

Treatment Patterns of Patients Requiring Redosing of an On-demand Treatment After the Return of an HAE Attack

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Abstract

Rationale: Hereditary angioedema (HAE) is characterized by painful and debilitating attacks of tissue swelling in various locations. Although self-administered on-demand parenteral (subcutaneous or intravenous) treatment has enhanced overall HAE attack management, some people living with HAE require redosing of an on-demand treatment to manage the return of an attack.

Methods: People with Type I or II HAE were recruited by the US Hereditary Angioedema Association to complete a 20-minute, self-reported, online survey between September 6 to October 19, 2022.

Results: Respondents included 107 Type I or II HAE patients, 80.4% female, mean age 41 years. Overall, 32.7% experienced return of an HAE attack after initial use of an on-demand treatment. Of these, 88.6% had administered icatibant injection as their initial treatment. HAE attacks initially treated within one hour returned less frequently (26.1%), compared to attacks treated after an hour or longer (37.7%). Upon attack return, 64.5% took an additional dose of on-demand treatment; of these, 63.4% used icatibant as their additional treatment. Although the additional treatment was often the same as the initial treatment, 17.5% of initial icatibant-treated patients opted for a different on-demand treatment for their additional dose. For most (87.9%), one additional dose of on-demand treatment was required to manage attack return; this rate was similar for people using prophylaxis plus on-demand treatment and those using on-demand treatment only.

Conclusions: Results highlight that people with HAE can experience the return of an HAE attack requiring one or more additional doses of on-demand treatment and that initial delays in HAE attack treatment result in increased frequency of attack return.

Rationale

- HAE is characterized by painful and debilitating attacks of tissue swelling in various locations
- Although self-administered on-demand parenteral (subcutaneous or intravenous) treatment has enhanced overall HAE attack management, some people living with HAE require redosing of an on-demand treatment to manage the return of an attack
- This survey aimed to characterize treatment patterns of patients requiring an additional dose of parenteral on-demand treatment after the return of an HAE attack

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 therapy only and 50% receiving long-term prophylaxis plus on-demand therapy
- 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 was 69% (107/155)
- Respondents provided consent for their data to be used anonymously or in aggregate
- Analysis was performed using descriptive statistics

Results

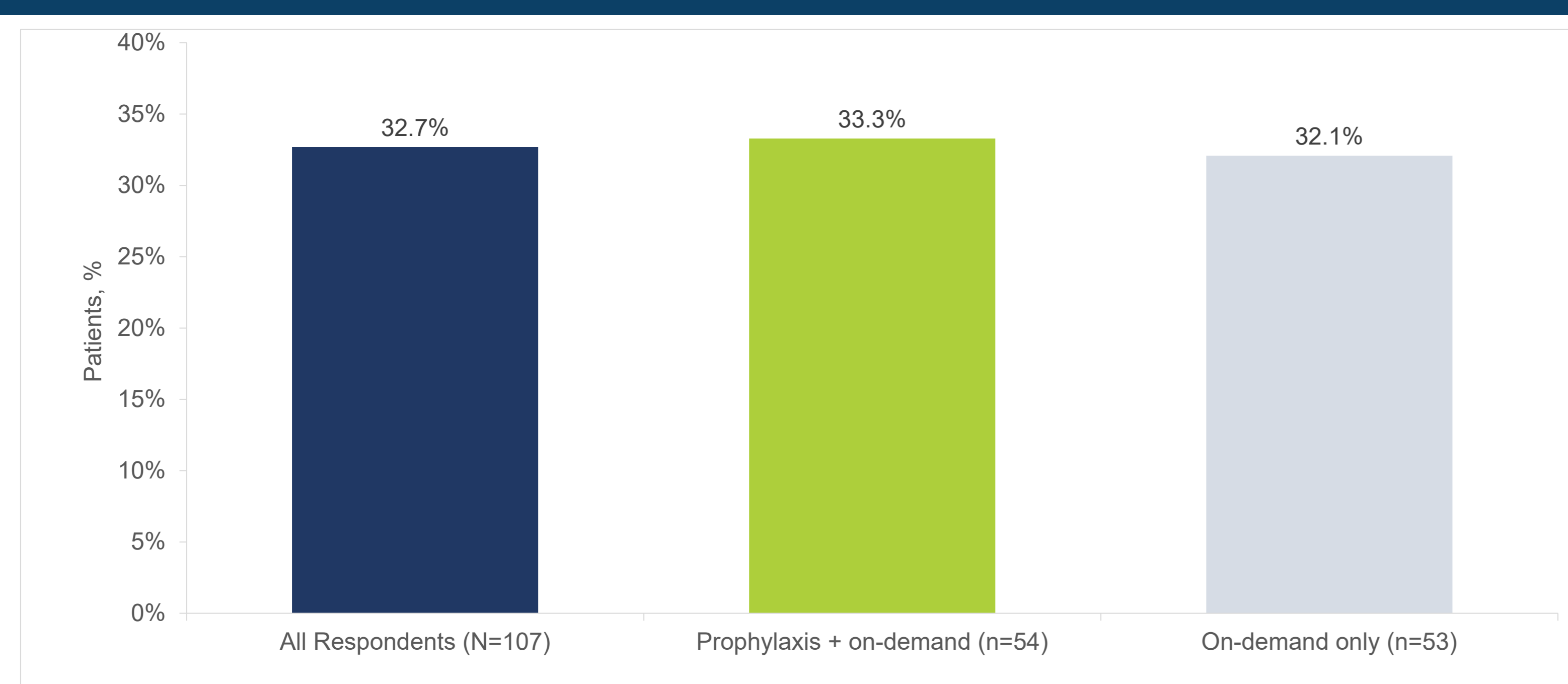
- Respondents included 107 Type I or II HAE patients, 80.4% female, mean age 41 years (Table 1)

