

Prophylactic Treatment With Deucricitibant Improves HAE Disease Control and HRQoL

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Conflicts of interest disclosure

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CHAPTER-1 is a Pharvaris-sponsored clinical trial. ClinicalTrials.gov identifier: NCT05047185.

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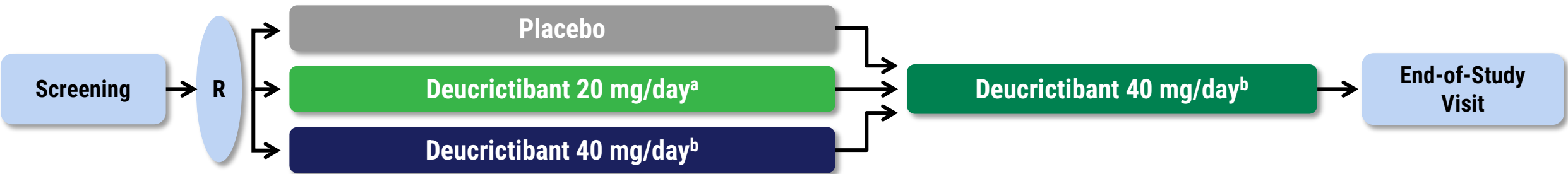
Unmet need for additional HAE therapies that improve disease control and HRQoL

- International hereditary angioedema (HAE) guidelines recommend that the goals of treatment are to achieve total disease control and normalize patients' lives¹
- HAE negatively impacts functional and psychological domains of health-related quality of life (HRQoL)²⁻⁶
- Patients with well-controlled disease report lower disease burden, lower burden on daily activities, and greater HRQoL than patients with poorly-controlled disease⁷
- Despite the availability of approved therapies for HAE, an unmet need remains for additional prophylactic treatments combining injectable-like efficacy, a well-tolerated profile, and ease of administration⁸⁻¹¹

1. Maurer M, et al. *Allergy*. 2022;77:1961–1990. 2. Bork K, et al. *Allergy Asthma Clin Immunol*. 2021;17:40. 3. Bygum A, et al. *Front Med*. 2017;4:212. 4. Mendivil J, et al. *Orphanet J Rare Dis*. 2021;16:94. 5. Chong-Neto HJ. *World Allergy Organ J*. 2023;16:100758. 6. Lumry WR, et al. *Allergy Asthma Proc*. 2010;31(5):407-14. 7. Grumach A, et al. *J Allergy Clin Immunol*. 2024;153: Suppl. AB92. 8. Bouillet L, et al. *Allergy Asthma Proc*. 2022;43:406-412. 9. Betschel SD, et al. *J Allergy Clin Immunol Pract*. 2023;11:2315-2325. 10. Center for Biologics Evaluation and Research. The voice of the patient – hereditary angioedema. US Food and Drug Administration; May 2018. Accessed August 16, 2024. <https://www.fda.gov/media/113509/download>. 11. Covella B, et al. *Future Pharmacol*. 2024;4:41-53.

CHAPTER-1: Two-part, Phase 2 study of deucricitibant for long-term prophylaxis of HAE attacks

Part 1 (RCT): Double-blind treatment period (12 weeks) Part 2 (OLE): Open-label treatment period



Disease control, HRQoL, and treatment satisfaction were assessed using pre-defined endpoints:

Disease Control	Angioedema Control Test (AECT): 4-week recall version^{1,2}
Health-related Quality of Life	- Angioedema QoL Questionnaire (AE-QoL)^{3,4} - Patient Global Assessment of Change (PGA-Change)
Treatment Satisfaction	Treatment Satisfaction Questionnaire for Medication (TSQM) Version II⁵

For further information see posters:

