

# Anxiety Associated with On-Demand Treatment of HAE Attacks May Result in Suboptimal Attack Management

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## Background

- Hereditary angioedema (HAE) is a rare genetic disease resulting in deficiency (type I) or dysfunction (type II) in the C1-inhibitor protein and subsequent uncontrolled activation of the kallikrein-kinin system
- People living with HAE experience unpredictable, painful and debilitating attacks of tissue swelling in various locations of the body that can be life-threatening depending on the location affected
- Although self-administered on-demand parenteral treatment has enhanced overall HAE attack management, patients may experience anxiety associated with parenteral on-demand treatment<sup>1</sup>

## Objective

- The objective of this analysis was to characterize treatment patterns and anxiety associated with parenteral on-demand treatment of HAE attacks

## Methods

- The US Hereditary Angioedema Association (HAEA) recruited people living with HAE to complete an online survey
- The survey was self-reported, and took respondents approximately 20 minutes to complete
- The survey was completed by 107 individuals between September 6 and October 19, 2022; response rate 69% (107/155)
- Respondents provided consent for their data to be used anonymously or in aggregate
- Analysis was performed using descriptive statistics

## References

1. Burnette A, et al. Anxiety Associated With Parenteral On-demand Treatment For Hereditary Angioedema (HAE). J Allergy Clin Immunol. 2023 Feb;151(2):AB141

## Disclosures

This study was sponsored by KalVista Pharmaceuticals, Inc. All authors met the ICMJE authorship criteria and had full access to relevant data. The authors had full editorial control of the data presented and provided final approval of all content. Neither honoraria nor payments were made for authorship.

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## Results

**Table 1. Respondent Characteristics**

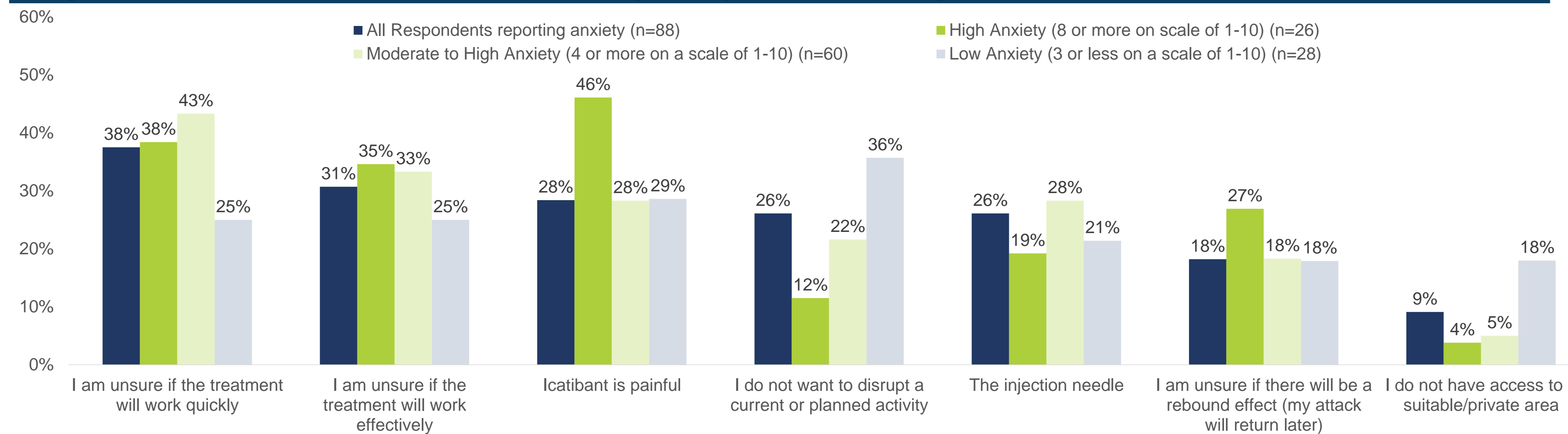
Characteristic	Total (n=107)
<b>Age, mean</b>	41yrs (Range 16-83 yrs)
<b>Age category, n (%)</b>	
< 40yrs	56 (52.3%)
≥ 40yrs	51 (47.7%)
<b>Gender, n (%)</b>	
Female	86 (80.4%)
Male	21 (19.6%)
<b>Type of therapy, n (%)</b>	
On-demand only	53 (49.5%)
Prophylaxis with on-demand	54 (50.5%)
<b>On-demand treatments used</b>	
Firazyr/icatibant	84 (78.5%)
Ruconest	13 (12.1%)
Berinert	9 (8.4%)
Kalbitor	1 (0.9%)

**Table 2. Reported level of anxiety when anticipating on-demand treatment\***

'High anxiety' (8-10 on scale of 1 to 10)	26 (24.2%)
'Moderate to high anxiety' (≥ 4 on scale of 1 to 10)	60 (56.1%)
'Low anxiety' (1-3 on scale of 1 to 10)	28 (26.9%)

