

# Treatment Preferences in Adults with Chronic Spontaneous Urticaria Symptomatic on H1-Antihistamines in China: Insights from CHOICE-CSU 2 Study

Qiquan Chen<sup>1</sup>, Cristina Constantinescu<sup>2</sup>, Xiaoxiao Ren<sup>3</sup>,Wanjie Guo<sup>3</sup>, Panagiotis Orfanos<sup>4</sup>, Ravneet Kaur Kohli<sup>5</sup>, Zhiqiang Song<sup>1</sup>

- 1.The Southwest hospital of AMU, Chongqing, China
- 2.IPSOS, Basel, Switzerland
- 3.Novartis Pharma Co., Ltd., Beijing, China
- 4.Novartis Pharma AG, Basel, Switzerland
- 5.Novartis Healthcare Private Limited, Hyderabad, India

## KEY FINDINGS & CONCLUSIONS

- Chinese patients with CSU showed a strong preference for oral treatment (75.1%) over injectable treatment when efficacy and safety were comparable.
- The top five prioritized attributes were side effects (96.8%), the impact on QoL (91.6%), fast treatment effect (88.5%), well-controlled urticaria (72.3%) and improvement in sleep problems (66.2%).
- While effectiveness and safety predominantly guide patient selection for treatments of CSU, acknowledging their preferences in terms of how these treatments are administered is essential.
- Offering multiple alternatives could assure patient-specific therapeutic approaches, potentially leading to improved outcomes and treatment satisfaction.

## INTRODUCTION

- Chronic spontaneous urticaria (CSU) is characterized by an unpredictable itch and hives, with or without angioedema, lasting over six weeks without external triggers<sup>1,2</sup>.
- The unpredictable itch and appearance of hives significantly diminish patients’ quality of life<sup>3</sup>; Over 50% of patients remain symptomatic despite first line H1-antihistamines (H1-AH)<sup>4</sup>.
- The assessment of patient preferences for treatment regimens, considering benefits, risks, and uncertainties, is vital for enhancing healthcare decision-making processes.
- A comprehensive understanding of patients’ perspectives and preferences, alongside the identification of critical treatment attributes, can significantly bolster decision-making by key stakeholders: the pharmaceutical industry in drug development, regulatory bodies in approval processes, and payers in reimbursement strategies.
- The CHOICE-CSU 2 study evaluated treatment preferences among adult patients with CSU inadequately controlled by H1-antihistamines.

## METHODS

- A quantitative online 30-min survey was conducted among adult patients with CSU who were inadequately controlled with H1-antihistamines (Urticaria Control Test 7 [UCT] < 12).
- A total of 150 participants from China were included. Participants were recruited via patient panels, advocacy groups, social media, and specialist referrals. Eligibility criteria included a diagnosis of CSU for >6 months, current use of antihistamine(s), and symptoms not fully controlled.
- The relative importance of treatment attributes and patient preferences for hypothetical treatment profiles were assessed using a Maximum Difference Scaling Exercise (MaxDiff) and a Discrete Choice Experiment (DCE), respectively.

## RESULTS

- A total of 150 participants (median age: 37; 61% female) participated in the study. At the time of the survey, patients perceived their urticaria to be poorly controlled with an overall mean UCT score of 8.0 (**Table 1**).
  - 43% of patients experienced angioedema, with a median of 2 episodes per month.
  - The mean number of times patients switched AH type or increased AH dose was 1.6 and 1.7, respectively.
  - 49% of patients were involved in decision-making process regarding their current treatment.
- Overall, we observed that patient prioritized side effects (96.8%), the impact on QoL (91.6%), fast treatment effect (88.5%), well-controlled urticaria (72.3%), and improvement in sleep problems (66.2%) (**Figure 1**).
- When attributes were evaluated using comparable clinical trial data (**Table 2**), more Chinese patients preferred oral treatment (75.1%) over injectable (24.9%) (**Figure 2**).