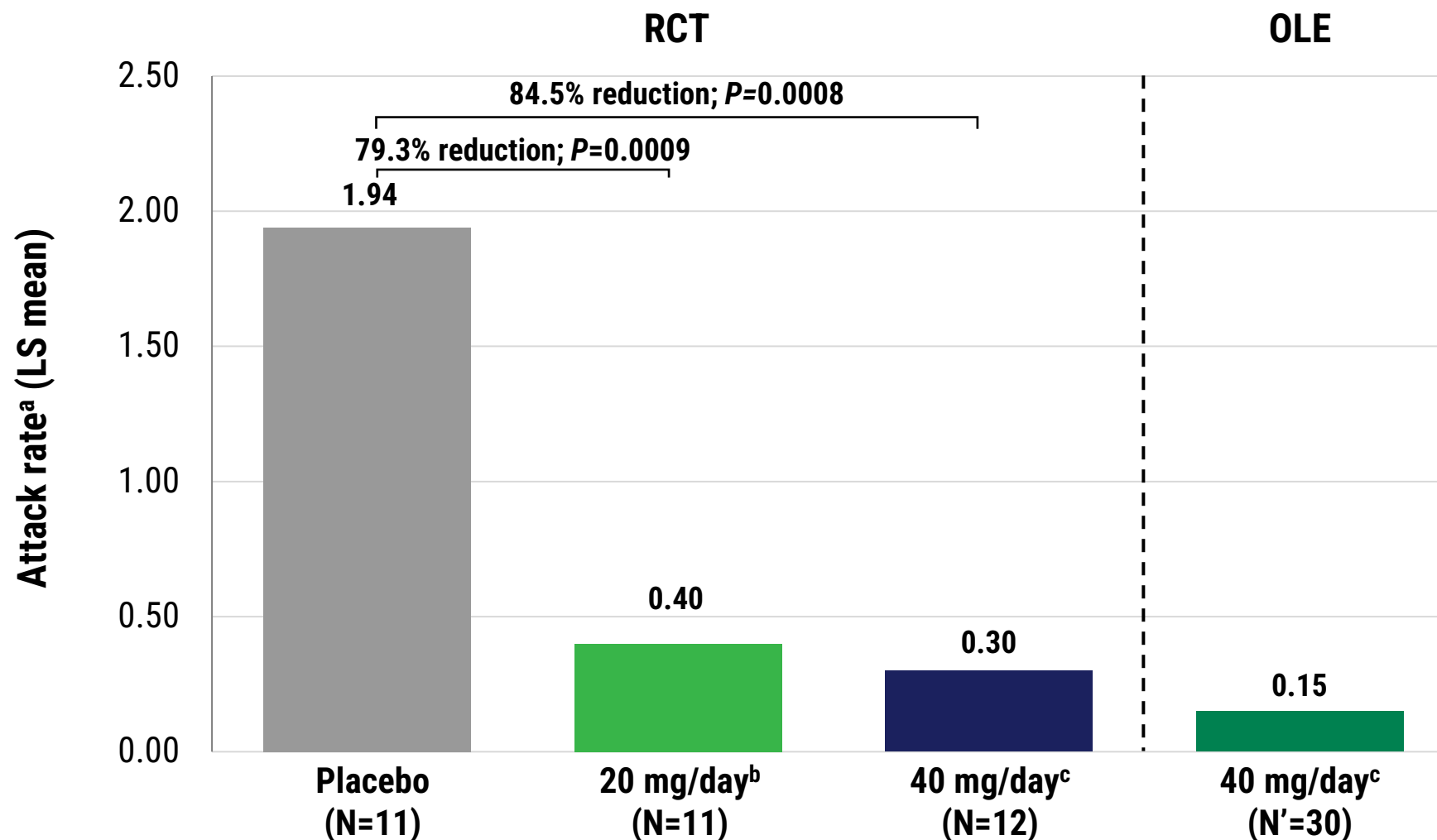
CHAPTER-1 Primary Results
Aygören-Pürsün E, et al.

CHAPTER-1 OLE Snapshot Results*
Riedl M, et al.
*Mean (SD) treatment duration 12.83 (5.03) months

Posters available: 5-6 September
Discussion: Friday 6 September, 15:35

HAE, hereditary angioedema; HRQoL, health-related quality of life; IR, immediate-release; OLE, open-label extension; R, randomization. RCT, randomized controlled trial; SD, standard deviation. CHAPTER-1 is a Pharvaris-sponsored clinical trial. ClinicalTrials.gov identifier: NCT05047185. <https://www.clinicaltrials.gov/study/NCT05047185>. Accessed August 19, 2024. ^aDeucricitibant IR capsule, 10 mg twice daily. ^bDeucricitibant IR capsule, 20 mg twice daily. 1. Weller K, et al. *Allergy*. 2020;75(5):1165-1177. 2. Weller K, et al. *J Allergy Clin Immunol Pract*. 2020b;8(6):2050-2057. 3. Weller K, et al. *Allergy*. 2012;67:1289-98. 4. Weller K, et al. *Allergy*. 2016;71:1203-9. 5. Atkinson MJ, et al. *Value Health*. 2005;8(s1):S9-24.

