

End of Progression of Attack Manifestations With Oral Deucrictribant Immediate-Release Capsule for On-Demand Treatment of Hereditary Angioedema Attacks in the Phase 3 RAPiDE-3 Trial

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Key takeaways

The Phase 3 RAPiDE-3 trial for treatment of attacks in multiple types of hereditary angioedema (HAE) demonstrated that attacks treated with the bradykinin B2 receptor antagonist, deucrictribant immediate-release (IR) capsule, achieved end of progression (EoP) of attack manifestations faster than those treated with placebo.

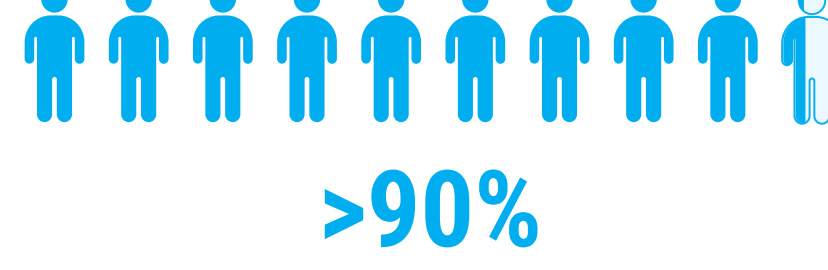
EoP of HAE attack manifestations

was measured in the RAPiDE-3 trial for the first time as a pre-specified endpoint in an HAE on-demand trial



17.47 minutes

Median time to EoP of attack manifestations in participants taking deucrictribant IR



