Long-Term Prophylactic Treatment with Oral Deucrictibant Improves Disease Control and Health-Related Quality of Life in Participants with Hereditary Angioedema: CHAPTER-1 Open-Label Extension Study

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Key takeaways

The ongoing Phase 2 CHAPTER-1 open-label extension (OLE) provides additional evidence on the sustained effects of long-term prophylactic treatment with oral deucrictibant on disease control, health-related quality of life (HRQoL), and treatment satisfaction for participants with hereditary angioedema (HAE).

PGA-Change

100%

of participants who received deucrictibant 40 mg/day reported improved HRQoL at weeks 12 and 62

AE-QoL

Week 4 → Week 62

Clinically meaningful improvement in HRQoL at week 4 and effects sustained through week 62

AECT

100%

of participants with a week 62 assessment reported well-controlled HAE

TSQM

Treatment satisfaction

High in participants receiving deucrictibant up to week 12 and sustained in the OLE

AECT, Angioedema Control Test; AE-QoL, Angioedema Quality of Life Questionnaire; HRQoL, health-related quality of life; PGA-Change, Patient Global Assessment of Change; TSQM, Treatment Satisfaction Questionnaire for Medication.

Background

- **Hereditary angioedema (HAE):** a bradykinin-mediated condition with painful swelling attacks affecting multiple locations in the body and negatively impacting HRQoL.[1-7]
- **Unmet need:** additional prophylactic treatments offering injectable-like efficacy, a well-tolerated profile, and ease of administration.[8-11]
- **Oral deucrictibant:** a selective, bradykinin B2 receptor antagonist under development for both prophylactic and on-demand treatment of HAE attacks.[11-22]

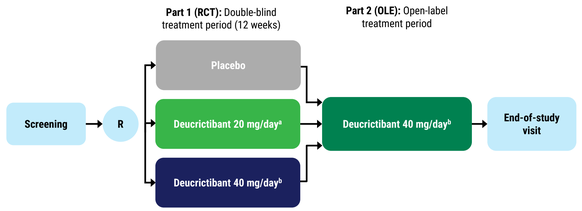
Objective

Evaluate the impact of deucrictibant treatment on disease control, HRQoL, and treatment satisfaction through 62 weeks in adult participants with HAE in the CHAPTER-1 OLE study (data snapshot 10 June 2024).[18]

Methods

- **CHAPTER-1 (NCT05047185)*:** a two-part, Phase 2 study.[18]
  - Part 1 randomized controlled trial (RCT) is complete. Part 2 OLE is ongoing.
- **Eligible participants:** adults diagnosed with HAE-1/2, not receiving other prophylactic treatments at screening, and with a pre-specified minimum number of attacks.

Figure 1. CHAPTER-1 study design



IR, immediate release; OLE, open-label extension; R, randomization; RCT, randomized controlled trial. [a]Deucrictibant IR capsule, 10 mg twice daily. [b]Deucrictibant IR capsule, 20 mg twice daily.

Methods

- **Patient Global Assessment of Change (PGA-Change)[23]:** a tool to measure the change in the impact of HAE on patient's HRQoL since starting study treatment compared with pre-treatment:

Much worse | A little worse | No change | A little better | Much better

- **Angioedema Quality of Life Questionnaire (AE-QoL)[24-26]:** 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:

Very often | Often | Sometimes | Rarely | Never

- **Angioedema Control Test (AECT)[27,28]:** a four-item questionnaire with a five-point response scale developed and validated to retrospectively quantify disease control and aid management decisions in patients with recurrent angioedema (AECT-4Wk — four-week recall used):

0 | 1 | 2 | 3 | 4

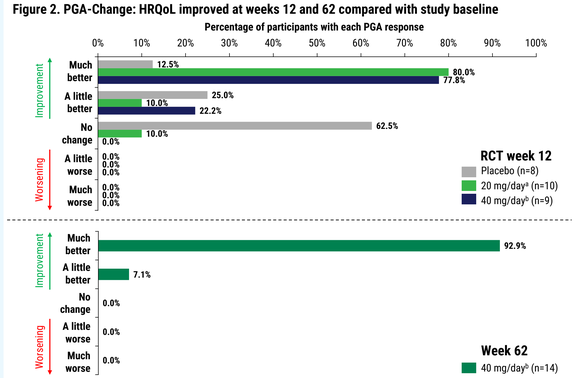
- **Treatment Satisfaction Questionnaire for Medication (TSQM) Version II[29]:** an 11-item questionnaire to gauge patients' satisfaction with "effectiveness", "side effects", "convenience", and "global satisfaction" of a medication:

Extremely dissatisfied | *Somewhat satisfied* | *Extremely satisfied*

Results

- All 30 participants who completed the Part 1 RCT enrolled in the Part 2 OLE.
  - At data cutoff: five participants had discontinued. 25 were ongoing, of whom 14 had reached at least the week 62 visit.
- This analysis included the 14 participants who had reached at least the week 62 visit.
  - Mean (SD) exposure to deucrictibant 40 mg/day for these 14 participants in the OLE: 16.9 (3.0) months.
  - Min-max exposure in the OLE: 12.4–20.8 months.
  - Maximum exposure to deucrictibant in the entire study: 23.7 months.