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)
Berotralstat	7 (13.0)
C1 esterase inhibitor (subcutaneous)	7 (13.0)
Androgens/steroids	5 (9.3)
C1 esterase inhibitor (intravenous)	4 (7.4)

- Overall, 32.7% experienced return of an HAE attack after initial use of an on-demand treatment (Figure 1)
 - Of these, 88.6% had administered icatibant injection as their initial treatment

Figure 1. Proportion of patients who experienced return of an HAE attack after initial use of on-demand treatment

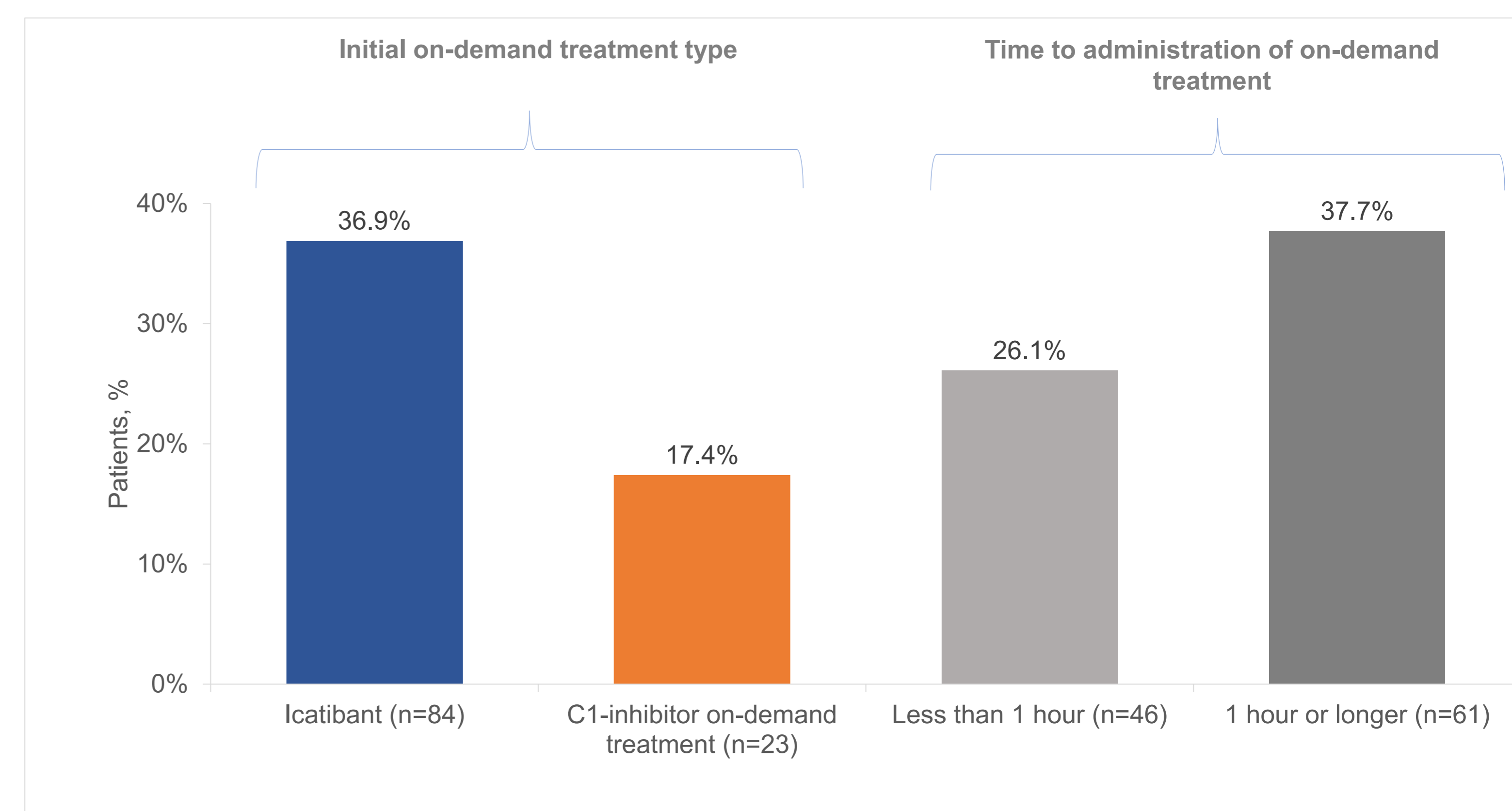


Disclosures

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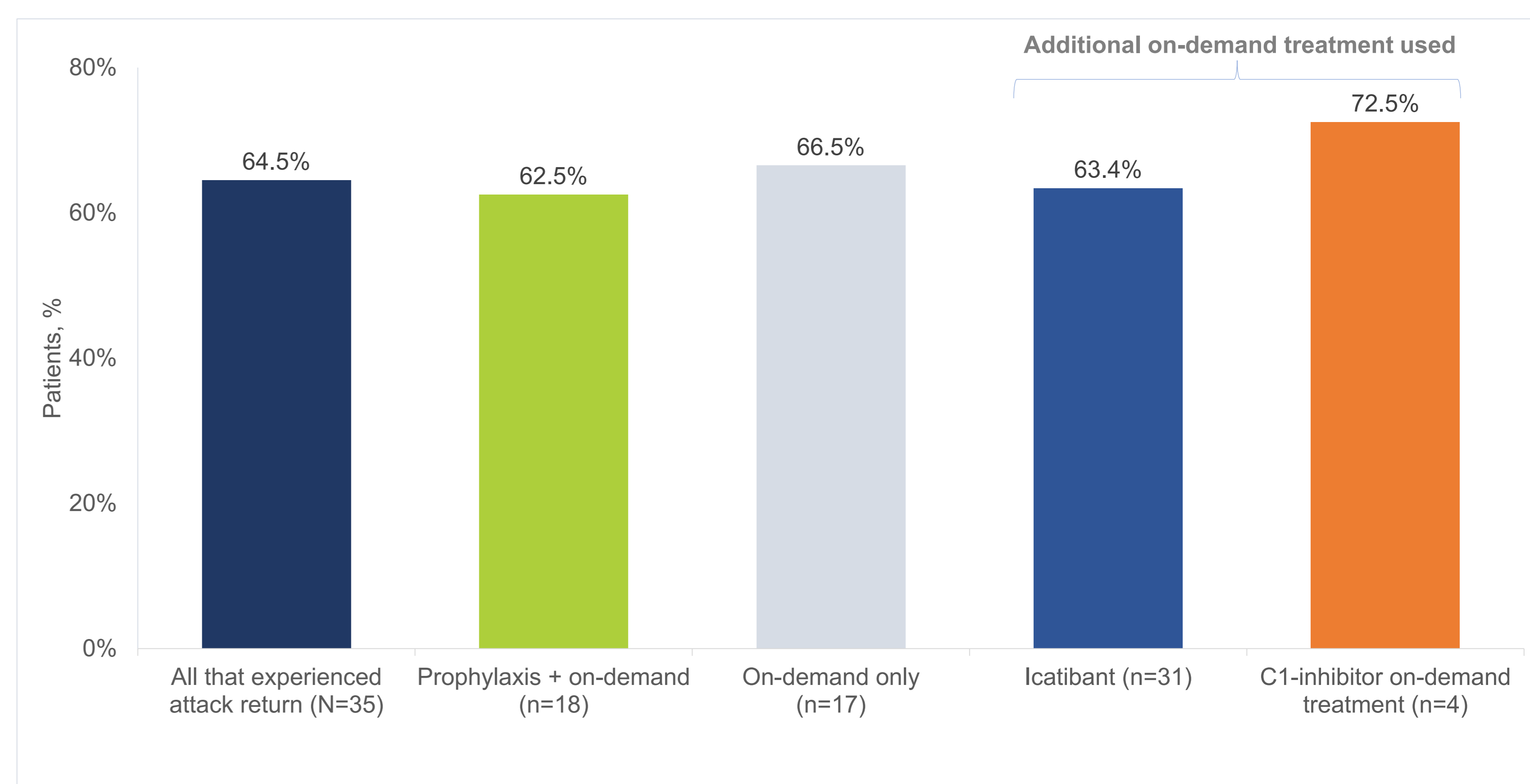
- HAE attacks initially treated within 1 hour returned less frequently (26.1%) compared with attacks treated after ≥1 hour (37.7%; Figure 2)

Figure 2. Proportion of patients who experienced return of an HAE attack after initial use of on-demand treatment by treatment type and time to initial treatment