Table 1. Patient Characteristics

| Population parameter                      |  | China (N=150) |
|---|--|---------------|
| Gender, %                                 |  |               |
| Male                                      |  | 39            |
| Female                                    |  | 61            |
| Time since CSU diagnosis, %               |  |               |
| 5+ years                                  |  | 23            |
| 4 to 4 year and 11 months                 |  | 15            |
| 3 to 3 year and 11 months                 |  | 19            |
| 2 to 2 year and 11 months                 |  | 21            |
| 1 to 1 year and 11 months                 |  | 16            |
| up to 12 months                           |  | 6             |
| UCT Scores, Mean [Median]                 |  |               |
| Overall                                   |  | 7.7 [8]       |
| UCT Q1 (Physical symptom)                 |  | 2.4 [2]       |
| UCT Q2 (QoL)                              |  | 2.2 [2]       |
| UCT Q3 (Treatment failure in last 7 days) |  | 1.9 [2]       |
| UCT Q4 (Control in last 7 days)           |  | 1.2 [1]       |

Table 2. Treatment Attributes and Levels Tested in DCE

| Attribute   | Profile 1 (Oral) <sup>6</sup>   | Profile 2 (Injectable) <sup>5</sup>   |
|---|---|---|
| <b>Well-controlled urticaria (symptoms are effectively managed and kept at a minimum)</b><br>(% of patients at week 12 after the first treatment dose)  | 48.8%   | 52%   |
| <b>Speed of treatment effect (fast action)</b><br>(% of patients achieving well controlled disease at week 1)   | 12%   | 8.5%  |
| <b>Urticaria impact on quality of life (DLQI)</b><br>(% of patients who report no negative impact of CSU (urticaria) on their quality of life at week 12)   | 38%   | 48%   |
| <b>Improvement in sleep problems (weekly sleep interference score from the UPDD questionnaire)</b><br>(% patients reported reduction in sleep problems after first treatment administration at week 12) | 86%   | 85%   |
| <b>Effect on swelling (angioedema-free) - from AAS</b><br>(% of patients who are angioedema free after first treatment administration at week 12)*  | 80%   | 76%   |
| <b>Mode of treatment administration</b><br>(mode and frequency)   | Oral twice daily every day  | Subcutaneous injection every 4 weeks  |
| <b>How is the treatment administered</b>  | Self administered   | The initial few treatment doses are administered by doctor; self-administered after training                              |
| <b>Treatment side effects</b>   | Very low and comparable risk of serious adverse events / side effects | Very low and comparable risk of serious adverse events / side effects. Has a warning due to increased risk of anaphylaxis |
| <b>Injection site reactions</b><br>(% of patients with reactions in the skin where the medication was injected)   | Not applicable  | 1% - 3%   |

\*This only includes patients who had angioedema at baseline

- Key attributes evaluated in both MaxDiff and DCE included: urticaria control, speed of treatment effect, impact on quality of life, sleep improvement, swelling reduction, mode of administration, side effects and injection site reactions.
- In the MaxDiff exercise, respondents were shown different combinations of 5 items on a screen and asked to select the most and least important factors in preferred choice. This was repeated until the full lists of factors was shown and covered.
- In the DCE, respondents were shown different mixed profiles of hypothetical treatments and asked to choose their preferred option, Attribute levels for each profile were derived from published clinical trials (REMIX<sup>6</sup>, PEARL<sup>5</sup>). These trials were selected to reflect current medical practice, including the use of rescue medications (Table 2).

