

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

Shyam Joshi<sup>1</sup>, Zhiqiang Song<sup>2</sup>, Qiquan Chen<sup>2</sup>, Cristina Constantinescu<sup>3</sup>, Panagiotis Orfanos<sup>4</sup>, Ravneet Kaur Kohli<sup>5</sup>, Dhaval Patil<sup>6</sup>, Mondher Mtibaa<sup>7</sup>, Xiaoxiao Ren<sup>8</sup>, Wanjie Guo<sup>8</sup>, Alexandros Epameinondas Chrysos<sup>9</sup>, Mueller, Maike<sup>10</sup>, Kunder, Jana<sup>10</sup>, Lucia Casoli<sup>11</sup>, Aad Wissink<sup>12</sup>, Paul Yamauchi<sup>13</sup>

<sup>1</sup>Oregon Health & Science University, Section of Allergy and Immunology, Portland, Oregon <sup>2</sup>The Southwest hospital of AMU, Chongqing, China <sup>3</sup>IPSOS, Basel, Switzerland <sup>4</sup>Novartis Pharma AG, Basel, Switzerland <sup>5</sup>Novartis Healthcare Private Limited, Hyderabad, India <sup>6</sup>Novartis Pharmaceuticals Corporation, New Jersey, USA <sup>7</sup>Novartis Pharma Canada Inc., Montreal, Canada <sup>8</sup>Novartis Pharma Co., Ltd., Beijing, China <sup>9</sup>Novartis Pharmaceuticals UK Limited, London, United Kingdom <sup>10</sup>Novartis Pharma GmbH, Nuremberg, Germany <sup>11</sup>Novartis Farma S.p.A., Milan, Italy <sup>12</sup>Novartis Pharma NL, Amsterdam, Netherlands <sup>13</sup>Dermatology Institute & Skin Care Center, Inc. and Clinical Science Institute, Santa Monica, US

## KEY FINDINGS & CONCLUSIONS

- Patients with CSU who participated in our global study preferred oral treatments over injectables when efficacy and safety were comparable.
- The top 4 most important treatment characteristics that have similar weight on patients’ choice are: clinical efficacy, impact on quality of life, safety and speed of treatment’s action.
- Patients recently diagnosed with CSU (within the past 12 months) show a significantly higher preference (63%) for an oral treatment over an injectable compared to all patients. This highlights the need for new, innovative treatments earlier in the CSU treatment pathway, before patients begin cycling through AH and/or on oral corticosteroids or other oral treatments without finding lasting relief.
- 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.

## RESULTS

- A total of 635 participants (mean age: 38; 58% 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 6.7 (**Table 1**).
  - 56% of patients experienced angioedema, with a mean of 3.9 episodes per month.
  - 100% of patients were receiving antihistamines, 51.2% were receiving steroids, 16.7% were receiving anti-inflammatory, and 19.7% were receiving injectable CSU treatments.
  - 78% of patients were involved in decision-making process regarding their current treatment.
- Overall, we observed that patient prioritized how well their urticaria symptoms are controlled, followed by impact of urticaria on quality of life, side effects, speed of treatment effect, and effect on swelling (**Figure 1**).
- When attributes were evaluated using comparable clinical trial data (**Table 2**), more patients preferred oral treatment (54%) over injectable (46%) (**Figure 2**). Subset analysis with special patient group of interest (**Figure 2**) showed similar preferences (**Figure 2**). Subgroup analysis with sufficient sample sizes in China (N=150) and the US (N=150) indicated a preference for oral treatments (**Figure 3**).

Table 1. Patient Characteristics

Population parameter		Global (N=635)
Countries, N		
USA		150
Germany		75
Netherlands		30
UK		80
Italy		75
Canada		75
China		150
Gender, %		
Male		42
Female		58
Time since CSU diagnosis, %		
5+ years		26
4 to 4 year and 11 months		11
3 to 3 year and 11 months		13
2 to 2 year and 11 months		20
1 to 1 year and 11 months		20
up to 12 months		10
UCT Scores, Mean [Median]		
Overall		6.7 [7]
UCT1 (Physical symptom)		1.7 [2]
UCT2 (QoL)		1.6 [2]
UCT3 (Treatment failure in last 7 days)		1.7 [2]
UCT4 (Control in last 7 days)		1.7 [2]

