



APAAACI 2024 CONGRESS



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RAPIDe-2 Study: Long-term Efficacy and Safety of Oral Deucricitibant for Treatment of Hereditary Angioedema Attacks

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APAAACI 2024

Kuala Lumpur, Malaysia; 12-15 December 2024

*Our distinguished colleague and friend, Prof. Marcus Maurer, sadly passed away during the finalization of this slide presentation.

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

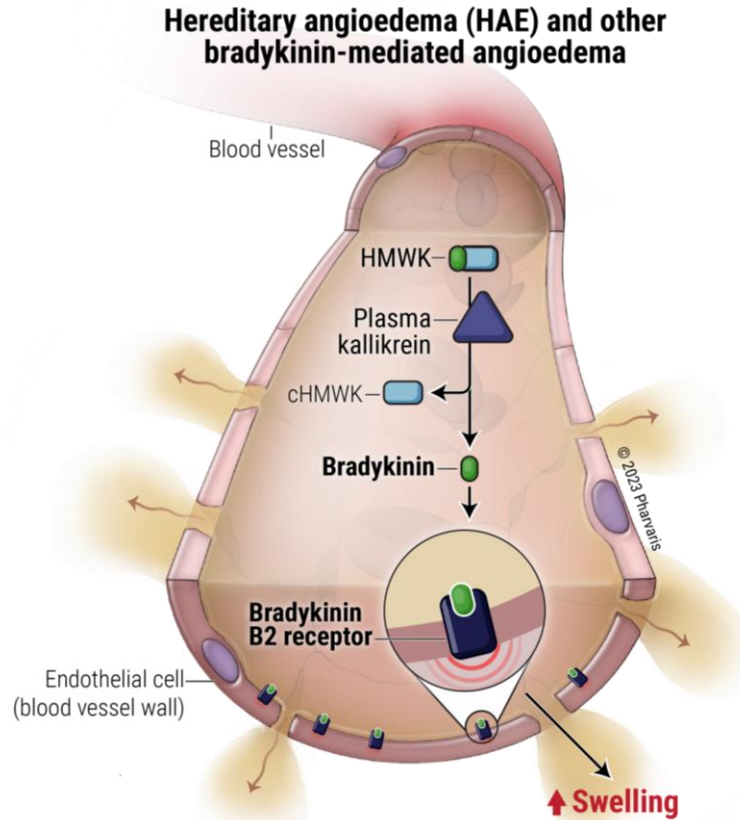
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M.Mag.: BioCryst, CSL Behring, Intellia, KalVista, Novartis, Octapharma, Pharming, Pharvaris, Takeda;
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L.B.: BioCryst, Blueprint, CSL Behring, Novartis, Takeda; **H.C.:** AstraZeneca (Alexion), CSL Behring, KalVista, Merck, Novartis, Pharming, Pharvaris, Roche, Sanofi, Sobi, Takeda; **H.F.:** BioCryst, CSL Behring, Intellia, KalVista, ONO Pharmaceutical, Pharming, Pharvaris, Takeda; **D.G.:** Pharming, Takeda; **R.H.:** BioCryst, CSL Behring, KalVista, Pharming, Pharvaris, Takeda; **R.L.:** BioCryst, CSL Behring, Ionis, KalVista, Novartis, Pharming, Pharvaris, Takeda; **A.R.:** BioCryst, CSL Behring, Pharming, Pharvaris, Stallergens, Takeda, Teva; **G.S.:** Pharvaris, Takeda; **M.Sta.:** none; **M.Sto.:** BioCryst, CSL Behring, KalVista, Pharming, Takeda; **A.V.:** AstraZeneca, Berlin-Chemie/Menarini Group, CSL Behring, KalVista, Novartis, Pharming, Pharvaris, Sobi, Takeda; **J.S., L.Z., M.Y., G.G.:** employees of Pharvaris, hold stocks in Pharvaris; **P.L.:** employee of Pharvaris, holds stocks/stock options in Pharvaris; **M.Mau.:** Adverum, Attune, BioCryst, CSL Behring, KalVista, Pharming, Pharvaris, Takeda

RAPIDe-2 is a Pharvaris-sponsored clinical trial. ClinicalTrials.gov identifier: NCT05396105.

Acknowledgments: Medical writing services were provided by Scott Salsman, Ph.D. of Two Labs Pharma Services.



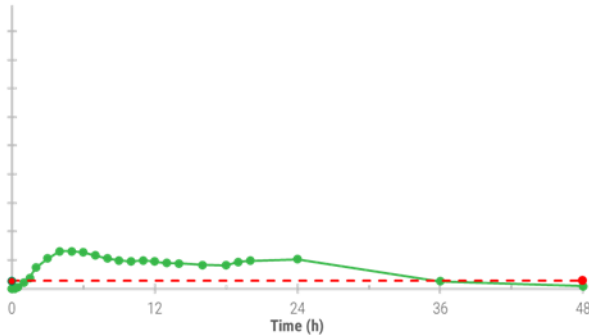


- International guidelines recommend that HAE attacks are **treated as early as possible**.¹⁻³
- Burden associated with **parenteral administration** of currently approved on-demand medications⁴⁻⁸ leads to treatment of a number of HAE attacks being **delayed or forgone**.⁹⁻¹³
- An unmet need exists for **on-demand oral** therapies that are effective and well tolerated and may reduce the treatment burden thus enabling prompt administration.¹³

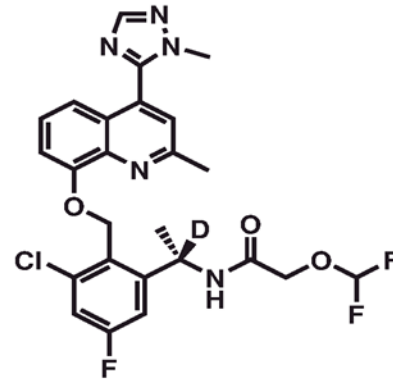
cHMWK, cleaved HMWK; HMWK, high-molecular-weight kininogen. **1.** Betschel S, et al. *Allergy Asthma Clin Immunol*. 2019;15:72. **2.** Busse PJ, et al. *J Allergy Clin Immunol Pract*. 2021;9:132-50. **3.** Maurer M, et al. *Allergy*. 2022;77:1961-90. **4.** Berinert®. Package insert. Accessed November 12, 2024. <https://labeling.cslbehring.com/pi/us/berinert/en/berinert-prescribing-information.pdf>; **5.** Cinryze®. Summary of product characteristics. Accessed November 12, 2024. https://www.ema.europa.eu/en/documents/product-information/cinryze-epar-product-information_en.pdf; **6.** Firazyr®. Package insert. Accessed November 12, 2024. https://www.shirecontent.com/PI/PDFs/Firazyr_USA_ENG.pdf; **7.** Kalbitor®. Package insert. Accessed November 12, 2024. https://www.shirecontent.com/PI/PDFs/Kalbitor_USA_ENG.pdf; **8.** Ruconest®. Package insert. Accessed November 12, 2024. https://www.ruconest.com/wp-content/uploads/Ruconest_PI_Apr2020.pdf; **9.** Burnette A, et al. Presented at: AAAAI; February 24–27, 2023; San Antonio, TX, USA. **10.** Tuong LA, et al. *Allergy Asthma Proc* 2014;35:250-4. **11.** Center for Biologics Evaluation and Research. The voice of the patient—Hereditary angioedema. US Food and Drug Administration. Accessed November 12, 2024. <https://www.fda.gov/media/113509/download>; **12.** Radojicic C, et al. Presented at: AAAAI; February 24–27, 2023; San Antonio, TX, USA. **13.** Mendivil J, et al. Presented at: ACAAI; November 9–13, 2023; Anaheim, CA, USA.