Significantly reduced attack rate during RCT remained low in OLE



IR, immediate-release; LS, least squares; OLE, open-label extension; RCT, randomized controlled trial. LS mean estimates of attack rate are based on Poisson regression models adjusted for baseline attack rate and time on treatment. No multiplicity adjustment was applied. N = number of randomized participants. N' = number of participants in the OLE. ^aBased on time normalized number of attacks per 4 weeks. ^bDeucricitabant IR capsule, 10 mg twice daily. ^cDeucricitabant IR capsule, 20 mg twice daily.

Measuring disease control, HRQoL, and treatment satisfaction

Angioedema Control Test (AECT): a four-item questionnaire with a five-point response scale developed and validated to retrospectively quantify disease control and to aid treatment decisions in patients with recurrent angioedema^{1,2} (AECT-4Wk – four-week recall used)



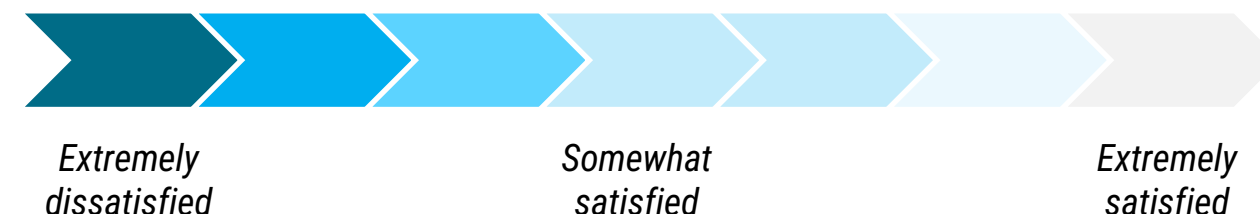
- *How often have you had angioedema in the last four weeks?*
- *How much has your quality of life been affected?*
- *How much has the unpredictability bothered you?*
- *How well has your angioedema been controlled by therapy?*

Angioedema Quality of Life Questionnaire (AE-QoL)³⁻⁵:

A tool validated for HAE and comprising a 17-item questionnaire across four domains, 'functioning', 'fatigue/mood', 'fear/shame', and 'nutrition,' on a five-point response scale