## References

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## METHODS

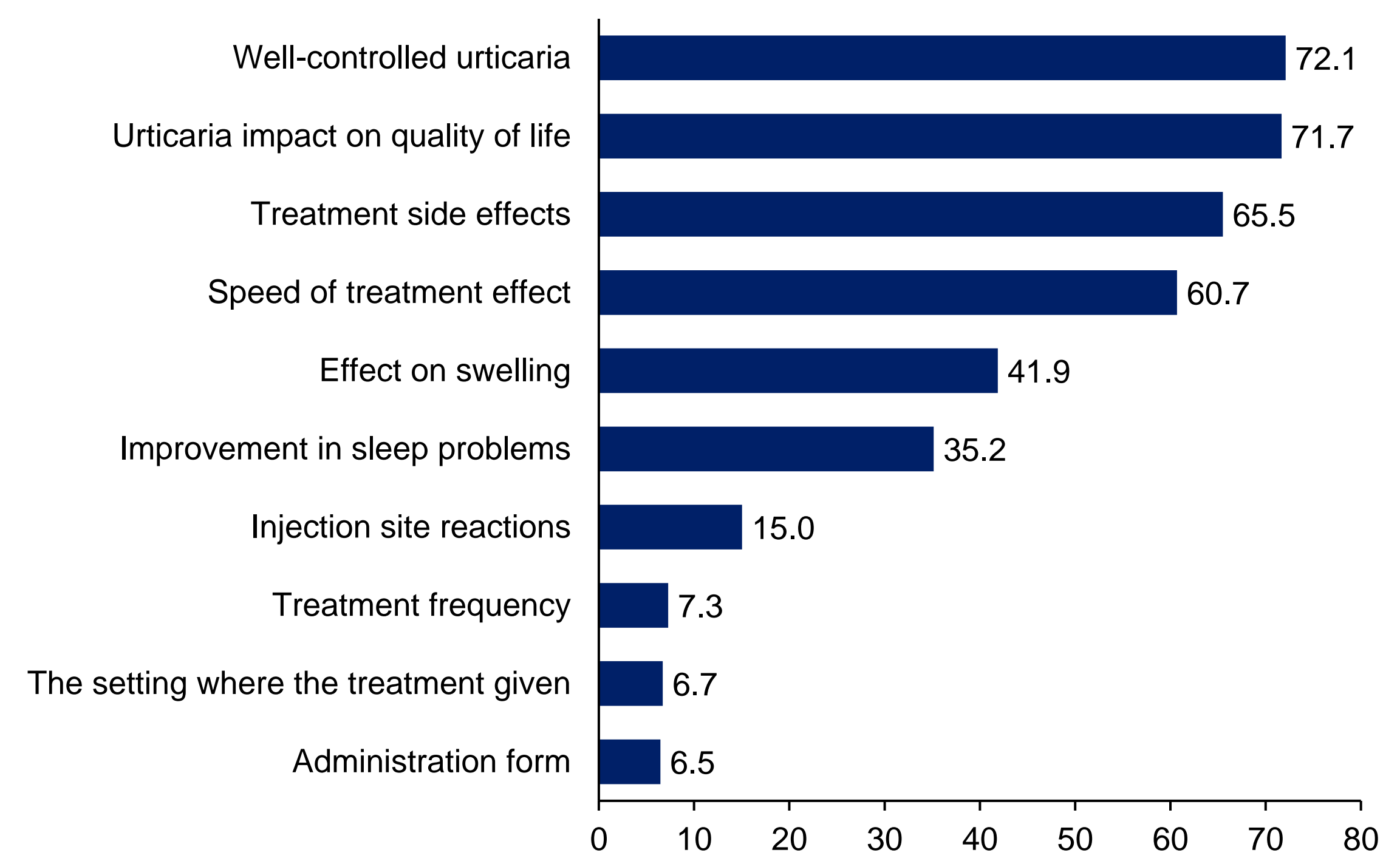
- A global quantitative online 30-min survey was conducted among adult patients with CSU who were inadequately controlled with H1-antihistamines (Urticaria Control Test 7 [UCT] < 12).
- A total of 635 participants from the USA, Canada, UK, Netherlands, Germany, Italy and China were included. Participants 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.