DEUCRICTIBANT extended-release (XR) tablet sustained absorption¹

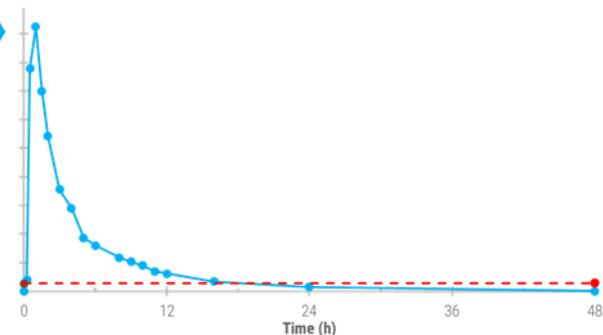


Maintains sustained therapeutic exposure over 24 hours² from day one, allowing for once-daily oral treatment to prevent HAE attacks^a



deucricitbant

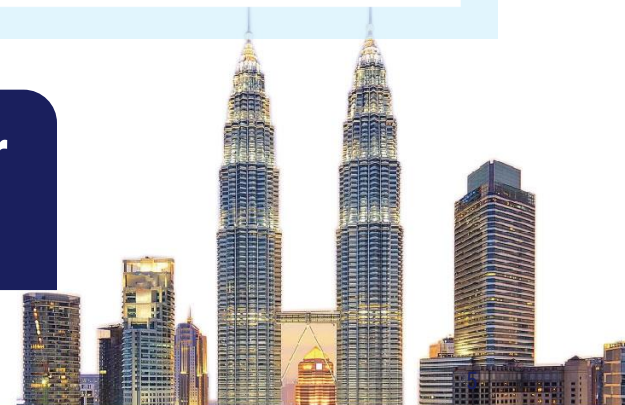
DEUCRICTIBANT immediate-release (IR) capsule rapid absorption³

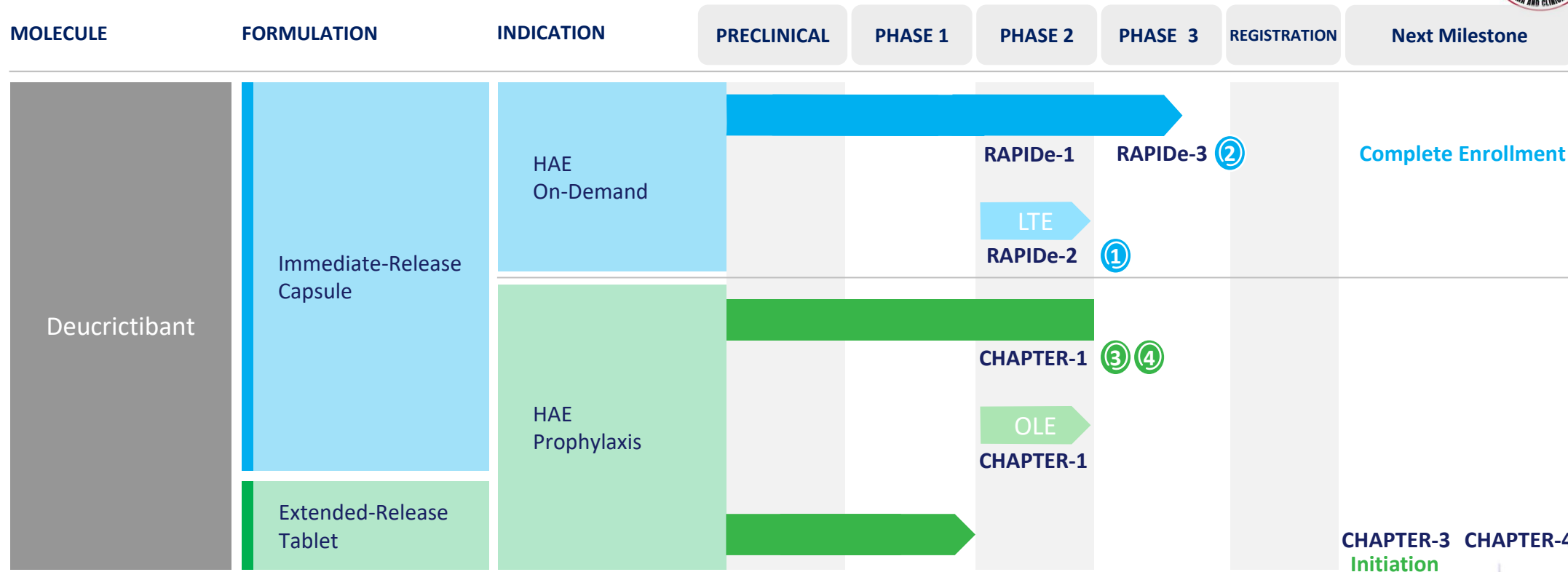


Rapidly reaches therapeutic exposure within 15-30 minutes⁴, making it suitable for on-demand oral treatment of HAE attacks^a

Two oral products with the same active ingredient for the prevention and treatment of HAE attacks

HAE, hereditary angioedema. ^aAspirational; to be confirmed with clinical data from Phase 3 studies. **1.** Company data: single-dose cross-over PK study in healthy volunteers (n=14) under fasting conditions. **2.** Lesage A, et al. Presented at IDDST; May 22-24, 2024. **3.** Crabbé R, et al. Presented at AAAAI; Feb 26-Mar 1, 2021. **4.** Maurer M, et al. Presented at AAAAI; Feb 24-27, 2023; San Antonio, TX, USA.

