# Patient Perspectives on an Optimal Outcome Measure to Assess Efficacy in the Acute Treatment of Hereditary Angioedema Attacks

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#### Introduction

- Clinical trials assessing the efficacy of on-demand treatments for hereditary angioedema (HAE) attacks have used a large variety of clinical endpoints,1 and there is no consensus regarding optimal standardized endpoints and/or patient-reported outcomes (PROs)
- Sebetralstat, an investigational oral plasma kallikrein inhibitor in development for on-demand treatment of HAE attacks, was studied in a phase 2, randomized, double-blind, placebo-controlled trial and demonstrated improvements in several PROs, including the Patient Global Impression of Change (PGI-C), Patient Global Impression of Severity (PGI-S), and composite visual analog scale (VAS)<sup>2,3</sup>
- A post hoc analysis of the trial data showed that improvements reported with the PGI-C were generally in agreement with the other PRO measures, supporting the PGI-C as a meaningful measure of efficacy in patients with HAE from a patient perspective<sup>3</sup>
- We sought to further understand the perspectives of patients with HAE with C1-inhibitor deficiency (C1-INH-HAE) on the PGI-C through a series of direct patient engagements

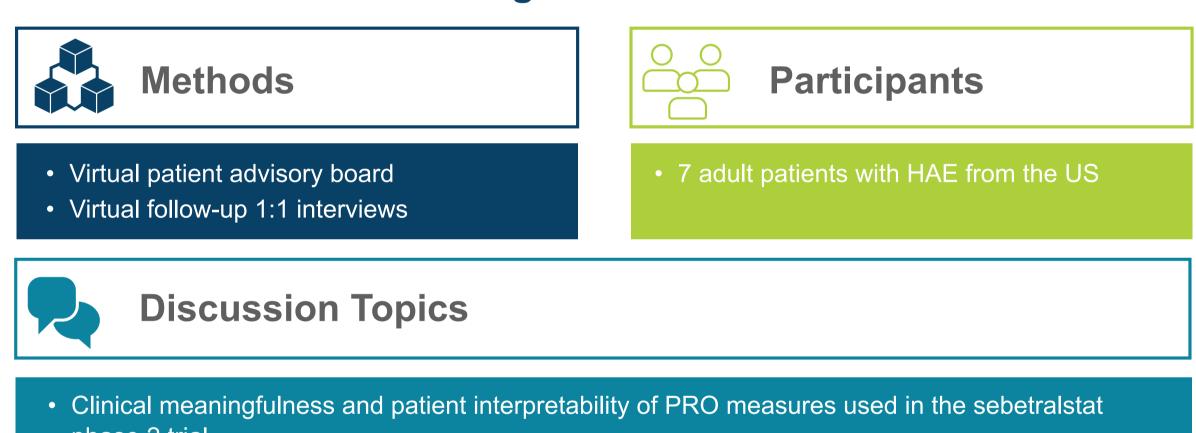
# Objective

To assess patient perspectives on assessments of efficacy for on-demand treatments for HAE

# Methods

- Patient insights were collected during a virtual patient advisory board and 1:1 follow-up interviews (Figure 1)
- The patient advisory board and subsequent individual follow-ups were conducted with the support of the US Hereditary Angioedema Association, which was responsible for patient recruitment
- Feedback was collected on outcome measures used in the sebetralstat phase 2 trial (Figure 2), symptom evolution, and the spectrum of symptom relief experienced over the course of HAE attacks

# Figure 1. Collection of Patient Insights



phase 2 trial

Symptom evolution associated with HAE attacks

• Importance of clinical milestones (eg, progression, beginning of symptom relief, resolution) during the course of HAE attacks

HAE, hereditary angioedema; PRO, patient-reported outcome.