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> (% of patients at week 12 after the first treatment dose)	48.8%	52%
<b>Speed of treatment effect (fast action)</b> (% of patients achieving well controlled disease at week 1)	12%	8.5%
<b>Urticaria impact on quality of life (DLQI)</b> (% 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> (% patients reported reduction in sleep problems after first treatment administration at week 12)	86%	85%
<b>Effect on swelling (angioedema-free) - from AAS</b> (% of patients who are angioedema free after first treatment administration at week 12)*	80%	76%
<b>Mode of treatment administration</b> (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> (% 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

Figure 1. Patient Preferences by MaxDiff Across Different Attributes When Making Treatment Decisions – Importance Scores\*



\*The figure illustrates a hierarchy of attributes ranked by importance, with scores measured on a default scale from 0 to 100, showing their relevance in comparison to each other.

- 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 Across Subsets

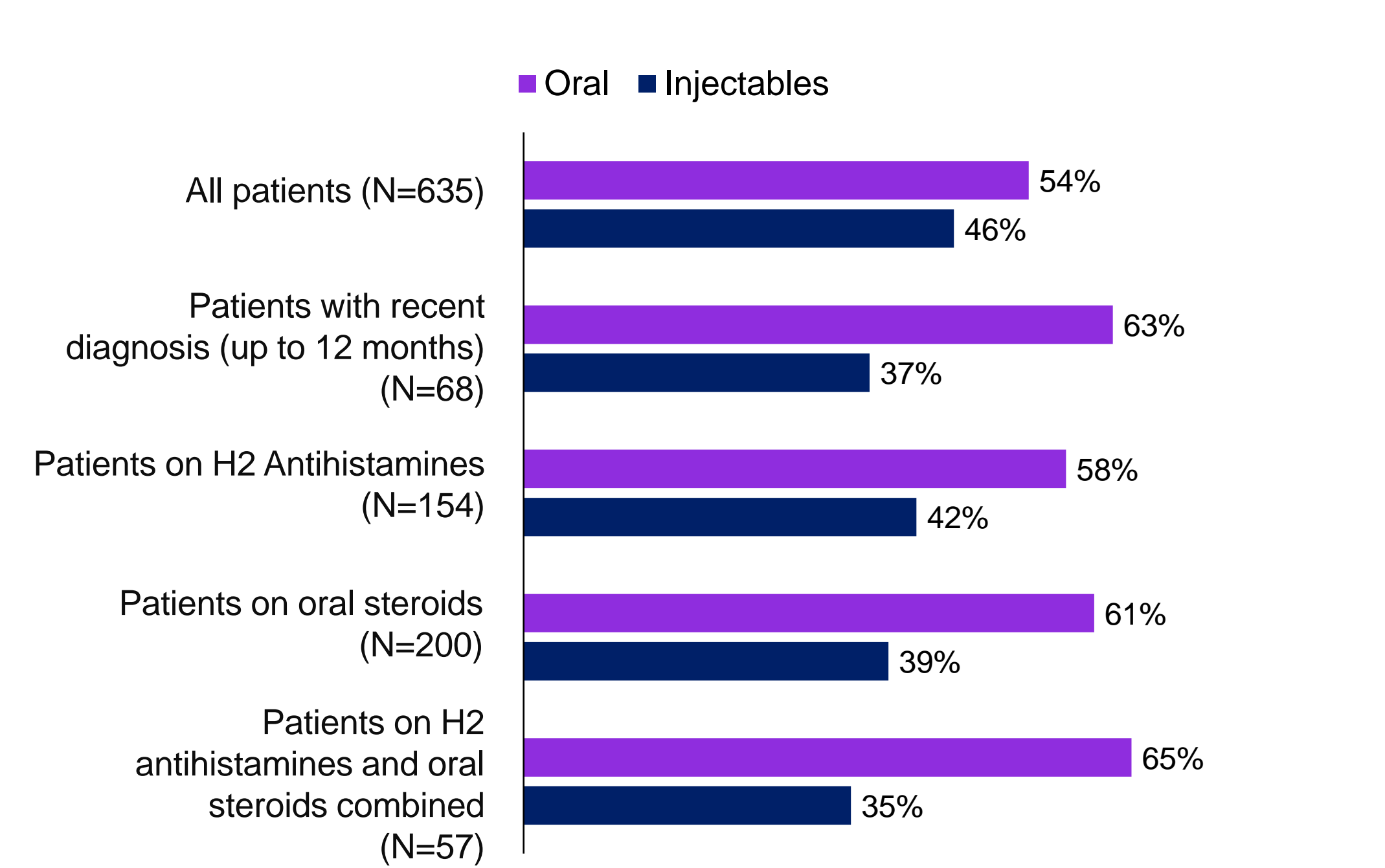
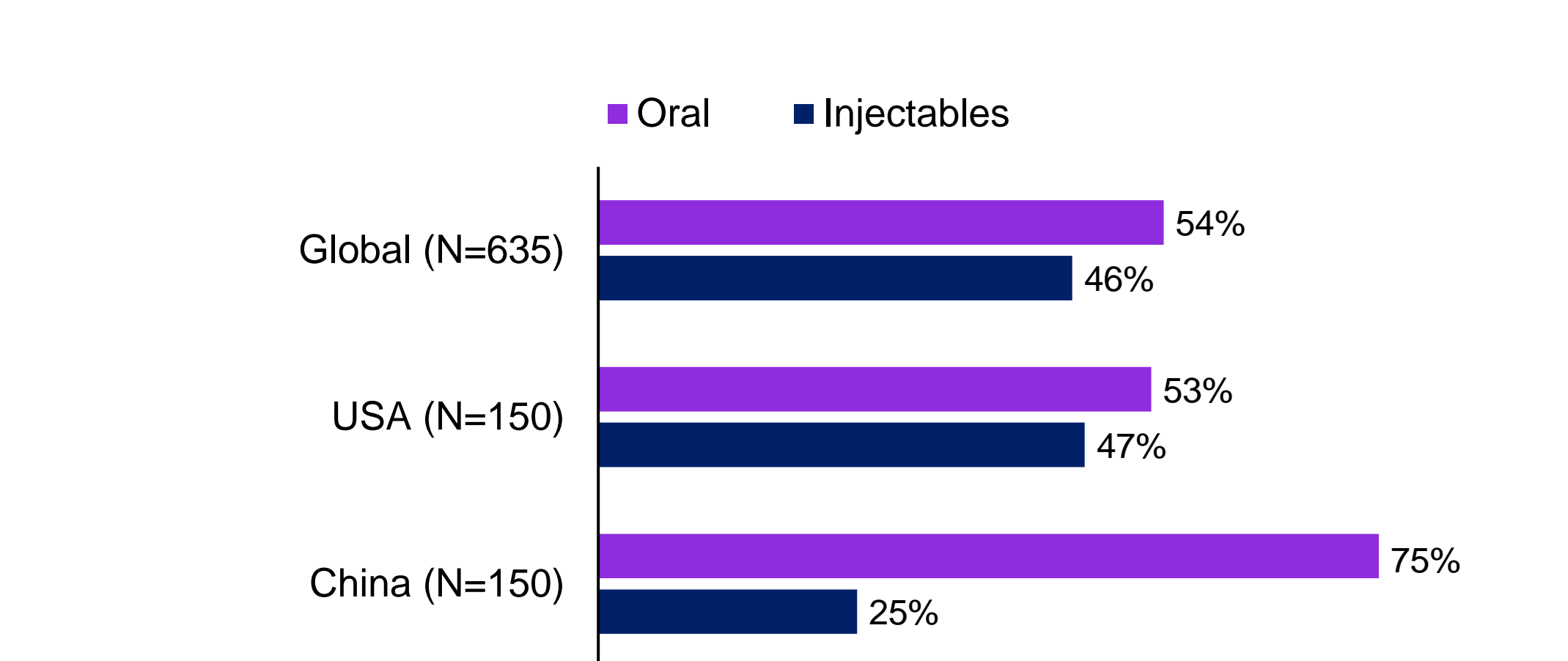


Figure 3. Patient Preferences in Key Country Subgroups



## DISCUSSION

Patients with CSU demonstrated a slight preference for oral treatments over injectables when efficacy and safety profiles were comparable. Although the primary drivers of patient choice were symptom control and substantial improvements in quality of life, 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.

## Acknowledgements

The authors thank the patients who participated in this study.

## Disclosures

This study was funded by Novartis Pharma AG, Basel, Switzerland