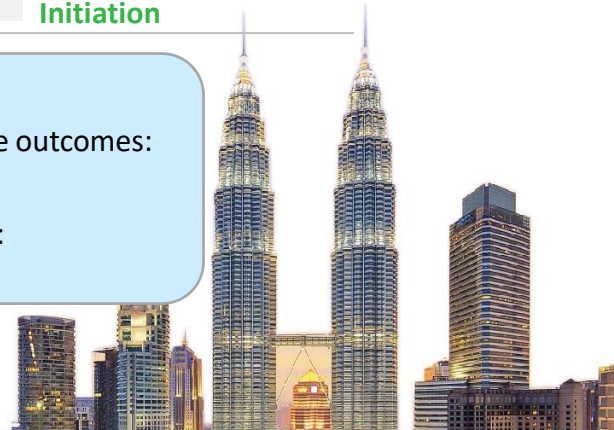




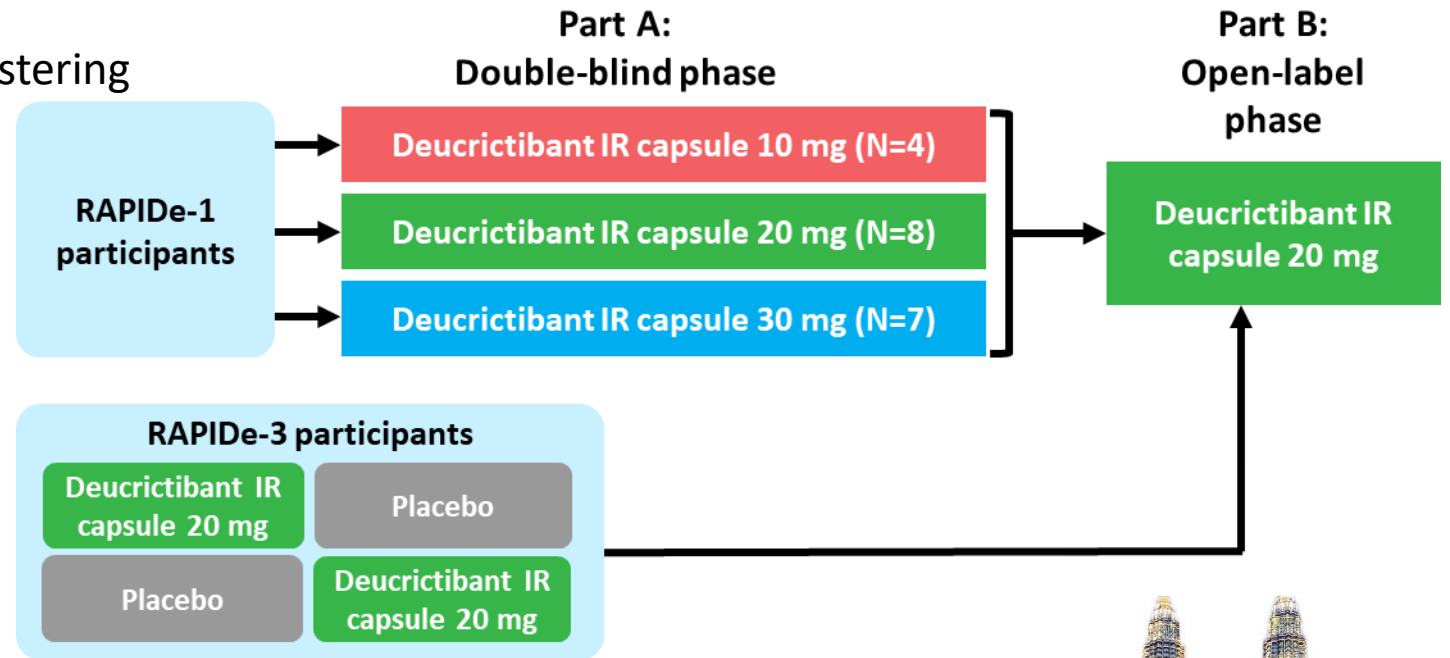
- Presentations at APAAACI 2024 poster session**
- ① Li et al. Propensity score matching: RAPIDe-2 vs. mixed methods
December 15, 8.00 AM – 6.00 PM
 - ② Li et al. RAPIDe-3 study design
December 15, 8.00 AM – 6.00 PM

- Additional oral clinical presentations at APAAACI 2024**
- ③ Magerl et al. CHAPTER-1 RCT clinical and quality-of-life outcomes:
December 14, 2.00-2.10PM
 - ④ Magerl et al. CHAPTER-1 Open-label extension results:
December 15, 3.20-3.30PM

HAE, hereditary angioedema; LTE, long-term extension; OLE, open-label extension; RCT, randomized controlled trial. RAPIDe-1. ClinicalTrials.gov identifier: NCT04618211. Accessed November 11, 2024. <https://www.clinicaltrials.gov/study/NCT04618211>. RAPIDe-2. ClinicalTrials.gov identifier: NCT05396105. Accessed November 11, 2024. <https://www.clinicaltrials.gov/study/NCT05396105>. RAPIDe-3. ClinicalTrials.gov identifier: NCT06343779. Accessed November 11, 2024. <https://www.clinicaltrials.gov/study/NCT06343779>. CHAPTER-1. ClinicalTrials.gov identifier: NCT05047185. Accessed November 11, 2024. <https://www.clinicaltrials.gov/study/NCT05047185>. CHAPTER-3. ClinicalTrials.gov identifier: NCT06669754. Accessed November 11, 2024. <https://www.clinicaltrials.gov/study/NCT06669754>. CHAPTER-4. ClinicalTrials.gov identifier: NCT06679881. Accessed November 11, 2024. <https://www.clinicaltrials.gov/study/NCT06679881>.



- RAPIDe-2¹ is an ongoing, two-part, Phase 2/3 extension study evaluating long-term safety and efficacy of orally administered deucricitbant IR capsule for the treatment of HAE attacks.
 - Part A enrolls adult (≥18 years) participants who completed RAPIDe-1².
 - In Part A, participants continue self-administering the same double-blinded dose of deucricitbant IR capsule (10 mg, 20 mg, or 30 mg) received in RAPIDe-1 to treat qualifying non-laryngeal attacks (≥1 symptom with Visual Analogue Scale score ≥30), and laryngeal attacks presenting without breathing difficulties.
 - This presentation reports the data from the RAPIDe-2 Part A combined-dose group at the date of cutoff.



HAE, hereditary angioedema; IR, immediate-release. 1. RAPIDe-2. ClinicalTrials.gov identifier NCT05396105. Accessed November 18, 2024. <https://clinicaltrials.gov/study/NCT05396105>.
2. RAPIDe-1. ClinicalTrials.gov identifier: NCT04618211. Accessed November 18, 2024. <https://www.clinicaltrials.gov/study/NCT04618211>.



- **Primary endpoint:** Safety, including TEAEs, clinical laboratory tests, vital signs, and ECG findings.

- **Efficacy:** Assessed using PRO tools.

