

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
- HAE guidelines recommend treating early after attack recognition to reduce morbidity and mortality

Objective

- The objective of this analysis was to understand whether people living with HAE have different on-demand treatment behaviors and experiences based on whether they treat attacks early or delay on-demand treatment

Methods

- The US Hereditary Angioedema Association (HAEA) recruited people living with HAE to complete an online survey
  - Recruitment was stratified to include 50% of patients taking on-demand only and 50% receiving LTP plus on-demand
- 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
- Respondents provided consent for their data to be used anonymously or in aggregate
- Analysis was performed using descriptive statistics

Disclosures

This study was sponsored by KalVista Pharmaceuticals. 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.

Hilary J. Longhurst - Honoraria/Travel grants and/or Speaker Bureau and/or Consultant/Clinical Research: BioCryst, CSL Behring, Intellia, Pharming, Shire/Takeda, and KalVista Pharmaceuticals  
Mar Guilarte - Consultant and Educational Funding: KalVista, CSL Behring, Takeda, BioCryst and Novartis  
Sally van Kooten and Markus Heckmann - Employees of KalVista Pharmaceuticals.  
Neil Malloy - Consultant fees from KalVista Pharmaceuticals  
Paula Busse - Advisor/Consultant and/or Grant/Research Support: CSL Behring, KalVista Pharmaceuticals, Inc., BioCryst Pharmaceuticals, Takeda, Regeneron, and Novartis

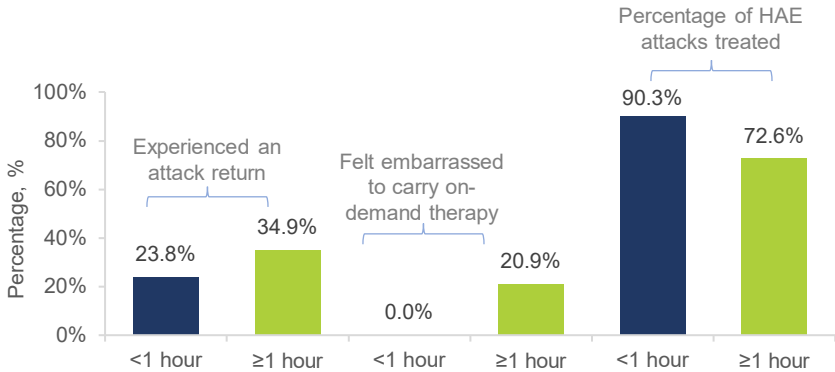
Results

- Respondents included 107 Type I or II HAE patients, 80.4% female, mean age 41 years; response rate 69% (107/155) (**Table 1**)

Table 1. Respondent characteristics	
Characteristic	Total (N=107)
Age, mean (range), years	41 (16-83)
Gender, n (%)	
Female	86 (80.4)
Male	21 (19.6)
Type of therapy, n (%)	
On-demand only	53 (49.5)
Prophylaxis with on-demand	54 (50.5)
On-demand treatments used, n (%)	
Icatibant	84 (78.5)
C1 esterase inhibitor (recombinant)	13 (12.1)
C1 esterase inhibitor (human)	9 (8.4)
Ecallantide	1 (0.9)
Time to administration of on-demand treatment, n (%)	
<1 hour	46 (43.0)
≥1 hour	61 (57.0)
Prophylactic treatments used, n (%) of those using prophylaxis (n=54)	
Lanadelumab	31 (57.4)
Berotrastat	7 (13.0)
C1 esterase inhibitor (subcutaneous)	7 (13.0)
Androgens/steroids	5 (9.3)
C1 esterase inhibitor (intravenous)	4 (7.4)

- When asked the question, “How long do you wait before you initiate on-demand treatment?”, 46 (43%) patients stated that they treated their attacks in <1 hour (**Table 1**)
  - These patients reported carrying on-demand treatment with them 70.5% of the time (vs 58.9% for those who waited ≥1 hour to treat their attack)
- Patients who treated their attacks in <1 hour reported halting their attacks in 1.4 hours (vs 2.9 hours for those who waited ≥1 hour to treat their attack) and achieved full recovery in 1.3 days (vs 1.9 days for those who waited ≥1 hour to treat their attack)

Figure 1. Proportion of patients who treated their attacks in <1 hour vs those who waited ≥1 hour to treat their attack



- Patients who treated their attacks in <1 hour reported experiencing fewer attacks return after taking on-demand treatment (23.8% of the time vs 34.9% for those who waited ≥1 hour to treat their attack)
- None (0%) of the patients who treated their attacks in <1 hour reported feeling embarrassed to carry their on-demand treatment (vs 20.9% of those who waited ≥1 hour to treat their attack)
- Patients who treated attacks in <1 hour reported feeling less anxious (3.4 on a scale of 0-11 vs 4.9 for those who waited ≥1 hour to treat).
- When asked what percentage of attacks they treated with on-demand treatment, 60.9% of patients who treated their attacks in <1 hour reported treating all attacks (90.3% of overall attacks) vs. 30% for those who waited ≥1 hour to treat their attack (72.6% of overall attacks))

Conclusions

- Results from this analysis highlight that patients with HAE who treat their attacks early (<1 hour) are more likely to carry their on-demand treatment with them and treat more attacks overall compared with those who delay treatment**
- Patients with HAE who treat their attacks early also recover more quickly and feel less anxious when anticipating on-demand treatment**