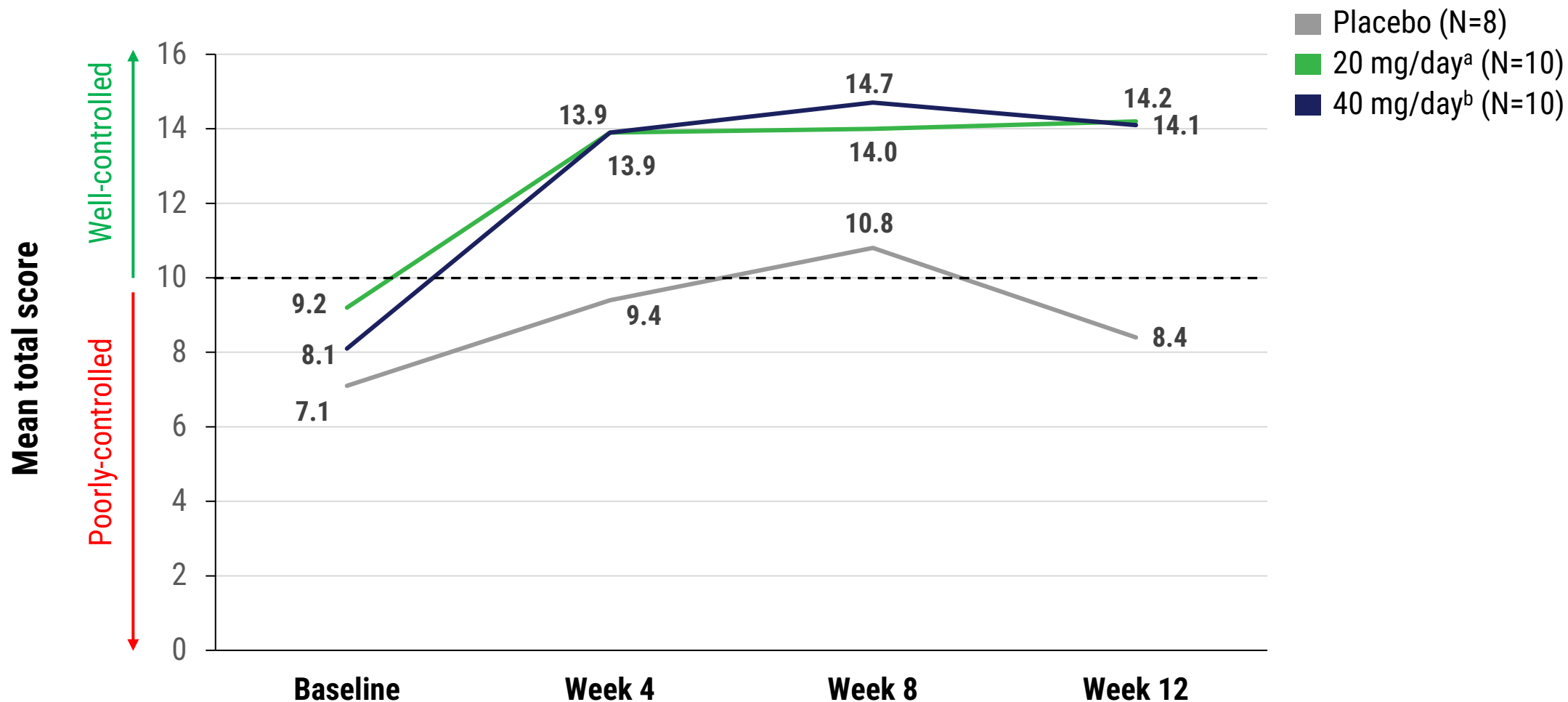


Treatment Satisfaction Questionnaire for Medication (TSQM) Version II⁶: An 11-item questionnaire to gauge patients' satisfaction with "effectiveness", "side effects", "convenience", and "global satisfaction" of a medication



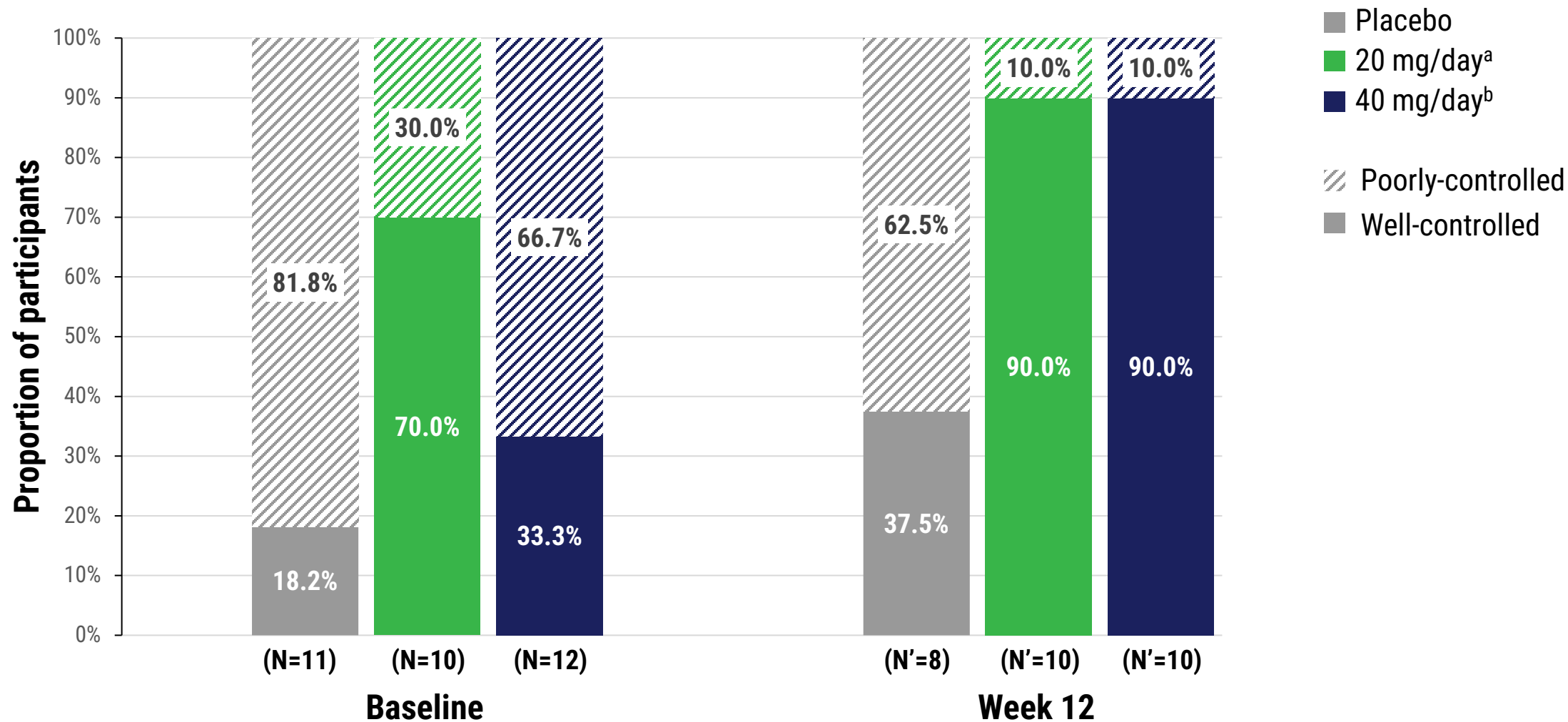
HAE, hereditary angioedema; HRQoL, health-related quality of life. 1. Weller K, et al. *Allergy*. 2020;75(5):1165-1177. 2. Weller K, et al. *J Allergy Clin Immunol Pract*. 2020;8(6):2050-2057. 3. Weller K, et al. *Allergy*. 2012;67:1289-98. 4. Weller K, et al. *Allergy*. 2016;71:1203-9. 5. Vanya M, et al. *J Patient Rep Outcomes*. 2023; 7:33. 6. Atkinson MJ, et al. *Value Health*. 2005;8(s1):S9-24.

