. In general administration of treatment at home was preferred to hospital setting.



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# INTRODUCTION

- Paroxysmal nocturnal hemoglobinuria (PNH) is a rare, chronic, complement-mediated blood disorder caused by an acquired mutation of the PIG-A gene in the hematopoietic stem cells.1
- PNH is characterized by hemolysis, anemia, thrombosis, and other debilitating symptoms such as fatigue and shortness of breath.1
- Treatment options for PNH include complement-inhibitor (Ci) infusions such as intravenous complement 5 inhibitors (C5i) or subcutaneous complement 3 inhibitors (C3i), oral monotherapy factor B inhibitor, and oral factor D inhibitor as an add-on to C5i.<sup>2-4</sup>
- The objective of this non-interventional study was to assess symptomatic burden, healthrelated quality of life and preference for treatment modalities among PNH patients in realworld setting.

# **METHODS**

- Data were drawn from the Adelphi PNH Disease Specific Programme™ Wave II, a cross-sectional survey of physicians and their patients with PNH, conducted in France, Germany, Italy, and Spain (December 2023 to May 2024).<sup>5-8</sup>
- DSP methodology has been validated and proved consistent over time. 5-8
- Hematologists completed surveys for up to their next 10 consecutively consulting patients diagnosed with PNH. Of those, patients willing to participate were invited to voluntarily complete a patient-reported survey.
- Physicians reported on prescribed treatment at time of survey.
- Patients reported data on demographics, symptoms including their severity and most bothersome, FACIT Fatigue, and treatment modality preference.

- The FACIT-Fatigue questionnaire score ranges from 0 - 52, where higher score indicate less fatigue, with general population norm mean [standard deviation; SD] of 43.5 [8.3], in Germany).9-11
- Preference for various treatment modalities (e.g., dosing regimen, administration, and setting) was evaluated on a 5-point response scale ranging from very low to very high preference.
- Patient-reported data were analyzed descriptively with no imputation for missing values.
- Where feasible, results are reported for all respondents (overall) and for Ci-treated.

## RESULTS

- A total of 94 patients (median [interquartile range; IQR]) age: 44.0 (34.0 57.2) years, 53% male) completed the survey.
- PNH subtype among all patients was 77% classical, 12% subclinical, and 12% PNH with concurrent bone marrow failure (BMF).
- Of patients with reported data on treatment duration, they were on any treatment for a median (IQR): 14 (6.1 - 23.6) months.
- At time of survey, 72% of patients were treated with Ci (Table 1). The median duration (IQR) of Ci among these patients was 13.8 (5.8 - 23.2) months.

Table 1. Complement inhibitor treatments prescribed at time of survey

<u>-</u>		
	n (%)	
Prescribed any Ci	68 (72%)	
Prescribed C5i	63 (67%)	
Eculizumab	45 (71.4%)	
Ravulizumab	18 (28.6%)	
Prescribed C3i	5 (5%)	
Pegcetacoplan	5 (100%)	

CI: complement inhibitors; C5i: Complement 5 inhibitors; C3i: Complement 5 inhibitors; n: Number of patients prescribed with complement inhibitors treatment