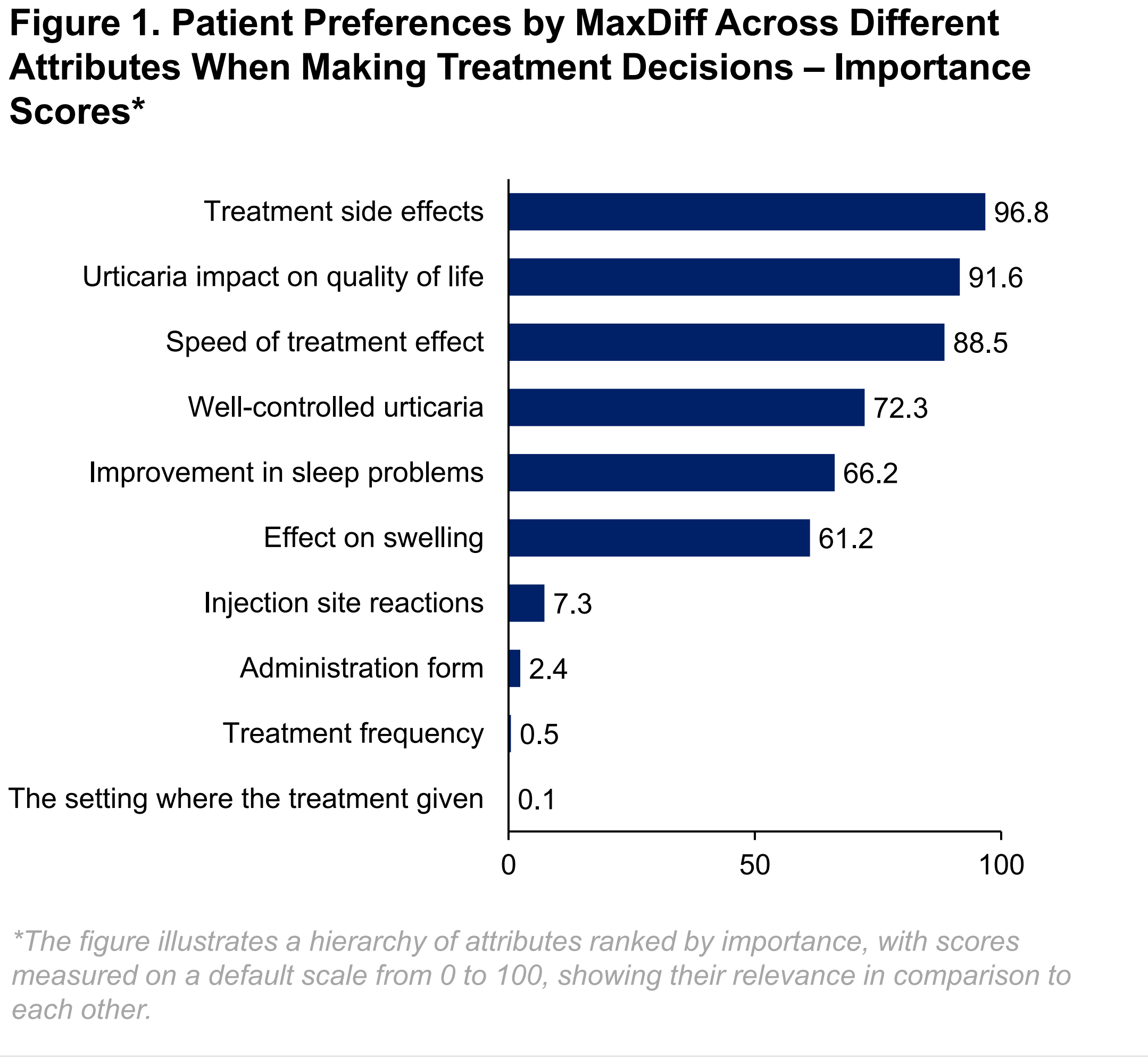
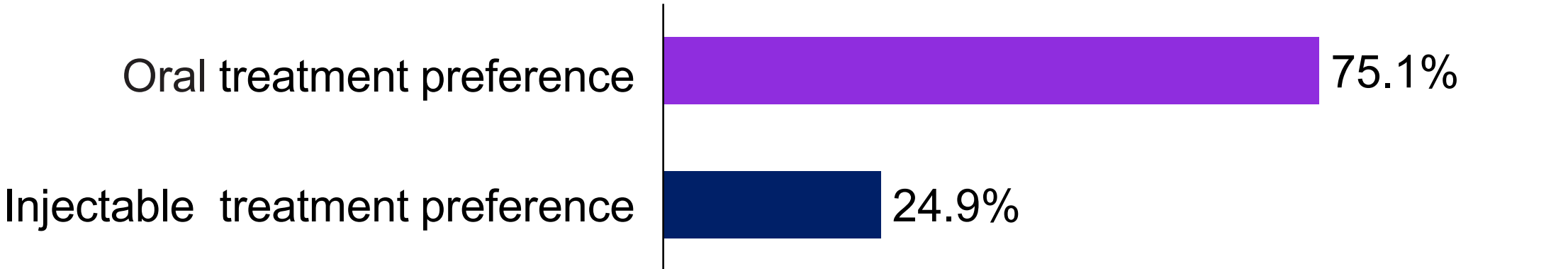


Figure 2. Patient Preferences results



## DISCUSSION

Chinese Patients with CSU showed a strong preference for oral treatments over injectables when efficacy and safety profiles were comparable. Although the primary drivers of patient choice were side effect, the impact on QoL and fast treatment effect, ensuring the availability of both oral and injectable options remains crucial. Involving patients in the decision-making process by offering these choices embeds patient-centric insights into treatment strategies.

Therefore, fostering alignment between medical advancements and patient expectations among stakeholders—including pharmaceutical developers, regulatory authorities, and payers—could contribute to improved outcomes and satisfaction throughout the healthcare continuum. This patient-centric approach would ensure treatments better tailored to individual needs, fostering improved adherence, compliance and overall health outcomes.

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## Disclosures

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