AECT: Treatment with deucricitibant resulted in well-controlled HAE by week 4 and throughout treatment



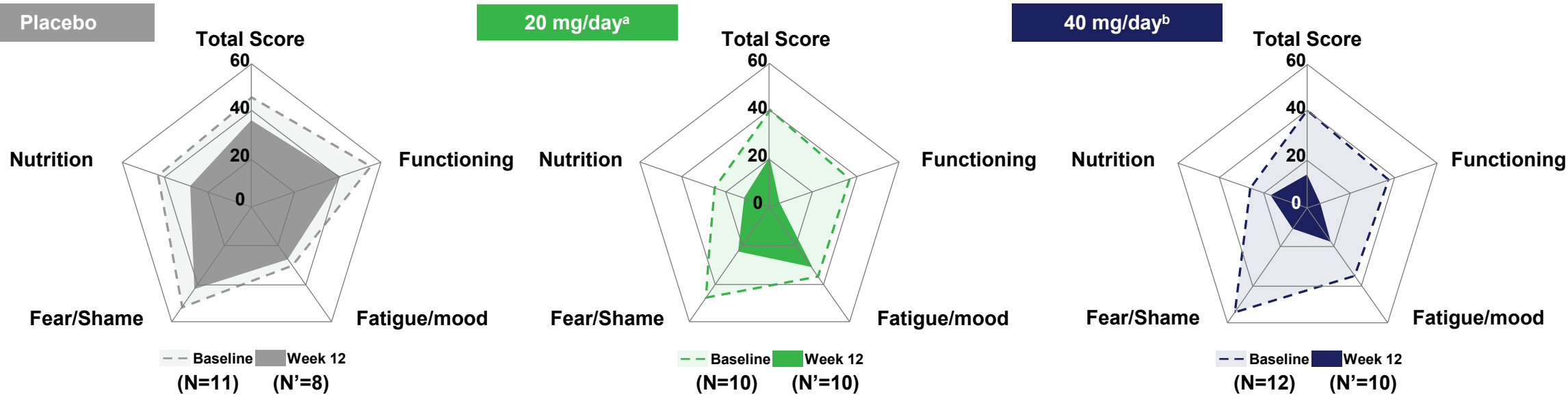
AECT, Angioedema Control Test; IR, immediate-release; RCT, randomized controlled trial. N = number of participants with AECT data at week 12. ^aDeucricitibant IR capsule, 10 mg twice daily. ^bDeucricitibant IR capsule, 20 mg twice daily.

AECT: 90% of participants on deucricitbant showed well-controlled HAE



AECT, Angioedema Control Test; IR, immediate-release; RCT, randomized controlled trial. N = number of participants randomized in each treatment group in the RCT. N' = number of participants with AECT data at week 12. ^aDeucricitbant IR capsule, 10 mg twice daily. ^bDeucricitbant IR capsule, 20 mg twice daily.