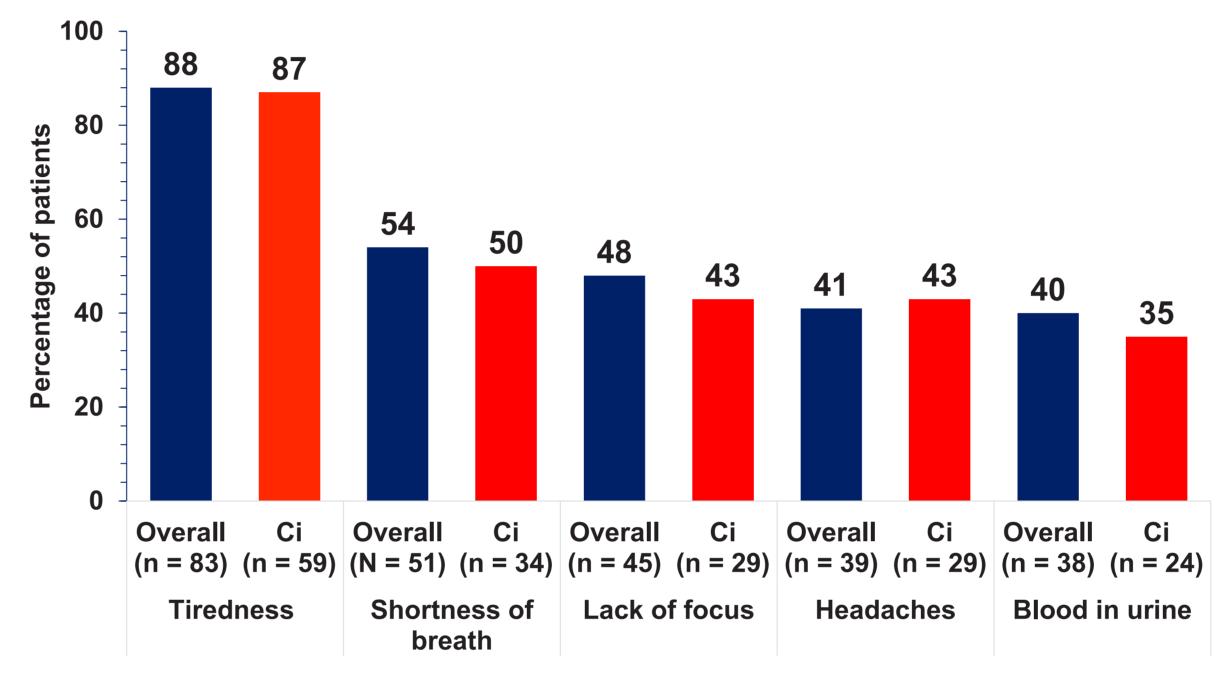
## **FACIT-Fatigue results**

• The mean (SD) FACIT-Fatigue score for all patients (n=92) was 36.6 (9.1) and for Ci-treated (n=66) was 36.8 (8.7)

