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CSU disease activity band shift after long-term treatment with remibrutinib in the Phase 3 REMIX-1 and REMIX-2 studies

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KEY FINDINGS AND CONCLUSIONS

- Remibrutinib **reduced CSU disease activity** as early as **week 1** in patients with CSU, and the **fast response** was **sustained** over **long-term** treatment for **52 weeks**
- Of note, treatment transition from placebo to remibrutinib resulted in **similar fast improvements, with well-controlled and complete response levels being comparable to remibrutinib patients** at **week 52**
- **Remibrutinib** has the potential to become a novel oral treatment option that provides **fast (as early as week 1)** and **sustained improvements** in disease activity in patients with **CSU**

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INTRODUCTION

- Remibrutinib, a novel, highly selective, oral, Bruton's tyrosine kinase inhibitor, has previously shown superior efficacy versus placebo at week 12 and a favourable safety profile in the 24-week double-blind period of the pivotal Phase 3 REMIX-1 and REMIX-2 studies in patients with chronic spontaneous urticaria (CSU) who remained symptomatic despite treatment with second-generation H1-antihistamines[1]
- In a previously presented REMIX analysis up to week 24, a reduction in CSU disease activity was observed as early as week 1 with remibrutinib, sustained up to 24 weeks of treatment in the target population of patients with moderate to severe CSU disease activity at baseline[2]

OBJECTIVE

- The objective of this analysis was to explore the shift in weekly Urticaria Activity Score (UAS7) bands after treatment with remibrutinib versus placebo up to **week 52 on a patient level** in the REMIX studies

METHODS

Study Design

- REMIX-1 and REMIX-2 are two identical, global, double-blind, placebo-controlled Phase 3 studies of remibrutinib 25 mg bid administered orally. Adult patients with CSU who remained symptomatic despite treatment with second-generation antihistamines were randomised 2:1 to oral remibrutinib 25 mg bid or placebo for 24 weeks, followed by an open-label treatment with remibrutinib 25 mg bid for 28 weeks (patients on placebo transitioned to remibrutinib at week 24)[1]