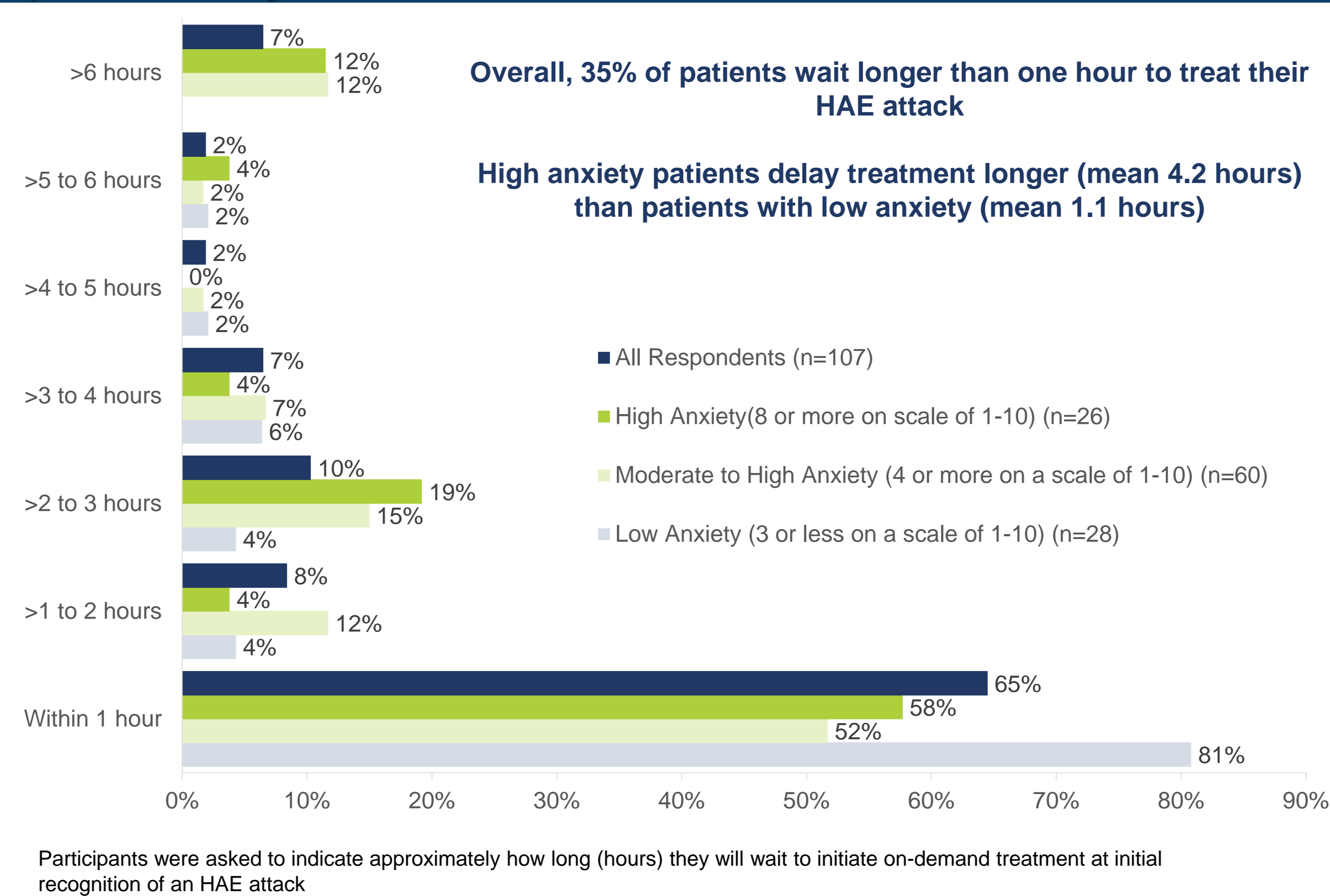
Participants were asked, "Please rate your level of anxiety when you anticipate using your current on-demand treatment," and provided a scale to select from 1-Not anxious to 10-Extremely anxious