#### **Patient-reported symptoms**

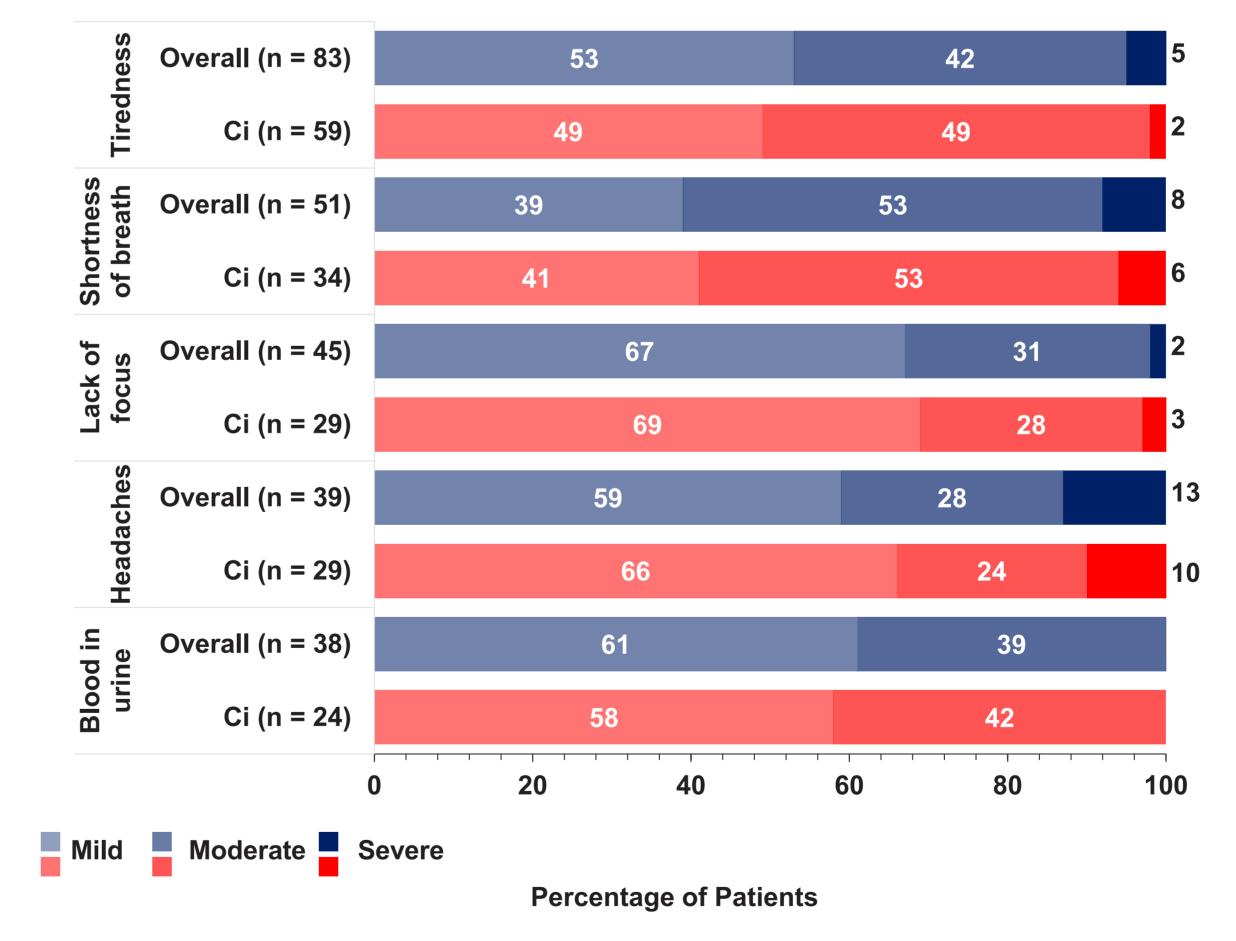
- Most common symptoms reported by overall and Ci-treated patients were tiredness (88% and 87%), shortness of breath (54% and 50%), lack of focus/brain fog (48% and 43%), headache (41% and 43%), and blood in urine/dark urine (40% and 35%). (Figure 1).
- The percentage of patients (overall and Ci-treated) reporting symptom severity as moderate-severe were for tiredness (47% and 51%), shortness of breath (61% and 59%), lack of focus/brain fog (33% and 31%), headaches (41% and 34%), and blood in urine/dark urine (39% and 42%) (Figure 2).
- A majority of patients (59% of overall (48/81) and 63% of Ci-treated group (38/60)) reported tiredness as the most bothersome symptom.

Figure 1. Patient reported symptoms\* at the time of survey



\*Top 5 symptoms reported at the time of survey

Figure 2. Percentage of patients reporting symptom severity



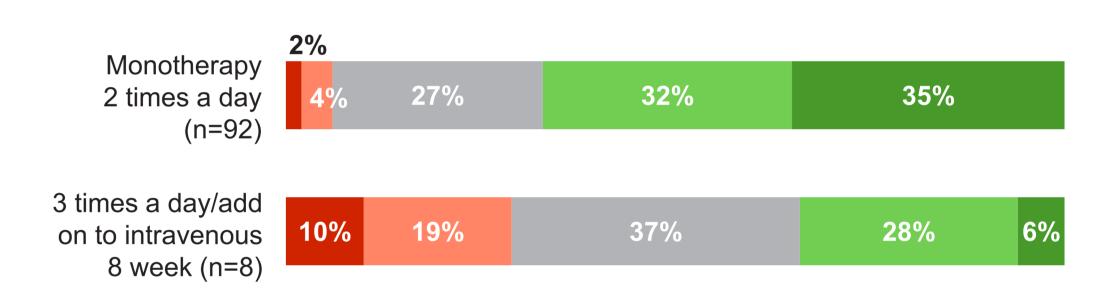
n = number of patients experiencing symptoms