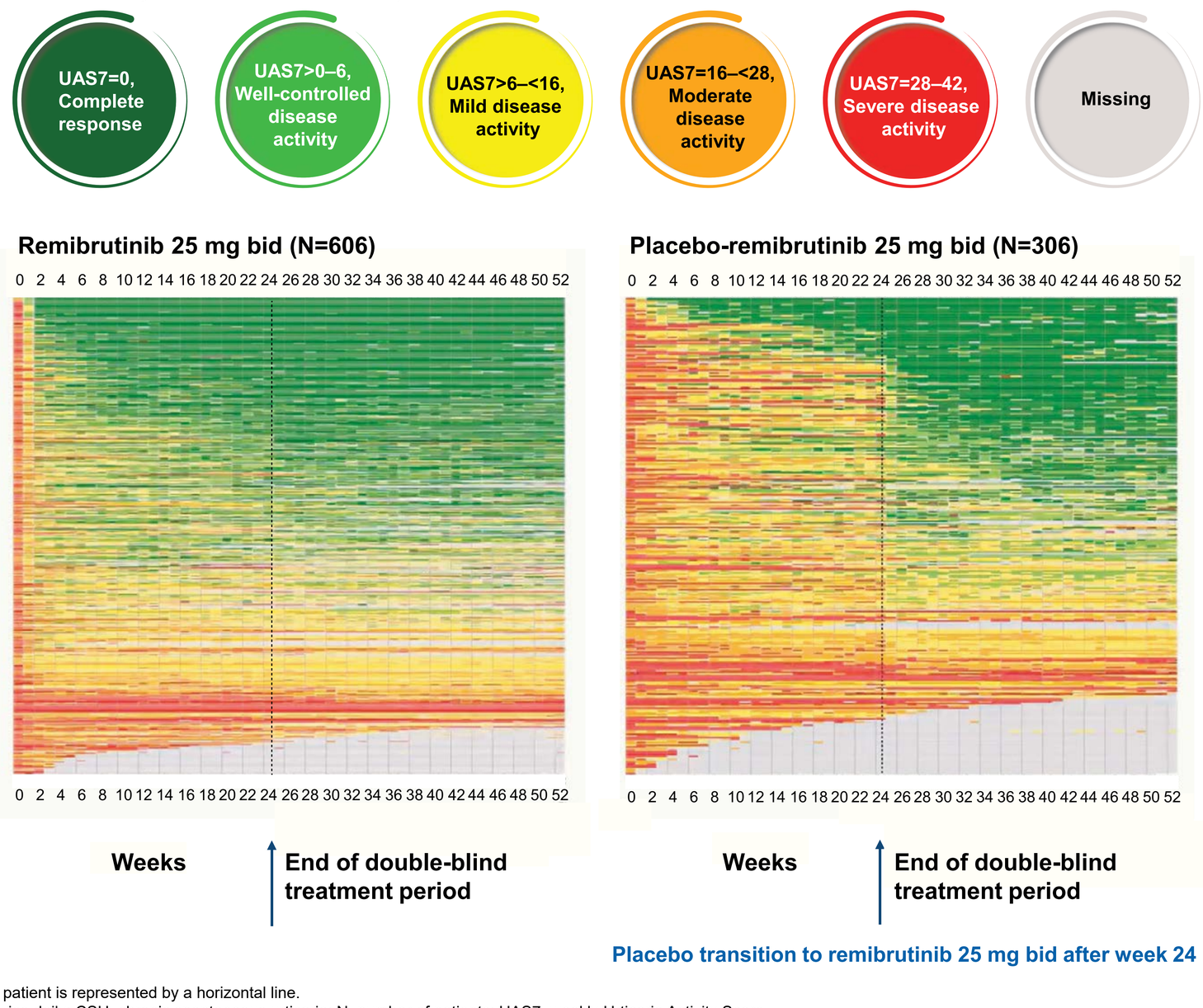
Study Assessments and Data Analysis

- CSU disease activity was categorised into five bands, based on the UAS7 (**Figure**)
- This post hoc analysis assessed the proportion of patients who experienced a shift in CSU disease activity from baseline to week 52 after treatment
- In addition, patients' individual UAS7 band shifts per week, up to week 52, were visualised in swimmer plots. Each patient is represented by a horizontal line, with each UAS7 band achievement represented by a colour as indicated in the **Figure**

RESULTS

- This pooled analysis included randomised patients who received at least one dose of **remibrutinib 25 mg bid** (**N=606**) or **placebo** for 24 weeks (**N=306**) in the **REMIX-1 and 2 studies**
- Disease severity at baseline was similar among patients on the remibrutinib and placebo treatment arms**; 215** (**35.5%**) and **386** (**63.7%**) patients from the **remibrutinib** arm and **122** (**39.9%**) and **181** (**59.2%**) from the **placebo** arm had **moderate** and **severe** CSU disease activity, respectively
- Overall, patients treated with **remibrutinib** vs **placebo** experienced substantial improvements in CSU disease activity and moved to a **lower disease activity band** as early as **week 1,** with more patients remaining in lower disease activity bands up to **week 24** (**Figure**)
  - Patients on placebo **transitioned** to **remibrutinib 25 mg bid** after **week 24** and moved to a **lower disease activity band** as early as **week 1** after the transition and remained in the lower disease activity bands up to week 52, in line with patients who were on remibrutinib throughout (**Figure**)
- In the remibrutinib treatment arm, while **63.7% of patients** were in the **severe band** at baseline, the number dropped to **24.9%, 17.2%, 9.1%, 7.8%** and **8.1% at weeks 1, 2, 12, 24** and **52,** respectively
- Similarly, of the **35.5%** of patients in the **moderate** band at baseline, the number dropped to **30.7%, 24.1%, 10.6%, 7.9%** and **7.3%** at **weeks 1, 2, 12, 24** and **52**, respectively
- There were no patients in the **well-controlled** and **complete response** disease bands at baseline; however, the numbers for the **well-controlled** (UAS7≤6) and **complete response** (UAS7=0) groups combined increased with remibrutinib vs placebo to **11.7%** (71/606) **vs 0.7%** (2/306) and **31.5%** (191/606) vs **4.2%** (13/606) at **weeks 1** and **2**, consistently improving up to **week 24** (**48.5%** [294/606] vs **28.4%** [87/306])
  - Notably, the proportion of patients receiving remibrutinib who **showed complete response increased** from **0.3%** at **week 1** to **16.2%** at **week 2**, with continued improvements up to **week 52** (**35.1%**)
  - By the **end of week 52**, patients who had **transitioned to remibrutinib** from placebo, after **week 24**, had achieved similar band shifts as those for patients who had been on remibrutinib for 52 weeks

Figure. Swimmer plot of the disease activity band shift based on UAS7 scores from baseline to week 52 (pooled full analysis set; observed data)



Each patient is represented by a horizontal line.
bid, twice daily; CSU, chronic spontaneous urticaria; N, number of patients; UAS7, weekly Urticaria Activity Score.

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1. Metz M, et al. Oral presentation at: EACCI 2024; 31 May–03 June 2024; Valencia, Spain. Abstract 100107.
2. Maurer M, et al. Oral presentation at: EACCI 2024; 31 May–03 June 2024; Valencia, Spain. Abstract 000439.

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Disclosures

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