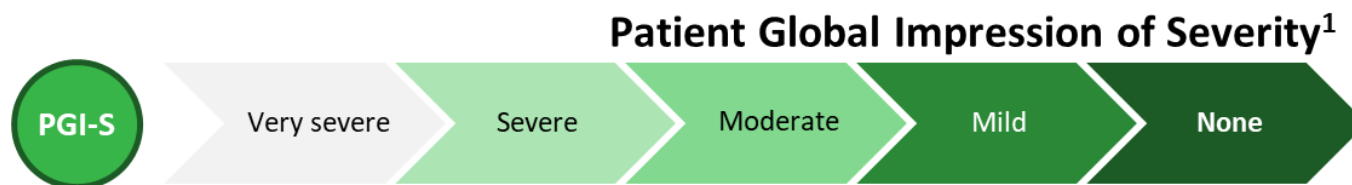
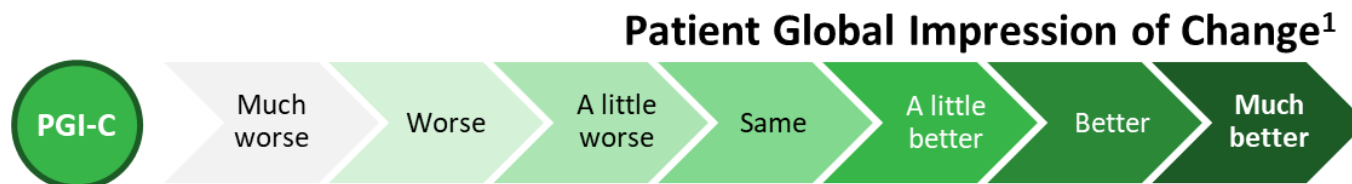
- **Secondary efficacy endpoints:**

- **Time to onset of symptom relief:**
PGI-C rating of at least “a little better” for 2 consecutive timepoints by 12 hours post-treatment

- **Time to reduction in attack severity:**
≥1-level reduction in PGI-S from pre-treatment for 2 consecutive timepoints by 12 hours post-treatment

- **Time to substantial symptom relief:**
PGI-C rating of at least “better” for 2 consecutive timepoints by 12 hours post-treatment

- **Proportion of attacks achieving complete attack resolution:**
PGI-S rating of “none” at 24 hours post-treatment



ECG, electrocardiogram; PGI-C, Patient Global Impression of Change; PGI-S, Patient Global Impression of Severity; PRO, patient-reported outcome; TEAE, treatment-emergent adverse event (defined as adverse event occurring during time window from first study drug administration). 1. Cohn DM, et al. *Clin Transl Allergy*. 2023;e12288.



- 265 attacks from 17 participants included in the mITT efficacy analysis set (data cutoff: 01 March 2024).^b
- 337 attacks from 19 participants included in the safety analysis set (data cutoff: 10 June 2024).^c
 - 7 of 337 attacks were laryngeal.
- Baseline characteristics were similar to those of the RAPIDe-1 Phase 2 trial population.

	Deucricitabant IR capsule (combined dose group)
Number of attacks treated^d	337
Number of participants^d	19
Age in years, mean (SD)	42.7 (17.6)
Sex: Male/female, n (%)	7 (36.8) / 12 (63.2)
Race: White/other, n	18 / 1
BMI, mean (SD)	27.0 (3.8)
Years since HAE diagnosis, mean (SD)	21.7 (15.2)
HAE type, n (%)	
HAE-1	17 (89.5)
HAE-2	2 (10.5)

BMI, body mass index; HAE, hereditary angioedema; IR, immediate-release; mITT, modified intention-to-treat; PGI-C, Patient Global Impression of Change; SD, standard deviation. ^aThe baseline characteristics of RAPIDe-2 participants at RAPIDe-1 initiation are shown. ^bAll participants who had ≥1 attack treated with deucricitabant and non-missing PGI-C results from ≥1 post-treatment timepoint. ^cAll participants who received any dose of deucricitabant in the study. ^dNumber by the cutoff date of 10 June 2024.



TEAEs within 5 days after administration of study drug

- No treatment-related TEAEs.
- No treatment-related serious or severe TEAEs, no treatment-related TEAEs in laboratory parameters, vital signs, or ECG findings.
- No TEAEs leading to treatment discontinuation, study withdrawal, or death.

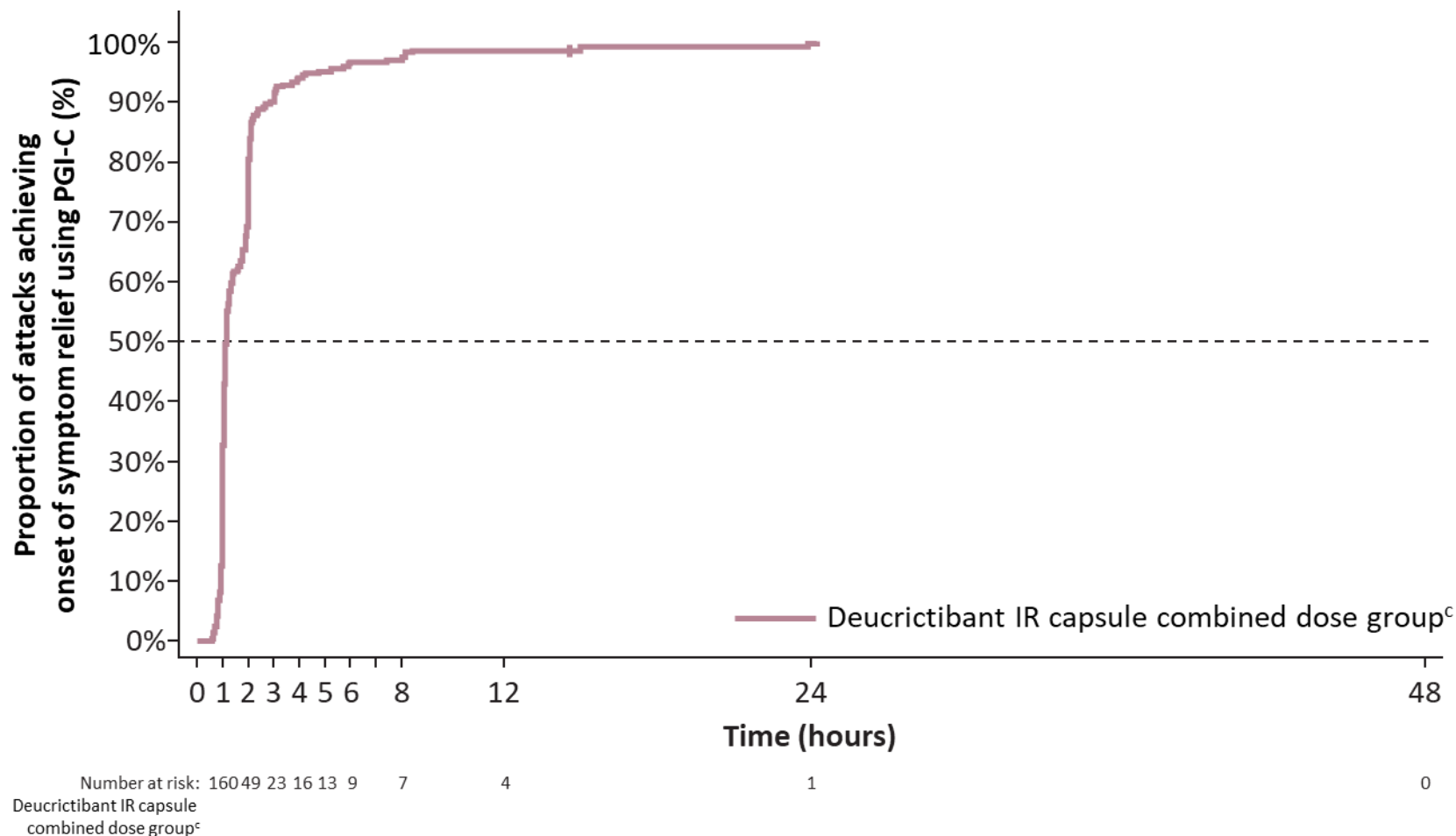
Adverse events	Deucricitibant IR capsule (combined dose group)
Number of attacks treated ^a	337
Number of participants ^a	19
Attacks with any TEAE, n (%)	13 (3.9)
Treatment-related TEAEs, n	0
Serious TEAEs, n	1 ^b
Treatment-related serious TEAEs, n	0
TEAEs leading to study drug discontinuation, study withdrawal, or death, n	0