**Figure 3. Top two reasons provided for experiencing anxiety when anticipating on-demand treatment**



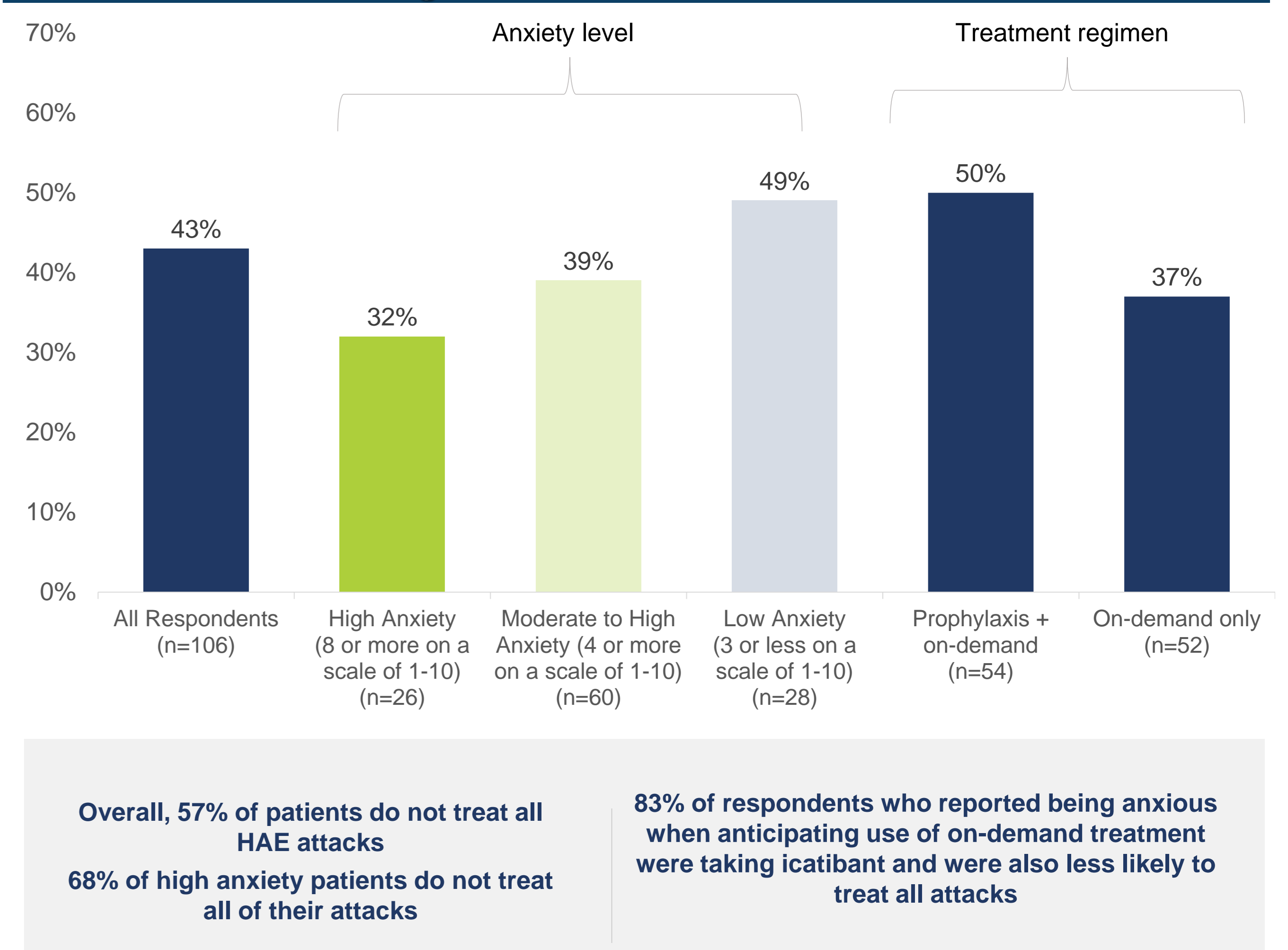
Participants that reported having any degree of anxiety when anticipating on-demand treatment (>1 on scale; n=88) were asked to rank the top two reasons why their on-demand treatment makes them feel anxious.

**Figure 1. Delay of on-demand treatment after initial attack recognition according to patients' anxiety level**



Participants were asked to indicate approximately how long (hours) they will wait to initiate on-demand treatment at initial recognition of an HAE attack

**Figure 2. Proportion of patients treating all attacks according to anxiety level and treatment regimen**



## Conclusions

- More than half of people with HAE in this survey feel moderately to highly anxious when anticipating use of their parenteral on-demand treatment (4 to 10 on a 1 to 10 scale of anxiety)
- High anxiety patients (8 or more on 1 to 10 scale of anxiety) delay treatment longer
- Two-thirds of patients who are highly anxious about on-demand treatment do not treat all attacks
- Higher levels of anxiety were reported by patients taking icatibant as their on-demand treatment and these patients were also less likely to treat all attacks
- Anxiety associated with on-demand treatment administration contributes to patients' decision of whether to treat, delay treatment or not treat attacks, resulting in missed opportunities for early attack treatment and optimal outcomes

## Presented:

American College of Allergy, Asthma and Immunology (ACAAI) 2023 Annual Scientific Meeting, November 9-13, 2023, in Anaheim, California.

To view this poster after the presentation, visit KalVista Virtual Medical Booth.