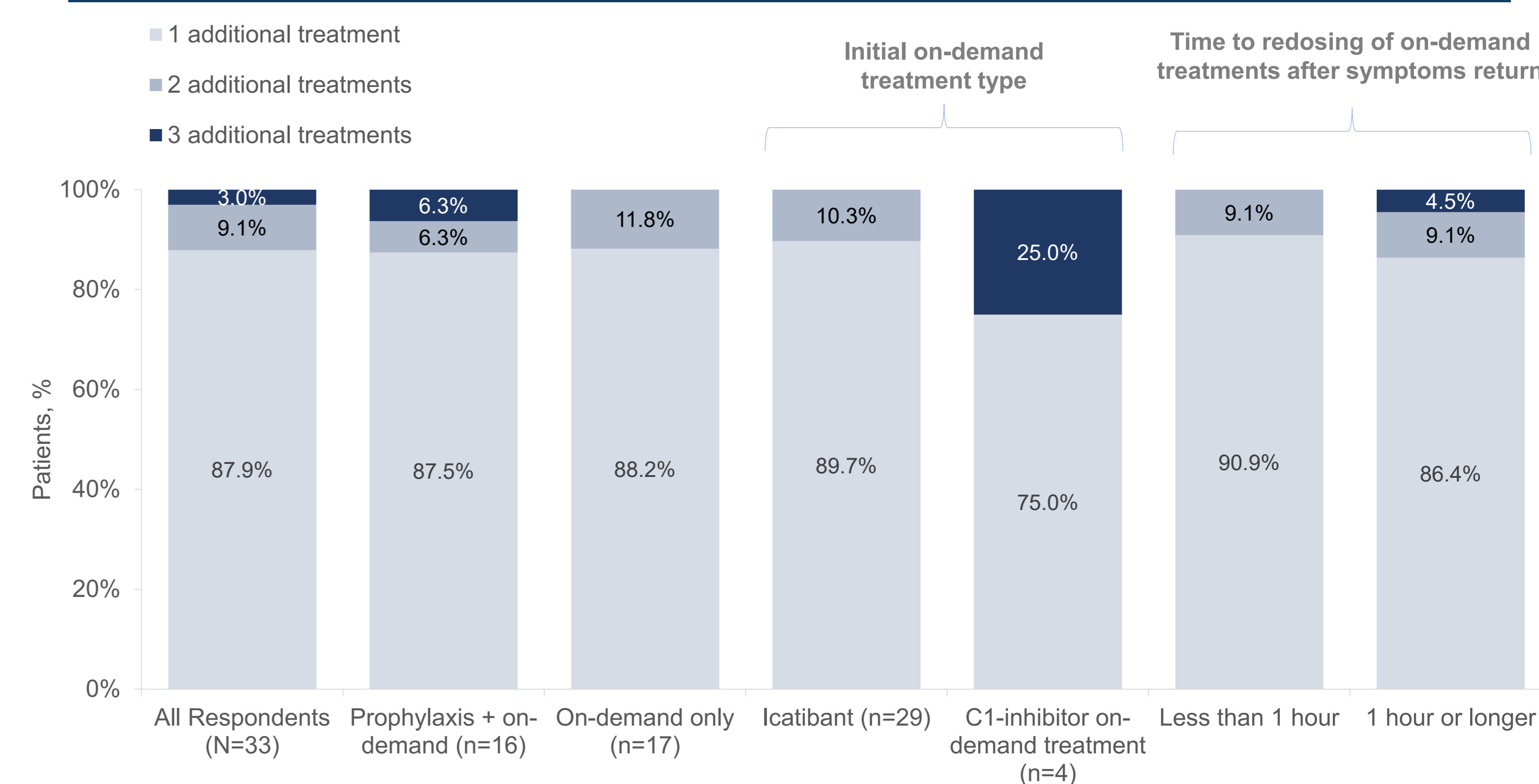
- Upon attack return, 64.5% took an additional on-demand treatment; of these, 63.4% used icatibant as their additional treatment (Figure 3)
- Although the additional treatment was often the same as the initial treatment, 17.5% of initial icatibant-treated patients opted for a different on-demand treatment for their additional treatment

Figure 3. Proportion of patients who administered an additional on-demand treatment after an attack returned



- For most (87.9%), one additional dose of on-demand therapy was required to manage attack return (Figure 4)
 - This rate was similar for people using prophylaxis + on-demand and those using on-demand only

Figure 4. Number of additional treatments administered to manage attack return



Conclusions

- Almost one third of people with HAE experienced the return of an HAE attack requiring ≥1 additional dose of on-demand treatment
- HAE attacks initially treated within 1 hour returned less frequently compared with attacks treated at 1 hour or longer
- For most, 1 additional dose of on-demand treatment was required to manage attack return; this rate was similar for people using prophylaxis + on-demand and those using on-demand only

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