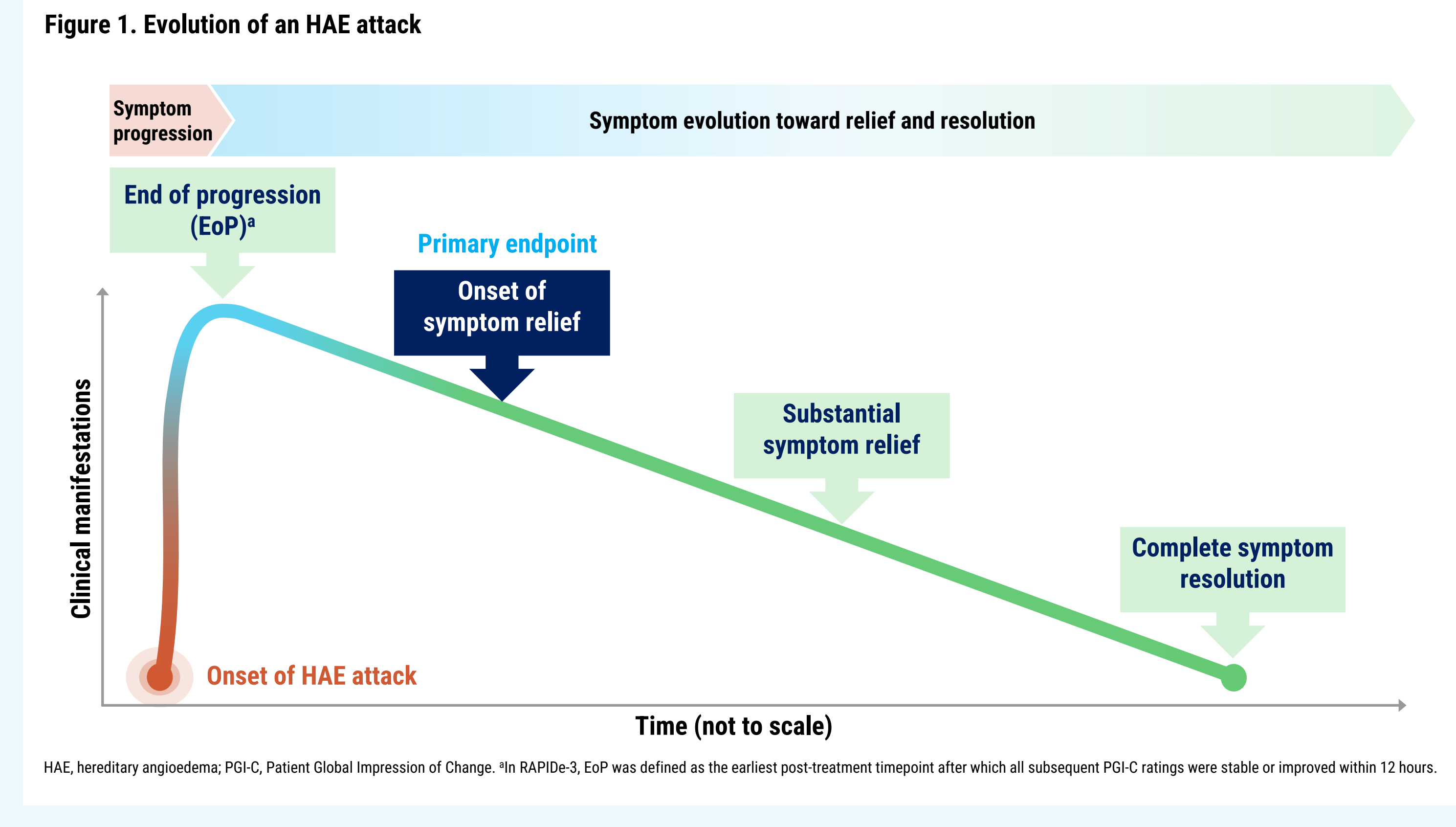
>90%

of participants taking deucrictribant achieved EoP of attack manifestations in 12 hours

This presentation includes data for an investigational product not yet approved by regulatory authorities.

Background

- Hereditary angioedema (HAE):** a condition characterized by excess bradykinin, which activates bradykinin B2 receptors causing increased fluid migration from the blood vessels to the surrounding tissues. HAE causes recurrent and unpredictable episodes of painful angioedema attacks affecting multiple locations in the body with varying degrees of severity.¹
- Unmet need:** an unmet need remains for additional orally administered treatments combining ease of administration, rapid and sustained effects, and a well-tolerated safety profile.^{2,4}
- End of progression (EoP):** defined as the earliest post-treatment timepoint after which attack manifestations stop worsening further, which marks the earliest evidence of treatment effects.²
 - It may serve as a clinically meaningful indicator of attacks starting to evolve to relief and resolution.²
 - Achieving EoP can also offer psychological reassurance by reducing the uncertainty associated with HAE attack escalation.
- Time to EoP as an outcome to measure treatment efficacy:** recommended for inclusion by the Acute Treatment Outcomes in Hereditary Angioedema (AURORA) consensus project.
 - The AURORA project brought together patients, clinicians, researchers, industry representatives, and regulatory stakeholders to develop a set of core outcomes recommended for inclusion in clinical trials of on-demand treatments for HAE attacks.²
 - 95% of participants agreed that time to EoP should be included as one of the five core outcomes as it represented the earliest sign of treatment effects.²
- Oral deucrictribant:** a selective bradykinin B2 receptor antagonist under development for both prophylactic and on-demand treatment of bradykinin-mediated angioedema attacks.⁵⁻¹²



