

Real-World Barriers to On-Demand Treatment for Attacks in Hereditary Angioedema: A Patient Survey

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Disclosures

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Background

- Hereditary angioedema (HAE) is characterized by unpredictable swelling attacks that affect cutaneous and submucosal tissues and are typically painful, debilitating, and potentially fatal
- WAO/EAACI 2021 updated guidelines recommend the early use of on-demand treatment following attack recognition to reduce morbidity and prevent mortality¹⁻³
- Despite the recommendation for early treatment, recent research suggests that patients delay on-demand treatment of their HAE attacks⁴
- The current analysis aimed to identify the burdens and potential barriers to subcutaneous on-demand treatment

1. Betschel S, Badiou J, Binkley K, et al. The International/Canadian Hereditary Angioedema Guideline. *Allergy, Asthma & Clinical Immunology*. 2019/11/25 2019;15(1):72. doi:10.1186/s13223-019-0376-8

2. Busse PJ, Christiansen SC, Riedl MA, et al. US HAEA Medical Advisory Board 2020 Guidelines for the Management of Hereditary Angioedema. *The Journal of Allergy and Clinical Immunology In Practice*. Jan 2021;9(1):132-150.e3. doi:10.1016/j.jaip.2020.08.046

3. Maurer M, Magerl M, Betschel S, et al. The international WAO/EAACI guideline for the management of hereditary angioedema-The 2021 revision and update. *Allergy*. Jul 2022;77(7):1961-1990. doi:10.1111/all.15214

4. Radojicic, Cristine et al. Patient Perspectives On Early Use Of On-demand Treatment For Hereditary Angioedema (HAE) Attacks to Reduce Severity

Methods

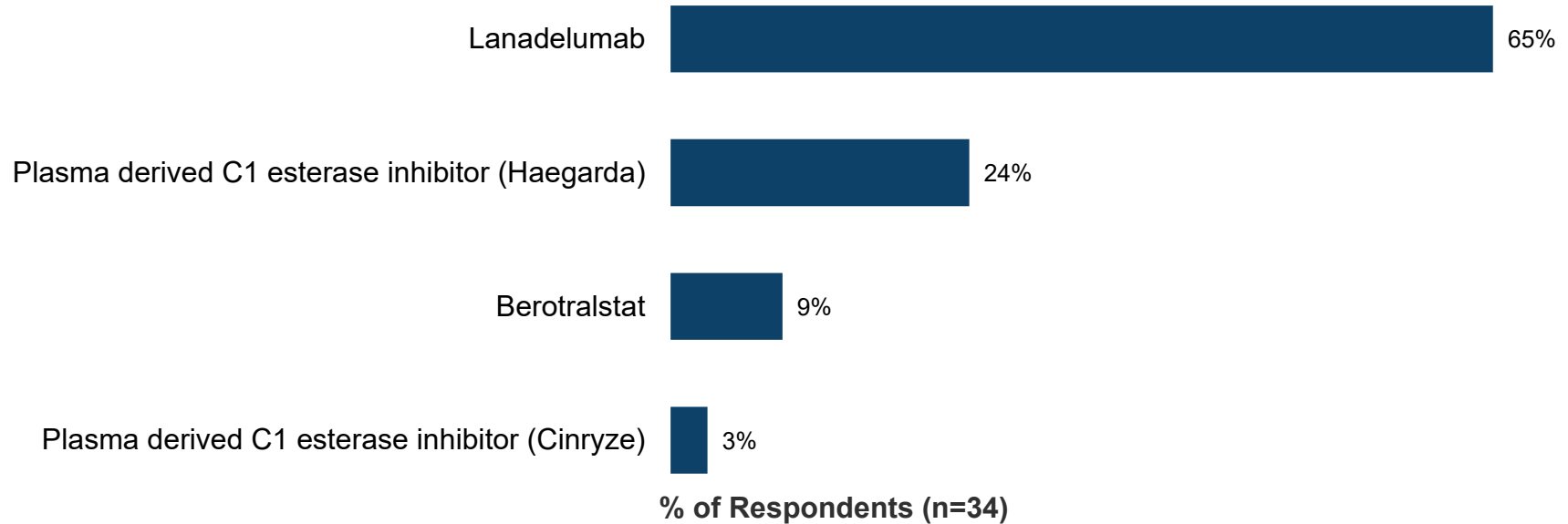
- The US Hereditary Angioedema Association recruited participants with Type 1 or 2 HAE between April and June 2023
- Participants had to be at least 12 years old and have treated at least 1 HAE attack within the prior 3 months with an approved on-demand therapy to be included in the survey
 - Participants completed a 20-minute, self-reported, online survey that inquired about their last treated HAE attack
- Analysis included a subgroup of participants who self-administered subcutaneous on-demand treatment