ECG, electrocardiogram; IR, immediate-release; TEAE, treatment-emergent adverse event (defined as adverse event occurring during time window from first study drug administration).

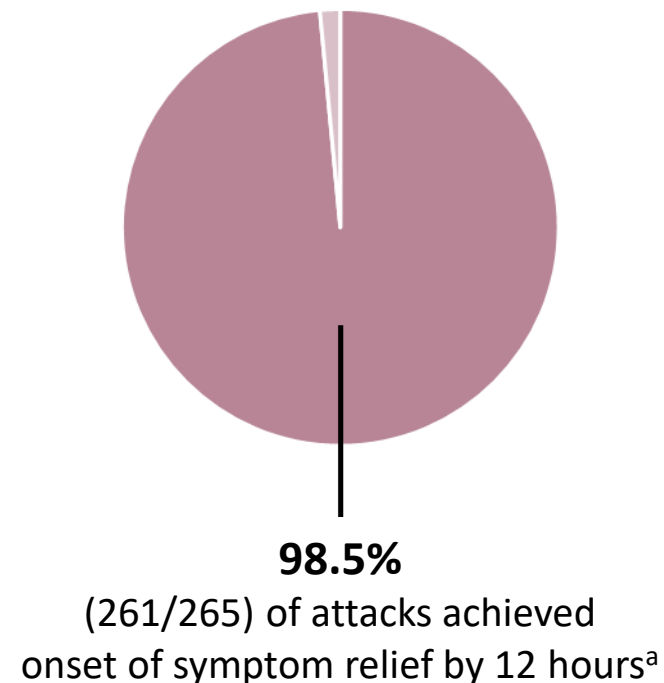
^aNumber in the safety analysis set (data cutoff: 10 June 2024). ^bTooth caries unrelated to treatment.



1.1 hours median time to onset of symptom relief^{a,b}



1.1 hours (95% CI, 1.0, 1.2)
median time to onset of symptom relief using PGI-C^{a,b}

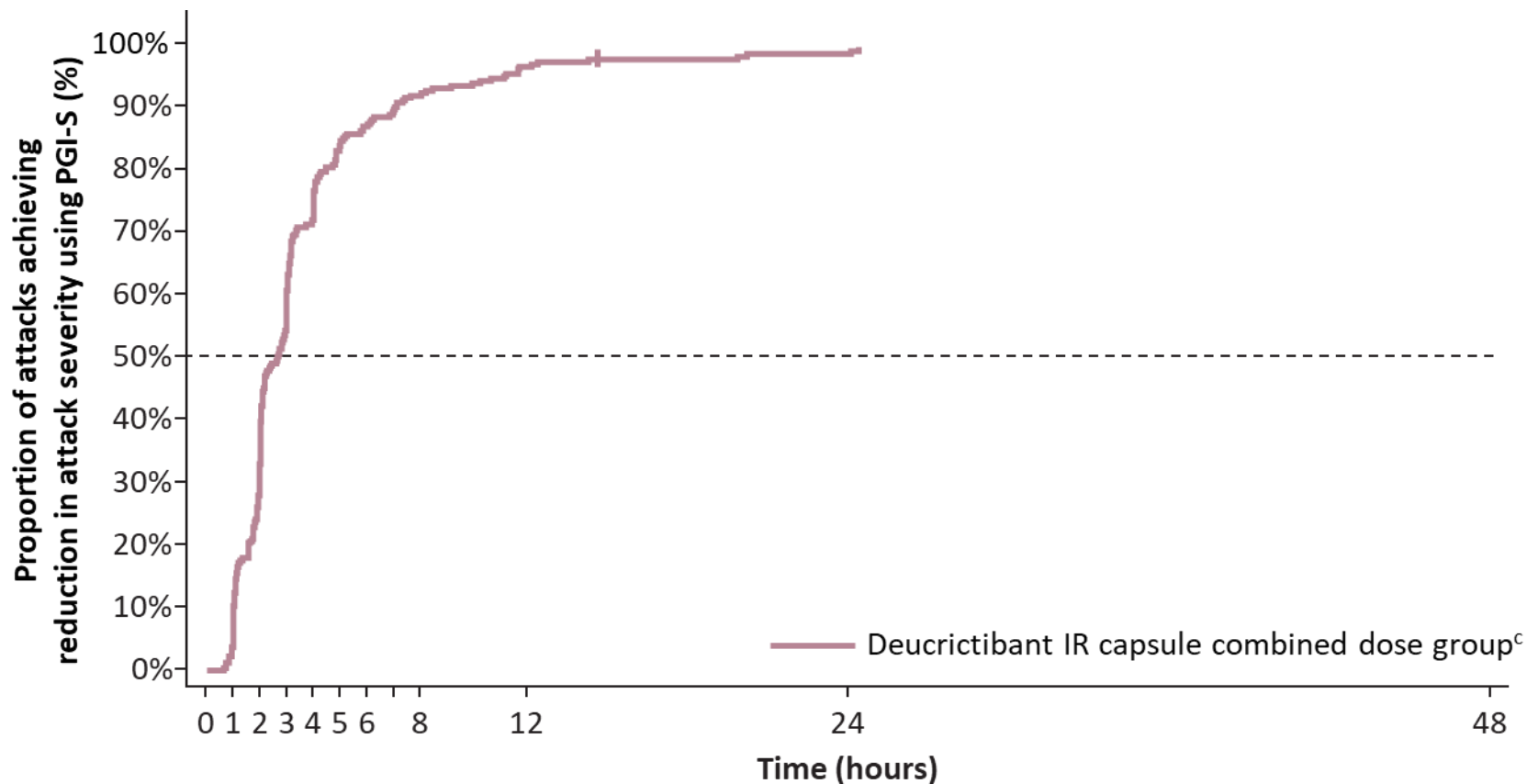


IR, immediate-release; PGI-C, Patient Global Impression of Change. ^aPGI-C rating of at least “a little better” for 2 consecutive timepoints by 12 hours post-treatment.

^bWithin-participant correlation was not accounted for in all Kaplan-Meier estimates. ^cIncludes 10 mg, 20 mg, and 30 mg dose groups.