# Figure 2. PROs in the Sebetralstat Phase 2 Trial

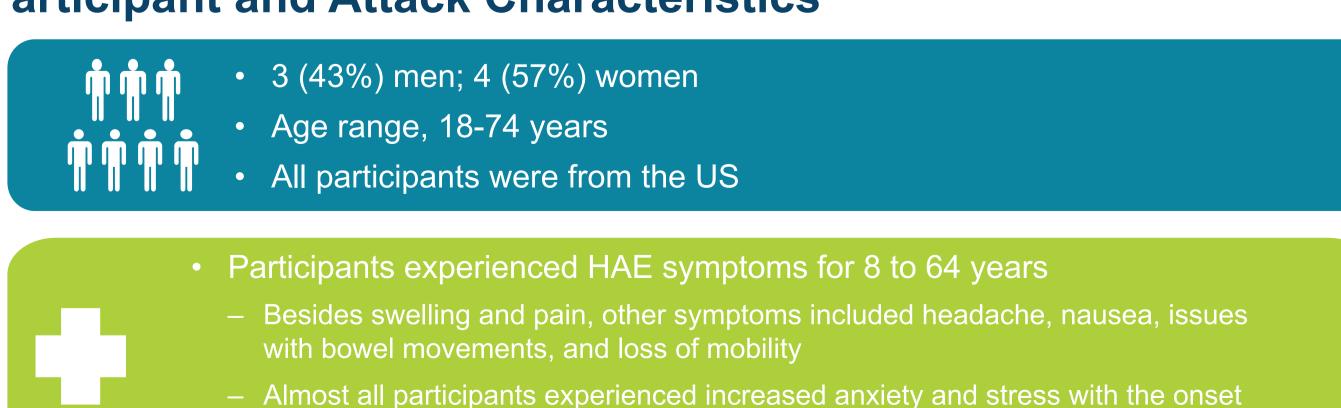


PGI-C, Patient Global Impression of Change; PGI-S, Patient Global Impression of Severity; PRO, patient-reported outcome; VAS, visual analog scale.

# Results

# Participant and Attack Characteristics

of symptoms



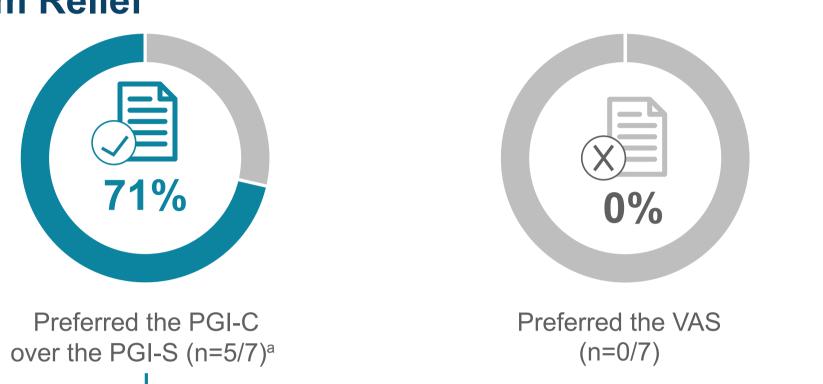
Medications used for on-demand treatment of HAE attacks



HAE, hereditary angioedema; pdC1INH, plasma-derived C1-inhibitor; rhC1INH, recombinant human C1-inhibitor

- Patients indicated that all PRO measures (Figure 2) used in the sebetralstat phase 2 trial were acceptable and measured outcomes that were meaningful to patients with HAE
- Most patients preferred the PGI-C over the PGI-S (Figure 3)
- None preferred the VAS
- All patients indicated that the beginning of symptom relief after treatment was more important than other clinical milestones during an attack, including complete resolution (Figure 3)

#### Figure 3. Patient Feedback on PRO Measures and the Importance of Early Symptom Relief





Said beginning of symptom relief was more important than other clinical milestones (n=7/7)

Patients indicated that scale increments of the PGI-C appropriately reflected gradual change

PGI-C, Patient Global Impression of Change; PGI-S, Patient Global Impression of Severity; PRO, patient-reported outcome; VAS, visual analog scale. <sup>a</sup> Two patients did not have strong opinions about the scale

Most patients selected "A Little Better" from the PGI-C when asked how HAE attack symptoms were when they first noticed improvement after use of on-demand treatment (Figure 4)

#### Figure 4. Patient Description of Overall HAE Attack Symptoms When They First Noticed Improvements After Use of On-Demand Treatment<sup>a</sup>

Much Better	<b>1</b> 14.2% (1/7)
	14.2 /6 (1//)
Better	14.2% (1/7)
A Little Better	<b>††††</b> 71.4% (5/7)
Same	0% (0/7)
A Little Worse	0% (0/7)
Worse	0% (0/7)
Much Worse	0% (0/7)

HAE, hereditary angioedema <sup>a</sup> Question: "At the moment when you first notice the medicine is beginning to work, how would you describe your overall HAE attack symptoms?"

# Conclusions

- These survey data support the PGI-C as a patient-preferred PRO for assessing the efficacy of on-demand treatments for HAE attacks
- The beginning of symptom relief measured as the PGI-C rating of "A Little Better" after treatment was the most important clinical milestone during **HAE** attacks
- These findings are consistent with post hoc analyses of the sebetralstat phase 2 trial, which found that the PGI-C was a sensitive measure of efficacy and was in agreement with other measures of improvement and attack resolution<sup>3</sup>
- Limitations of this study include the small number of participants and inclusion of participants from a single country
- These data support the use of the PGI-C rating of "A Little Better" as the primary endpoint in the ongoing sebetralstat phase 3 KONFIDENT trial (NCT05259917) for on-demand treatment of HAE attacks in patients with C1-INH-HAE4

# References

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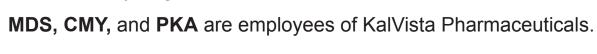
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information about the KONFIDENT trial