Participant Characteristics (Subcutaneous subgroup)

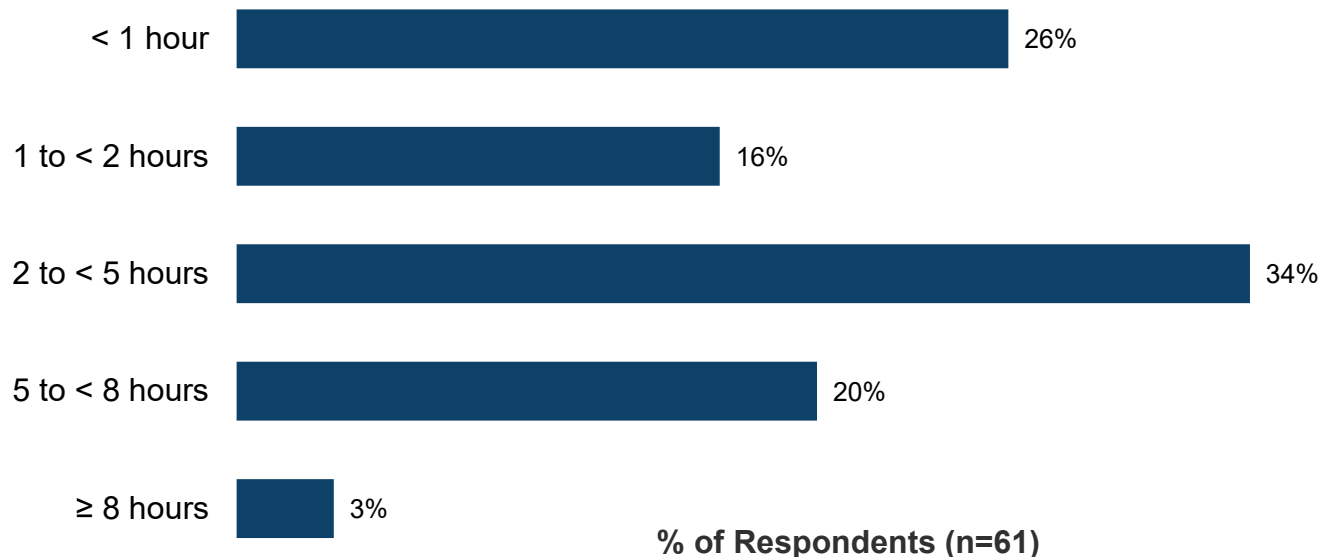
- 61 out of 94 (64.9%) participants who completed the survey treated their last attack with subcutaneous on-demand treatment

Participants who used subcutaneous on-demand treatment	Total (n=61)
Current age, years; mean (SD)	46 (15.2)
<u>Gender</u>	
Male	12 (20%)
Female	49 (80%)
<u>HAE Type</u>	
Type I	48 (79%)
Type II	13 (21%)
On long-term prophylaxis at the time of their last attack	34 (56%)

Long-Term Prophylaxis Agent Among Patients who Treated their Last Attack with Subcutaneous On-Demand Treatment