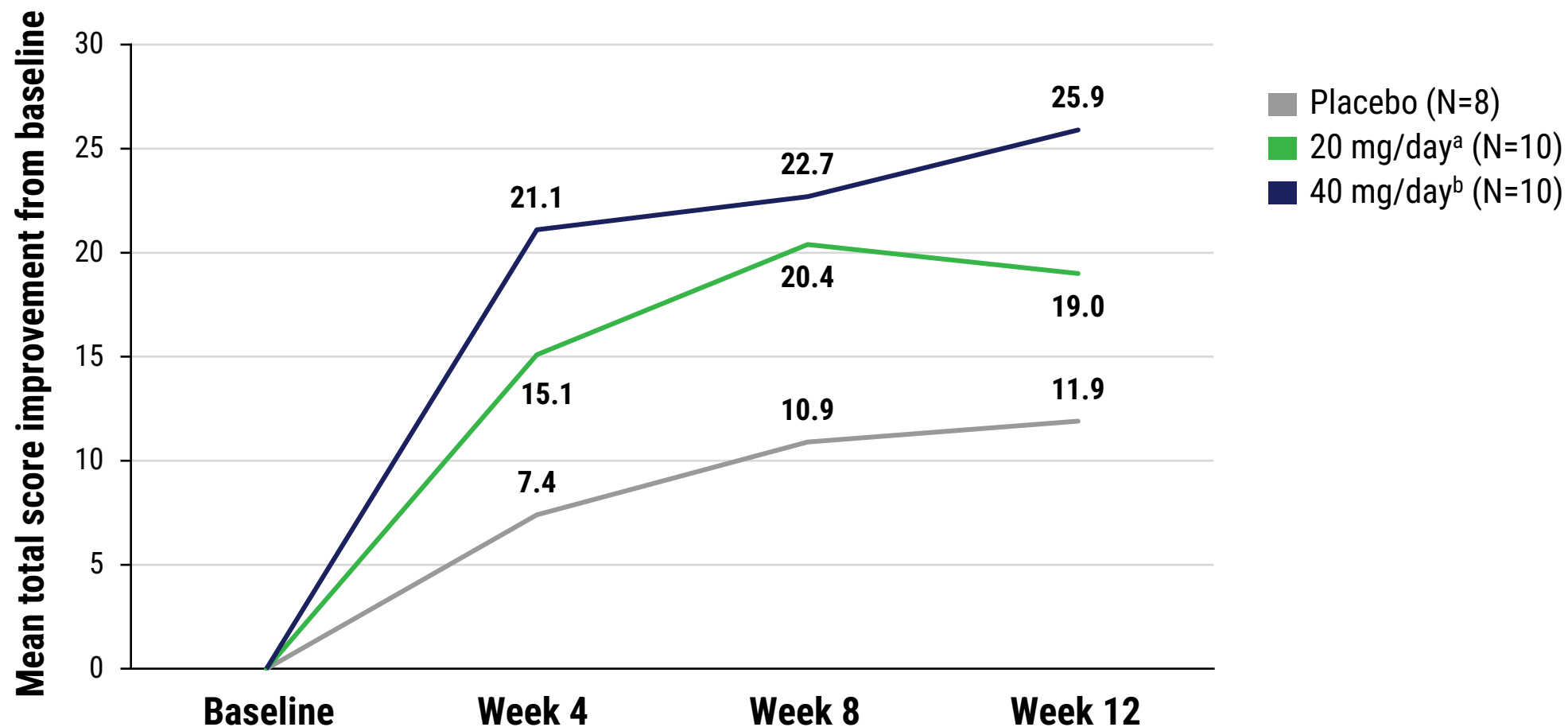
AE-QoL: HRQoL improved across all domains



AE-QoL Total Score	Deucricitibant		
	Placebo	20 mg/day ^a	40 mg/day ^b
Baseline	N=11	N=10	N=12
Mean (SD)	45.3 (18.5)	39.1 (22.0)	41.1 (15.5)
Median (Q1, Q3)	42.6 (29.4, 57.4)	37.5 (16.2, 55.9)	40.4 (31.6, 49.3)
Week 12	N'=8	N'=10	N'=10
Mean (SD)	35.7 (19.6)	20.2 (15.6)	13.2 (6.9)
Median (Q1, Q3)	37.5 (19.1, 49.3)	18.4 (7.4, 33.8)	12.5 (10.3, 17.7)