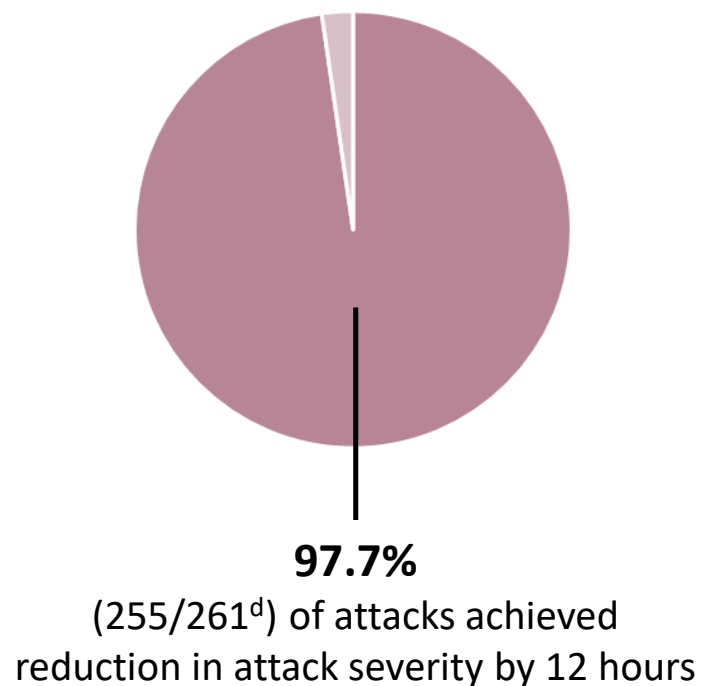
2.6 hours median time to reduction in attack severity^{a,b}



Number at risk: 228 151 95 59 40 33 20 9 2

Deucricitibant IR capsule combined dose group^c

2.6 hours (95% CI, 2.0, 2.9)
median time to reduction in attack severity using PGI-S^{a,b}

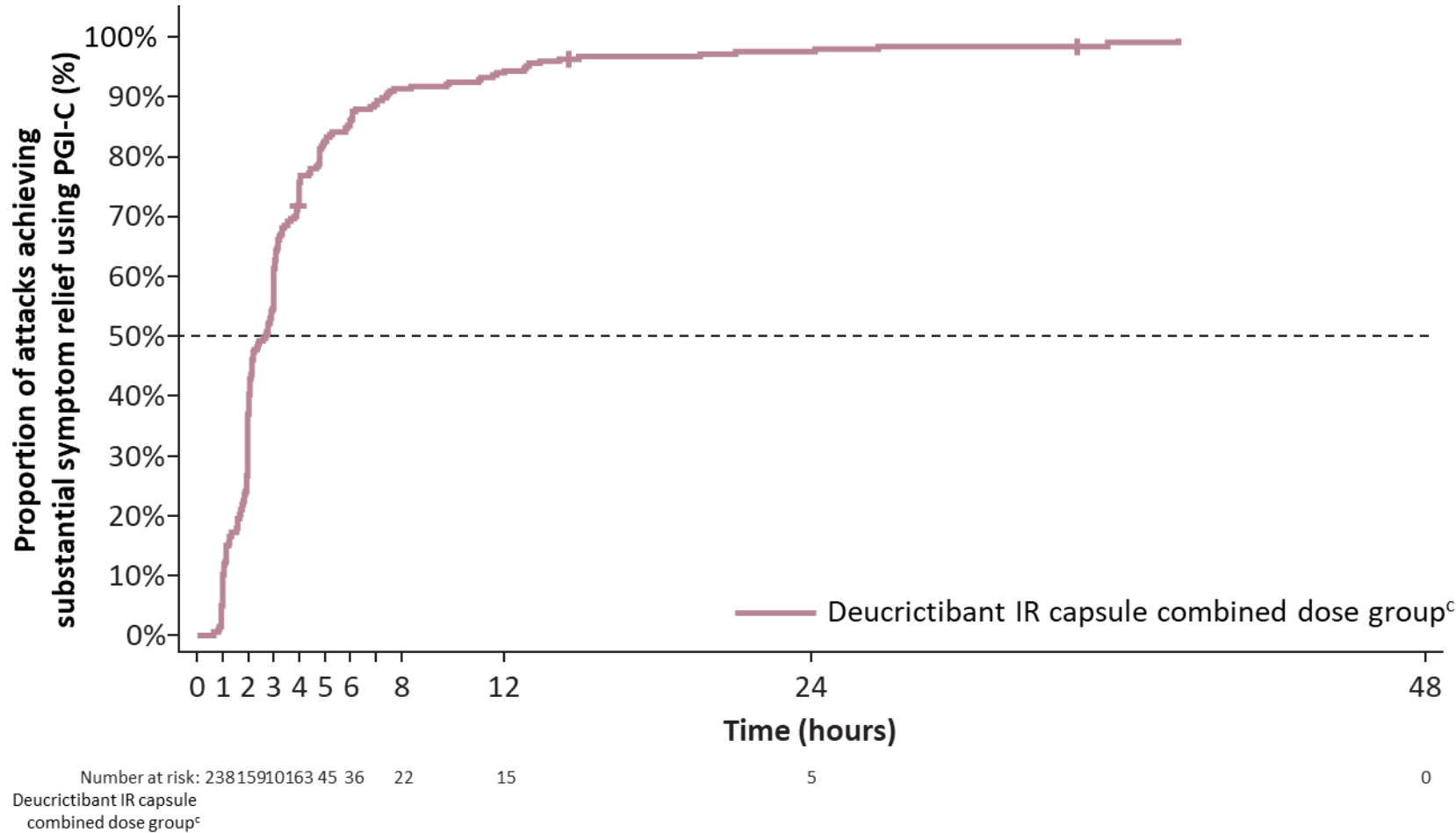


IR, immediate-release; PGI-S, Patient Global Impression of Severity. ^a≥1 point reduction in PGI-S from pre-treatment for 2 consecutive timepoints by 12 hours post-treatment.