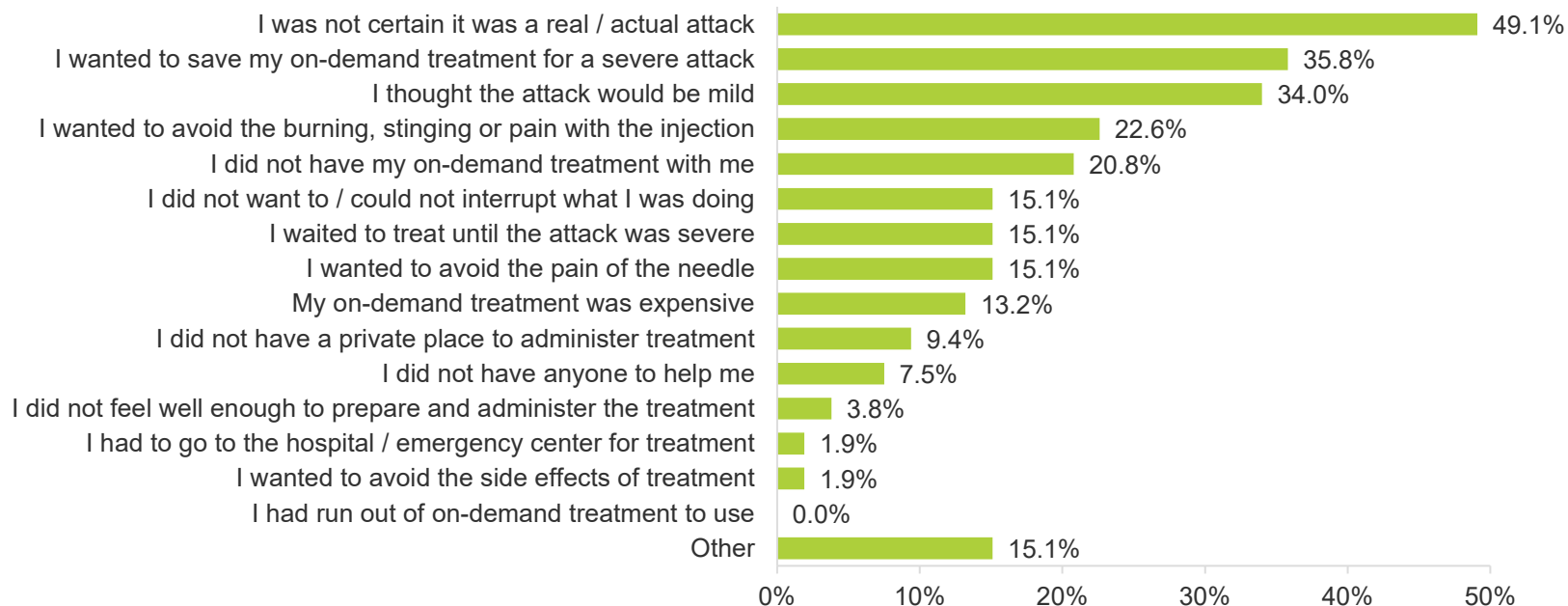
Time to on-Demand Treatment After Initial Attack Recognition



- Mean reported time (standard deviation) from attack onset to on-demand treatment was 2.9 (3.6) hours

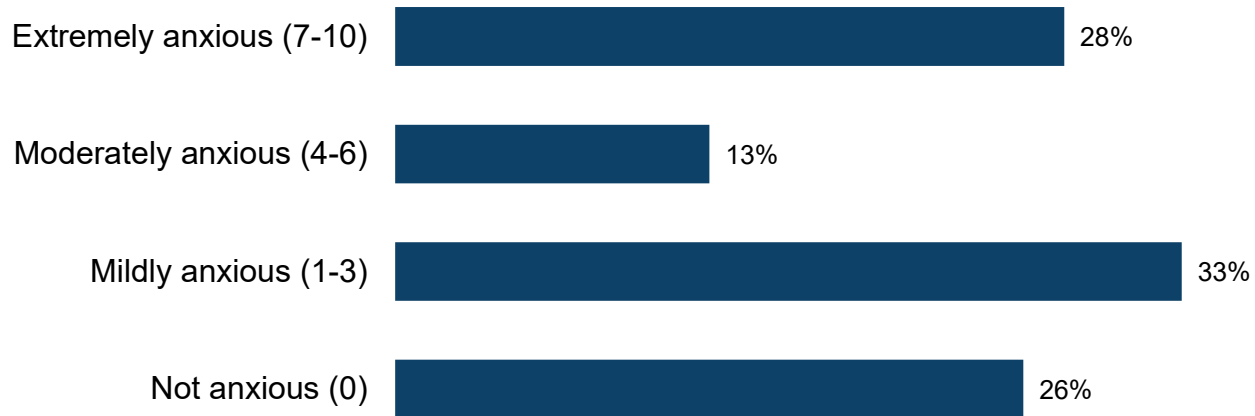
Barriers to Treating HAE Attack Sooner (Top 5 Ranked)

- Respondents were asked to rank their top 5 reasons from a list of possible reasons for delaying the administration of on-demand treatment
- Reasons for not treating earlier were reported by 53/61 (87%) patients*



* Excludes participants who treated all attacks immediately

Reported Level of Anxiety Associated with Use of Subcutaneous On-demand Treatment