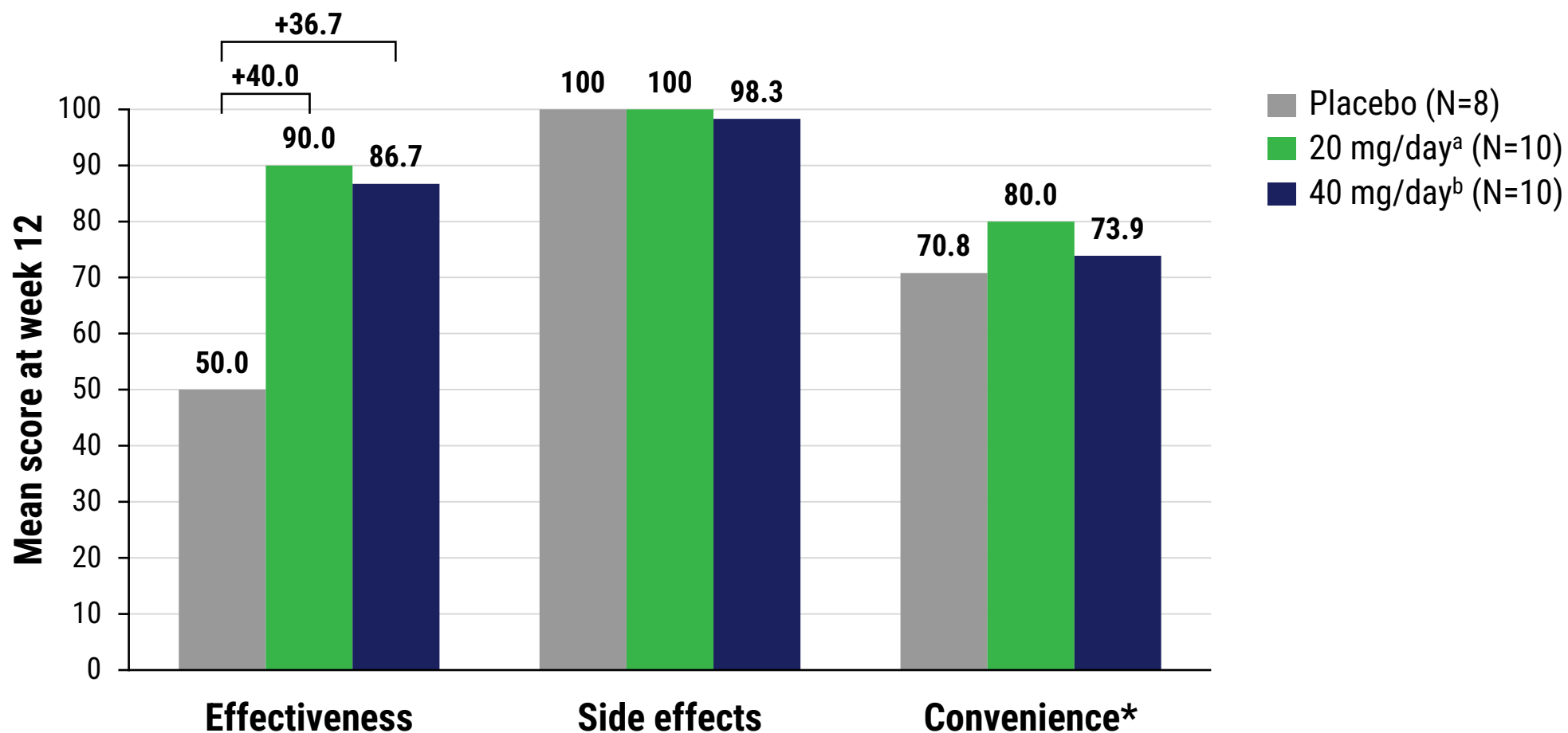
AE-QoL, Angioedema Quality of Life Questionnaire; IR, immediate-release. N = number of randomized participants with AE-QoL data at baseline. N' = number of participants with AE-QoL data at week 12. ^aDeucricitibant IR capsule, 10 mg twice daily. ^bDeucricitibant IR capsule, 20 mg twice daily.

AE-QoL: Total score improved from baseline by week 4 and throughout treatment



AE-QoL, Angioedema Quality of Life Questionnaire; IR, immediate-release. N = number of participants with AE-QoL data at week 12. ^aDeucricitabant IR capsule, 10 mg twice daily. ^bDeucricitabant IR capsule, 20 mg twice daily.