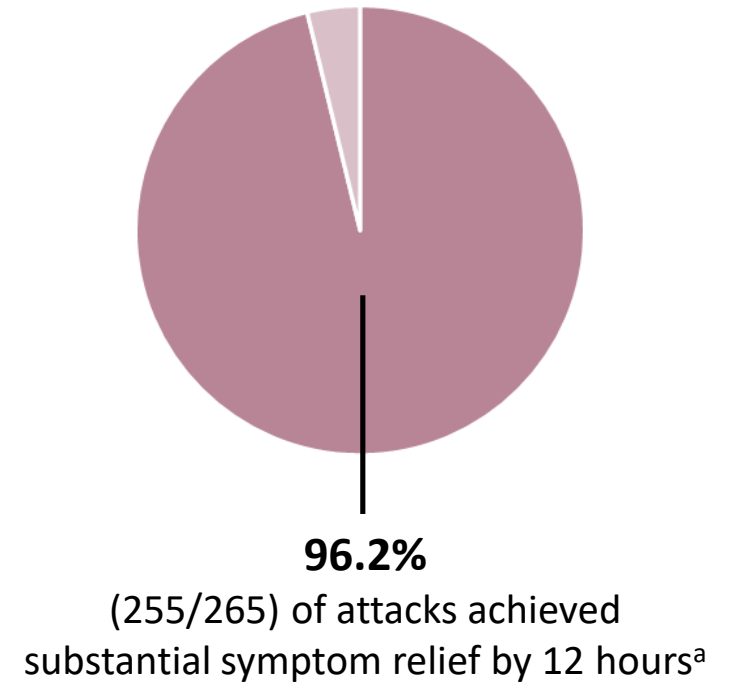
^bWithin-participant correlation was not accounted for in all Kaplan-Meier estimates. ^cIncludes 10 mg, 20 mg, and 30 mg dose groups. ^d261 attacks have non-missing pre-treatment PGI-S.



2.7 hours median time to substantial symptom relief^{a,b}



2.7 hours (95% CI, 2.1, 2.9)
median time to substantial symptom relief using PGI-C^{a,b}

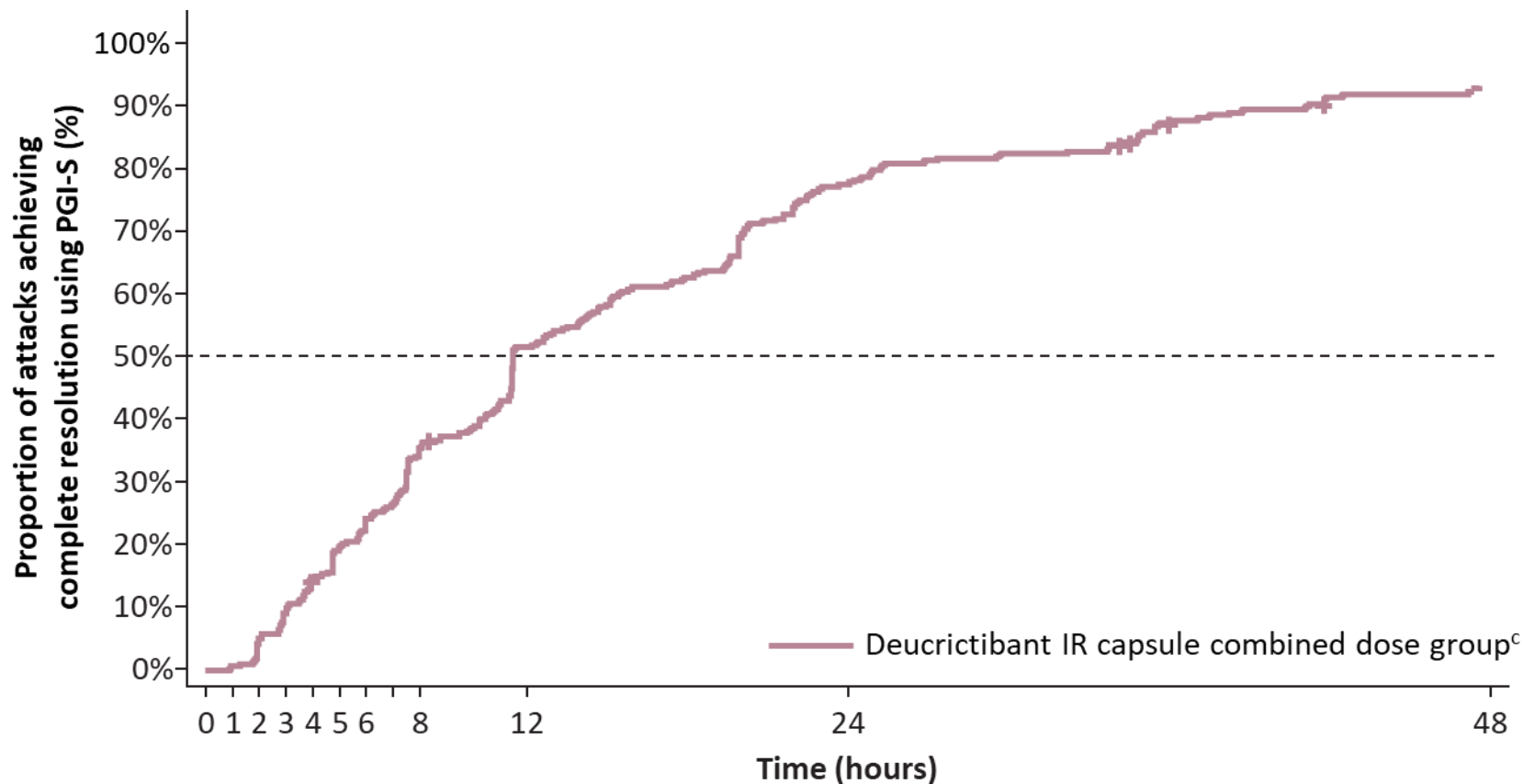


IR, immediate-release; PGI-C, Patient Global Impression of Change. ^aPGI-C rating of at least “better” for 2 consecutive timepoints by 12 hours post-treatment.

^bWithin-participant correlation was not accounted for in all Kaplan-Meier estimates. ^cIncludes 10 mg, 20 mg, and 30 mg dose groups.

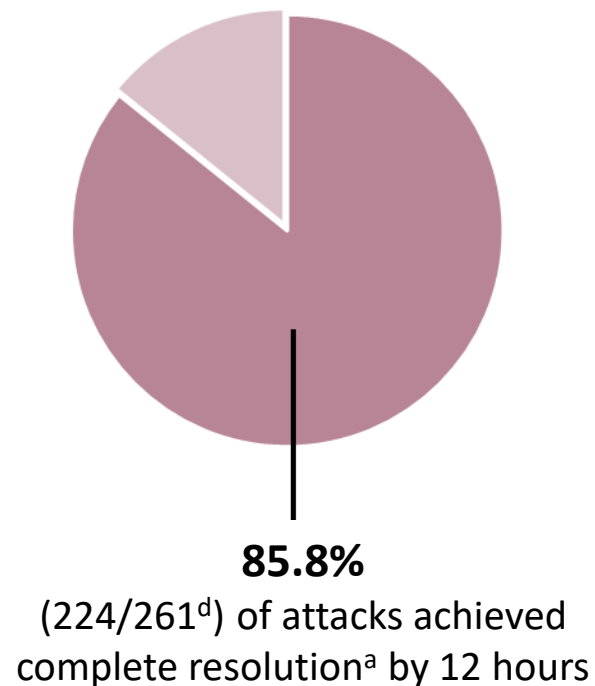


11.5 hours median time to complete attack resolution^{a,b}



Number at risk: 259 236 207 167 119
Deucricitabant IR capsule combined dose group^c 247 220 199 49 5

11.5 hours (95% CI, 11.0, 13.0)
median time to complete attack resolution using PGI-S^{a,b}