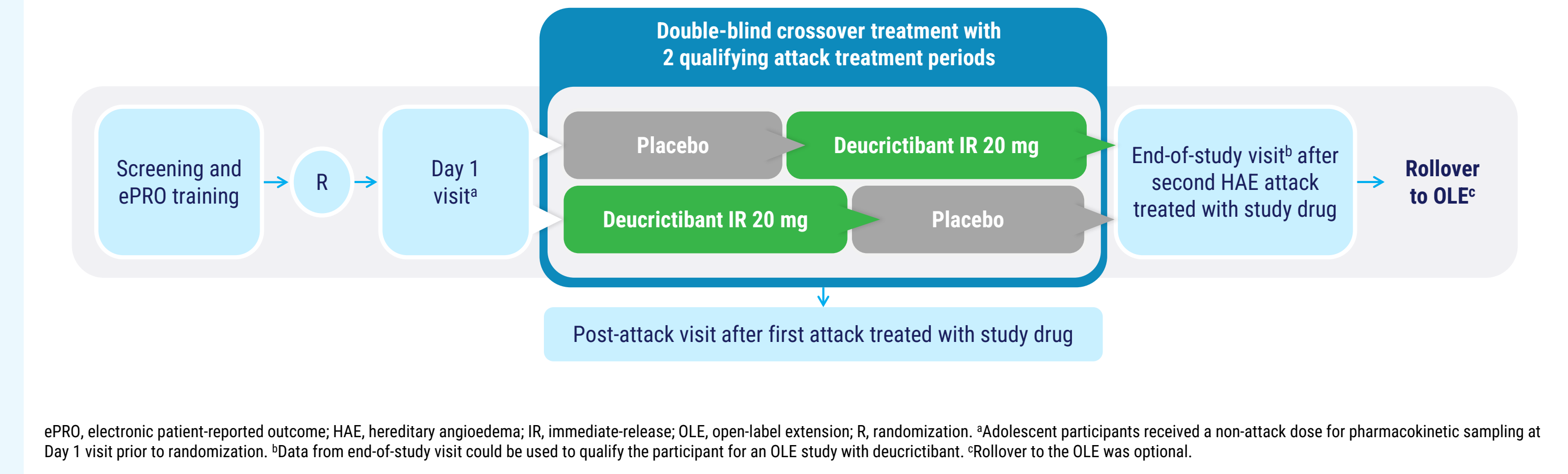
Objective

To evaluate the time to EoP of attack manifestations as a pre-specified outcome aimed to document initial or earliest clinical evidence of acute attack manifestations stopping to worsen and starting to evolve towards relief and resolution following on-demand treatment with deucrictribant immediate-release (IR) versus placebo in adolescents and adults with HAE.

Methods

- RAPiDE-3 (NCT06343779):** a global, Phase 3, randomized, double-blind, placebo-controlled, crossover trial.
- Participants:** adolescents (aged ≥12 to <18 years) and adults (aged ≥18 to ≤75 years) with HAE-C1INH type 1 or 2, or HAE with normal C1 inhibitor (HAE-nC1INH). Participants on long-term HAE prophylaxis were also enrolled.
- Study drugs:** participants self-administered deucrictribant IR capsule 20 mg or placebo to treat two qualifying attacks in a crossover design. Qualifying attacks were defined as either non-laryngeal or non-severe laryngeal attacks without breathing difficulties or stridor, and with at least one symptom item score ≥20 on the Angioedema symptom Rating sAe assessment.
- Analysis set:** primary efficacy analysis included all randomized participants who had two attacks treated with study drug in accordance with the crossover design.