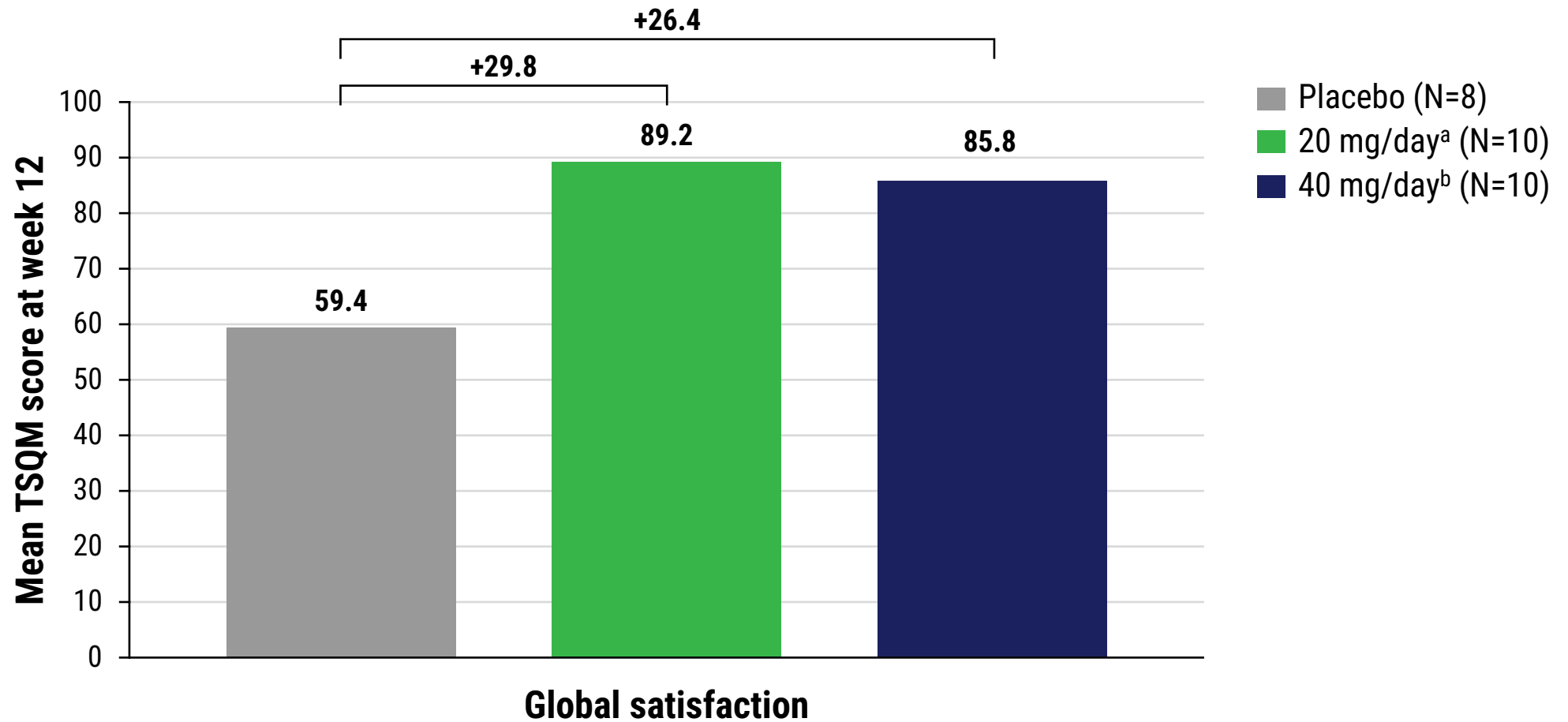
TSQM: Greater patient satisfaction with effectiveness vs placebo



IR, immediate-release; TSQM, Treatment Satisfaction Questionnaire for Medication. N = number of participants with TSQM results at week 12. ^aDeucricitabant IR capsule, 10 mg twice daily. ^bDeucricitabant IR capsule, 20 mg twice daily.

*Dose frequency was twice daily using IR capsule; once daily tablet is the intended formulation for the Phase 3 trial.

TSQM: Greater overall patient satisfaction vs placebo



IR, immediate-release; TSQM, Treatment Satisfaction Questionnaire for Medication. N = number of participants with TSQM results at week 12. ^aDeucricitabant IR capsule, 10 mg twice daily. ^bDeucricitabant IR capsule, 20 mg twice daily.

Conclusions

- The CHAPTER-1 Phase 2 trial provides encouraging results on the effects of prophylactic treatment with oral deucricribant for 12 weeks on HAE control, HRQoL and treatment satisfaction in people living with HAE
 - Deucricribant improved disease control from as early as week 4 versus placebo, with 90% of participants in the deucricribant groups demonstrating well-controlled HAE at week 12
 - Deucricribant improved AE-QoL scores, particularly in “functioning” and “fear/shame” domains
 - Participants reported high levels of satisfaction with deucricribant
- Confirmation of these data in the planned Phase 3 study may provide further evidence on deucricribant as a potential treatment to address existing unmet needs in HAE disease control and HRQoL
- CHAPTER-1 OLE data showing maintained improvement in disease control and HRQoL through one year of deucricribant treatment to be presented at upcoming scientific conferences

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 CHAPTER-1 trial.