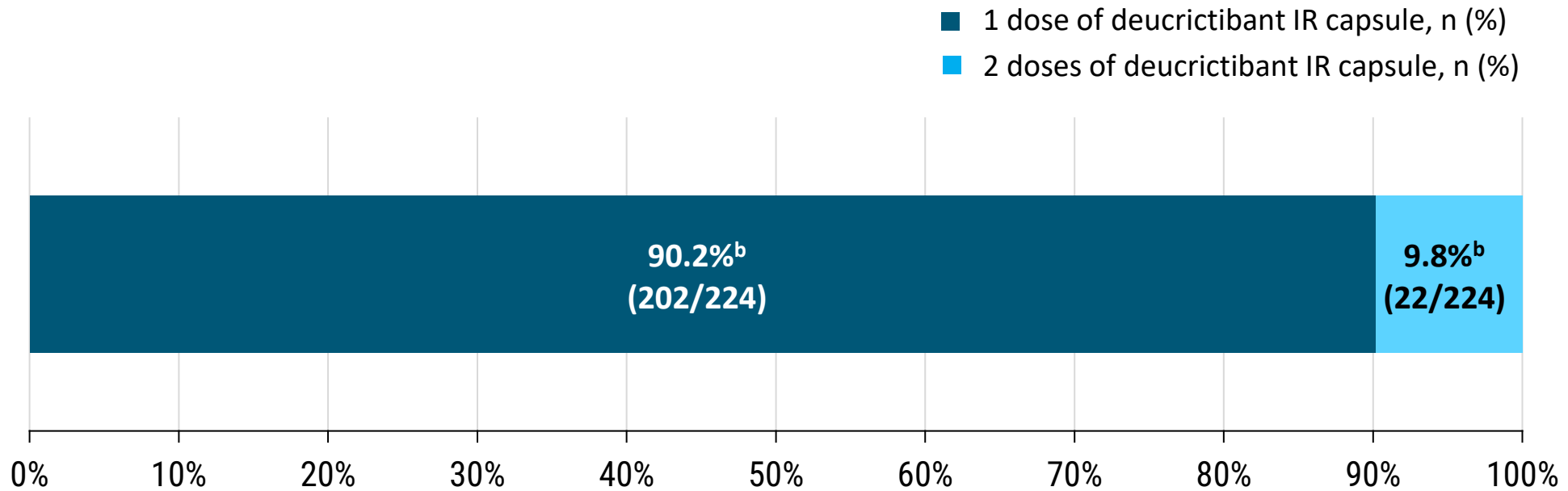
IR, immediate-release; PGI-S, Patient Global Impression of Severity. ^aPGI-S rating of “none” at 24 hours post-treatment. ^bWithin-participant correlation was not accounted for in all Kaplan-Meier estimates. ^cIncludes 10 mg, 20 mg, and 30 mg dose groups. ^d261 attacks have non-missing pre-treatment PGI-S.



90.2% of attacks achieved complete resolution^a by 24 hours with a single dose of deucricitbant

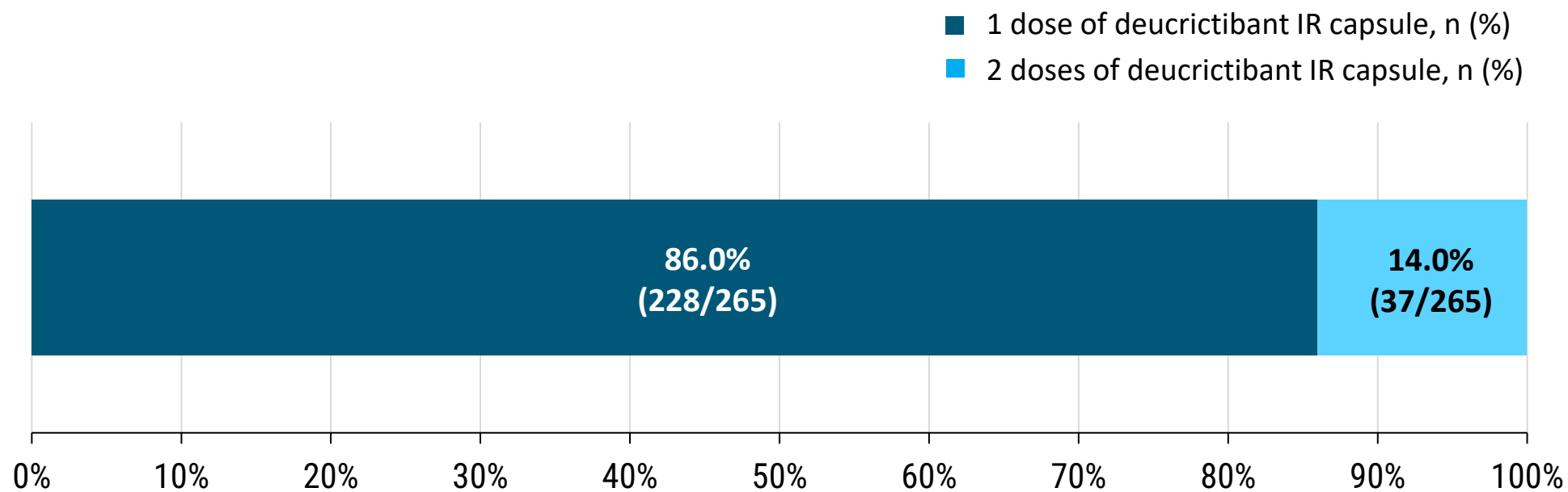


Attacks treated with 1 or 2 doses of deucricitbant IR capsule prior to achieving complete attack resolution^a



IR, immediate-release; PGI-S, Patient Global Impression of Severity. ^aPGI-S rating of “none” at 24 hours post-treatment. ^bProportion of 224 attacks achieving complete attack resolution using PGI-S by 24 hours.

Attacks treated with 1 or 2 doses of deucricitabant



- In the current analysis of the ongoing RAPIDe-2 Phase 2/3 extension study, deucricitbant IR capsule was well tolerated for all studied doses with no safety signals observed.
- Efficacy analysis showed:
 - 1.1 hours median time to onset of symptom relief using PGI-C – 98.5% of attacks by 12 hours.
 - 2.6 hours median time to reduction in attack severity using PGI-S – 97.7% of attacks by 12 hours.
 - 2.7 hours median time to substantial symptom relief using PGI-C – 96.2% of attacks by 12 hours.
 - 11.5 hours median time to complete attack resolution using PGI-S – 85.8% of attacks by 24 hours.
 - 86.0% of attacks were treated with a single dose of deucricitbant IR capsule.
- Results from the ongoing RAPIDe-2 extension are consistent with the Phase 2 RAPIDe-1 study and provide evidence on the long-term safety and efficacy of deucricitbant IR capsule for repeat treatment of HAE attacks.

The Authors and the Sponsor would like to thank all the people with HAE as well as all study site staff who participated in the RAPIDe-2 trial.