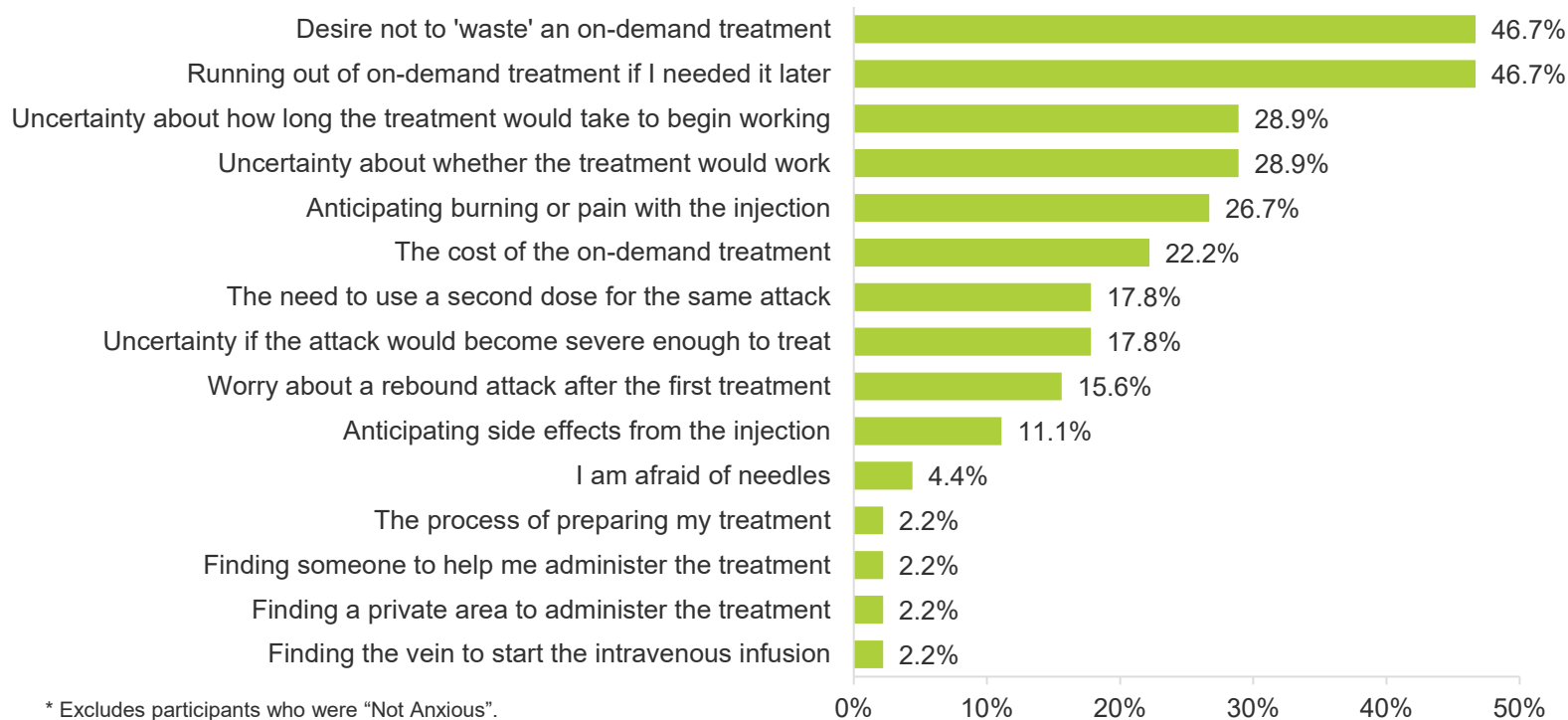
% of Respondents (n=61)

How much anxiety did you feel about treating this HAE attack with on-demand treatment (on a scale of 0-10)?

- 74% of respondents (45/61) reported experiencing mild to extreme anxiety about treating their most recent HAE attack with a subcutaneous on-demand therapy

Reported Reasons for Feeling Anxious About Treating Most Recent Attack with Subcutaneous On-Demand Treatment (Top 5 Ranked)

Respondents (n=45)* were asked to rank their top 5 reasons from a list of possible factors contributing to their anxiety about treating their most recent attack with on-demand treatment



Conclusions

- Results suggest that many patients with HAE who are prescribed subcutaneous on-demand treatment do not follow guideline recommendations for initiating treatment as soon as an attack is recognized
- Reasons for delaying treatment included uncertainty whether the attack was real, desire to save on-demand treatment, thinking the attack would be mild, and wanting to avoid needle/injection pain
- Most patients experienced anxiety about using on-demand treatment due to concerns about running out of treatment, uncertainty regarding its efficacy, and anticipating pain from the injection
- Ready access to treatments with less invasive routes of administration, in addition to appropriate patient education, may help to overcome barriers to prompt on-demand treatment of HAE attacks