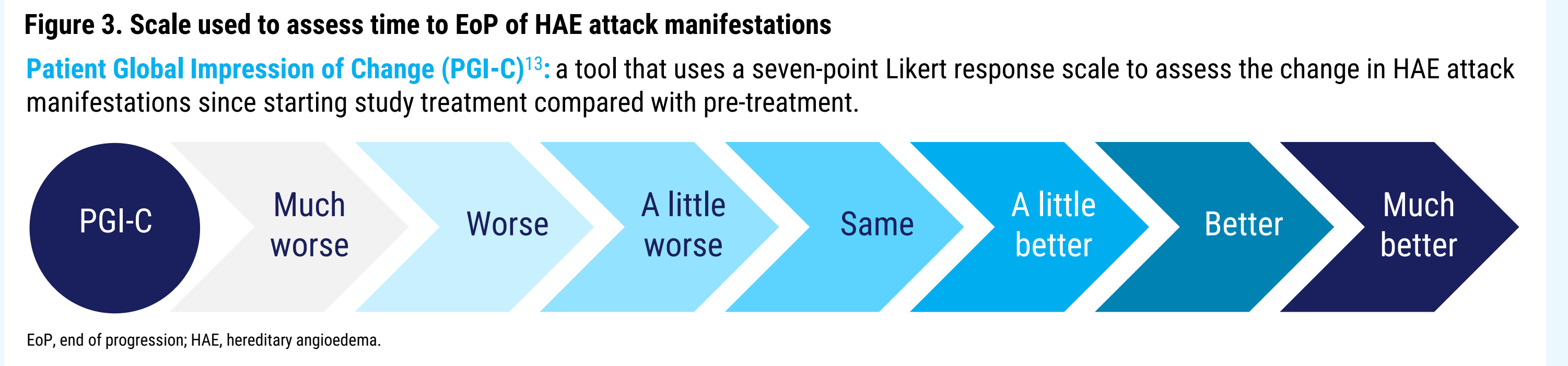
Figure 2. RAPiDE-3 trial design⁷



Methods

Table 1. Assessment of time to EoP of HAE attack manifestations	
Parameter	Details
Time to EoP of attack manifestations	The time to the earliest post-treatment timepoint after which all subsequent Patient Global Impression of Change (PGI-C) scale ratings were stable or improved within 12 hours
Instrument	PGI-C
Type of analysis	Pre-specified secondary endpoint (5th in the hierarchical testing order) ⁷
Window for endpoint assessment	Baseline to 12 (+1) hours

EoP, end of progression; HAE, hereditary angioedema.

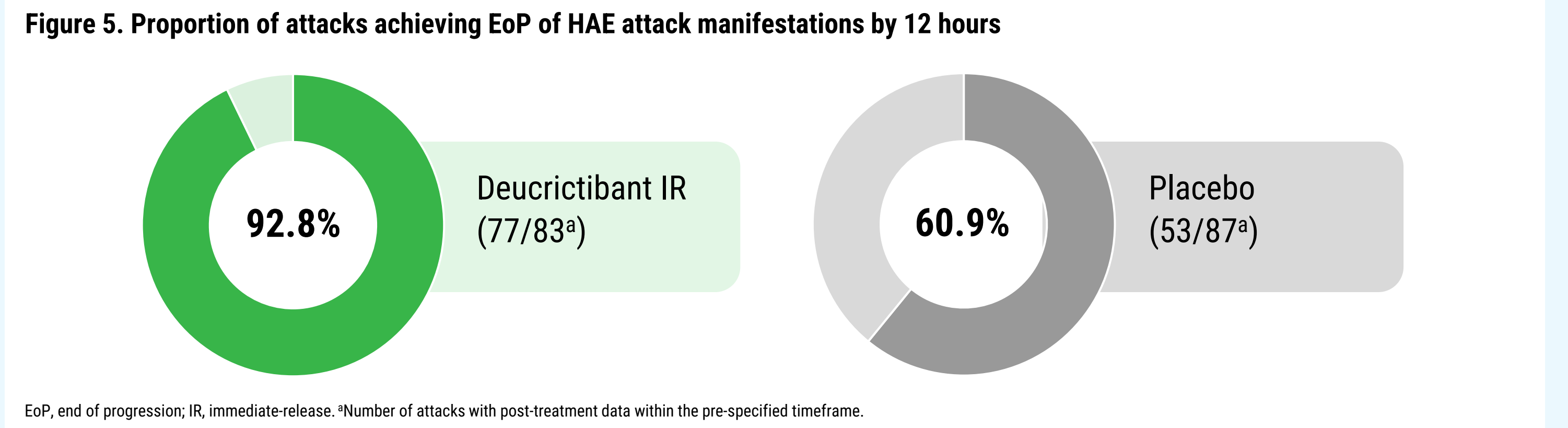
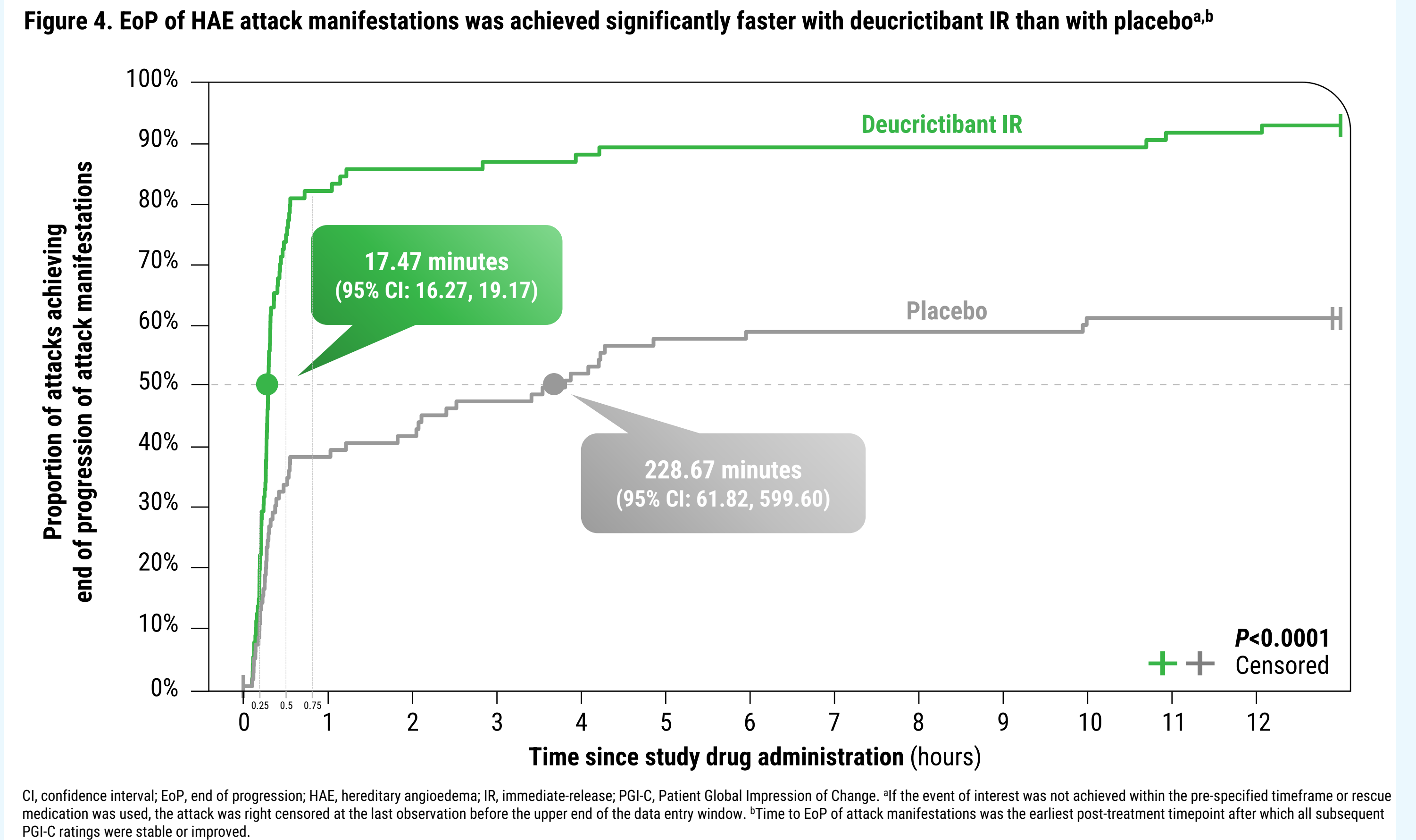