### Patient preference for PNH medication

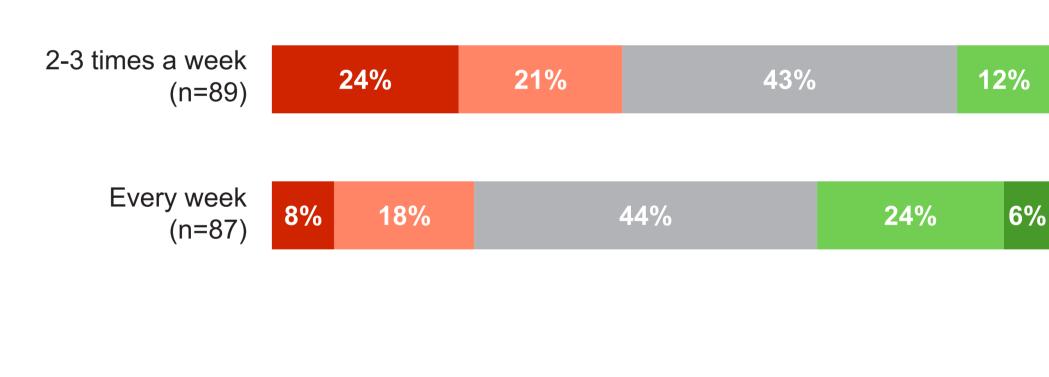
- A majority of patients (67%) had a high/very high preference for oral monotherapy (Figure 3).
- For treatments with parenteral administrations, 55% had a high/very high preference for intravenous administration every 8 weeks.
- Administration setting at home was preferred by respondents (63%) with high/very high preference).

### Figure 3. Patient preference for PNH medication (frequency and route of administration)

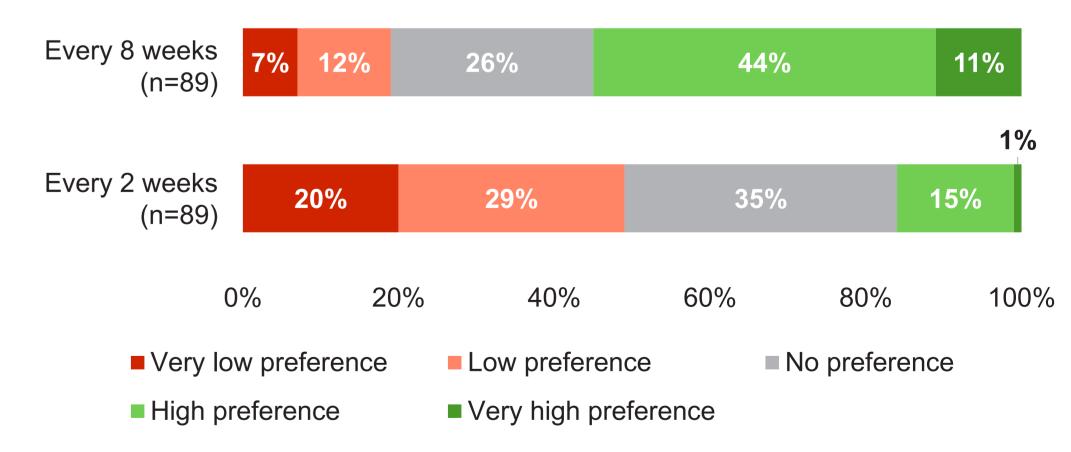
#### **Oral administration**



#### **Subcutaneous administration**



#### Intravenous administration



n =number of respondents of each question

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## **Disclosures**

The Adelphi PNH Disease Specific Programme™ is a wholly owned Adelphi Real World product, data collection for the DSP was undertaken by Adelphi Real World as part of an independent survey, of which Novartis Pharma AG was one of multiple subscribers.

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