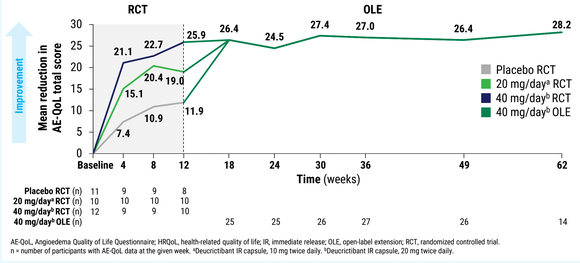
Figure 2. PGA-Change: HRQoL improved at weeks 12 and 62 compared with study baseline



HRQoL, health-related quality of life; IR, immediate release; OLE, open-label extension; PGA-Change, Patient Global Assessment of Change; RCT, randomized controlled trial. n = number of participants with PGA-Change results at the given week. [a]Deucrictibant IR capsule, 10 mg twice daily. [b]Deucrictibant IR capsule, 20 mg twice daily.

Results

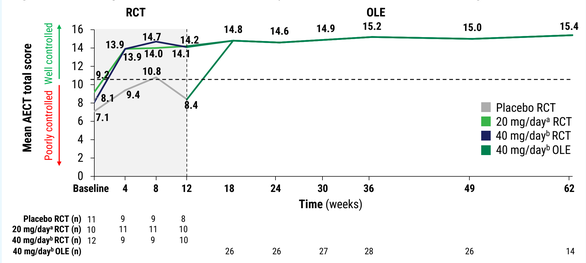
Figure 3. AE-QoL: Improvement in HRQoL by week 4 and effects sustained through week 62



Placebo RCT (n)	11	9	9	8					
20 mg/day[a] RCT (n)	10	10	10	10					
40 mg/day[b] RCT (n)	12	9	9	10					
40 mg/day[b] OLE (n)					25	25	26	27	26	14

AE-QoL, Angioedema Quality of Life Questionnaire; HRQoL, health-related quality of life; IR, immediate release; OLE, open-label extension; RCT, randomized controlled trial. n = number of participants with AE-QoL data at the given week. [a]Deucrictibant IR capsule, 10 mg twice daily. [b]Deucrictibant IR capsule, 20 mg twice daily.

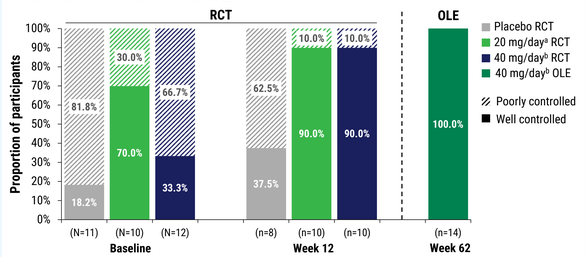
Figure 4. AECT: Improvement in disease control by week 4 and effects sustained through week 62



Placebo RCT (n)	11	9	9	8					
20 mg/day[a] RCT (n)	10	11	11	10					
40 mg/day[b] RCT (n)	12	9	9	10					
40 mg/day[b] OLE (n)					26	26	27	28	26	14

AECT, Angioedema Control Test; HAE, hereditary angioedema; IR, immediate release; OLE, open-label extension; RCT, randomized controlled trial. n = number of participants with AECT results at the given week. [a]Deucrictibant IR capsule, 10 mg twice daily. [b]Deucrictibant IR capsule, 20 mg twice daily.

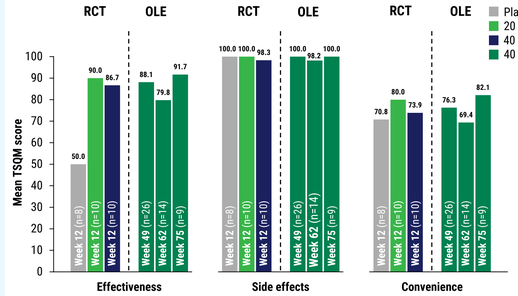
Figure 5. AECT: 90% of participants at 12 weeks and 100% of participants at 62 weeks receiving deucrictibant showed well-controlled HAE



AECT, Angioedema Control Test; HAE, hereditary angioedema; IR, immediate release; OLE, open-label extension; RCT, randomized controlled trial. N = number of participants randomized to each treatment group in the RCT. n = number of participants with AECT results at the given week. [a]Deucrictibant IR capsule,10 mg twice daily. [b]Deucrictibant IR capsule, 20 mg twice daily.

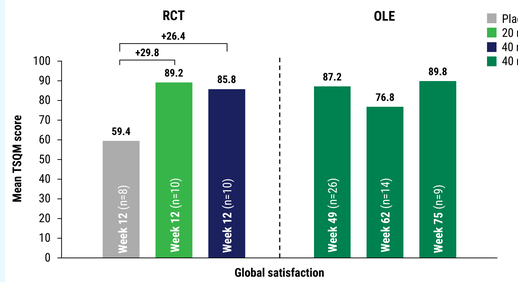
Results

Figure 6. TSQM: Greater patient satisfaction with effectiveness vs placebo at week 12 was sustained in the OLE



IR, immediate release; OLE, open-label extension; RCT, randomized controlled trial; TSQM, Treatment Satisfaction Questionnaire for Medication. n = number of participants with TSQM results at the given week. [a]Deucrictibant IR capsule, 10 mg twice daily. [b]Deucrictibant IR capsule, 20 mg twice daily.

Figure 7. TSQM: Greater overall patient satisfaction vs placebo at week 12 was sustained in the OLE



IR, immediate release; OLE, open-label extension; RCT, randomized controlled trial; TSQM, Treatment Satisfaction Questionnaire for Medication. n = number of participants with TSQM results at the given week. [a]Deucrictibant IR capsule, 10 mg twice daily. [b]Deucrictibant IR capsule, 20 mg twice daily.

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

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