Results

Table 2. Participant baseline demographics and disease characteristics	
Participant characteristics	All randomized participants (N=134)
Age in years, mean (SD)	39.0 (14.7)
Sex: Female, n (%)	76 (56.7)
Years since HAE diagnosis, mean (SD)	17.7 (13.0)
Number of attacks within 3 months before screening, mean (SD)	4.4 (3.3)
HAE type, n (%)	
HAE-C1INH-type 1	118 (88.1)
HAE-C1INH-type 2	10 (7.5)
Unspecified type 1 or 2 ^a	2 (1.5)
HAE-nC1INH ^b	4 (3.0)
Current long-term prophylaxis use, n (%) ^c	31 (23.1)

HAE, hereditary angioedema; HAE-C1INH-type 1, hereditary angioedema type 1; HAE-C1INH-type 2, hereditary angioedema type 2; HAE-nC1INH, hereditary angioedema with normal C1 inhibitor; SD, standard deviation. ^aHAE type not specified by participant at baseline. ^bIncluded participants with HAE-nC1INH associated with a documented genetic variant. ^cLong-term prophylaxis medication included lanadelumab (13 [9.7%]), berotralstat (8 [6.0%]), complement C1 esterase inhibitor (6 [4.5%]), and other (4 [3.0%]).

- A total of 134 eligible participants (10 [7.5%] adolescents, 4 [3.0%] with HAE-nC1INH) were enrolled and randomized at 59 sites across 24 countries on 6 continents.
- The primary efficacy analysis set included 88 participants with paired attacks; 113 participants had ≥1 attack treated with study drug.



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