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Dermatologists, March 20-24, Maui, HI; and European Academy of Allergy and Clinical Immunology Congress, June 17-21, 2017, Helsinki, Finland.

Conflicts of interest

Dr Casale's university employer has received grants and consulting fees from Genentech, Inc. and Novartis. Dr Win is a principal investigator and/or collaborator for and has served as a speaker for Genentech, Inc. Dr Bernstein has served as a consultant, advisory board member, principal investigator, and/or collaborator for; received research grants/has pending research grants from; and has served as a speaker and received honoraria for participating in speaker bureaus, symposia, and acting as an expert witness for Genentech, Inc. and Novartis. Dr Rosén, Dr Holden, Dr Iqbal, Mr Trzaskoma, Dr Yang, and Dr Antonova are employees of Genentech, Inc. Dr Murphy has served in speaker bureaus for Boehringer Ingelheim, Genentech, Inc., and Teva. Dr Scarupa has served as a speaker for Genentech, Inc. Dr Sofen has served as a consultant and speaker for Genentech, Inc. and Novartis, and has received honoraria from Genentech, Inc. and Novartis. Dr Kaplan has performed adjudications of adverse events for Genentech, Inc., Novartis, and Sanofi-Aventis, and served on ad hoc advisory board for CSL Behring.

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61 **Key words:** chronic idiopathic urticaria; chronic spontaneous urticaria; H₁ antihistamine; H₂

62 antihistamine; hive; itch; leukotriene receptor modifier; omalizumab; pruritus

To the Editor:

We describe results from a phase IV study in patients with chronic idiopathic urticaria (CIU) that provide an expanded view of omalizumab treatment benefits in protocol-defined responders and nonresponders and offer insight that may be useful to clinicians when deciding treatment duration for omalizumab nonresponders. The Xolair Treatment Efficacy of Longer Duration in Chronic Idiopathic Urticaria (XTEND-CIU) study was a US-based, multicenter, randomized, double-blind, placebo-controlled trial (Fig 1) that included patients with CIU between the ages of 12 and 75 years. After the 24-week open-label period during which patients received omalizumab 300 mg every 4 weeks, patients were stratified by their 7-day Urticaria Activity Score (UAS7): UAS7 ≤ 6 (protocol-defined responder) versus UAS7 > 6 (nonresponders); responders entered a double-blind phase. Symptoms were recorded electronically by patients using the Urticaria Patient Daily Diary^{1,2} and by paper-based clinician- and patient-reported instruments.

A total of 206 patients were enrolled in the open-label period, and 205 were treated with omalizumab. At baseline, patients enrolled in XTEND-CIU reported a substantial disease burden, reflected in UAS7 (mean [SD], 32.2[7.0]) and patient-reported outcome (PRO) scores, despite treatment with H₁ antihistamines, H₂ blockers, and/or leukotriene receptor modifiers.

By week 1, 3.9% of patients had achieved a UAS7 ≤ 6 ; complete response was evident as early as week 2 in 13.7% of patients, and improvements continued to week 24. The percentages of patients meeting the definition of protocol-defined responder or complete responder, respectively, were: 38.2% and 17.6% at week 4, 58.8% and 36.8% at week 12, and 73.0% and

52% at week 24 (Fig 2). Among protocol-defined nonresponders (ie, nonrandomized patients), 64% experienced a UAS7 improvement ≥ 10 between baseline and the end of week 24.

PRO measures showed improvement in all evaluated areas; the most notable improvement occurred between baseline and week 12, with additional improvement achieved by week 24. Even protocol-defined nonresponders reported evidence of clinically meaningful improvement (achievement of minimally important difference response) in Dermatology Life Quality Index and Insomnia Severity Index scores through 24 weeks of omalizumab treatment. Mean activity and productivity impairment scores improved in responders and nonresponders. No new safety signals were detected.

Patients in XTEND-CIU had a disease burden consistent with that described in other large studies.³⁻⁶ Protocol-defined response at randomization was 65% at week 24, exceeding the expected 57% response at week 24 based on data from the GLACIAL study, which enrolled a similar population to the current study.³

These preliminary findings from XTEND-CIU, reflecting the initial 24-week open-label period, demonstrate that in patients with evidence of moderate to severe CIU symptoms at baseline, improvements in UAS7 score were observed as early as week 1 and continued to week 24; PROs followed a similar trend. Even among protocol-defined nonresponders there was evidence of a treatment response. Data from the double-blind period of XTEND-CIU will enhance understanding of the safety and efficacy of longer-term (48 weeks) administration of omalizumab in patients with CIU.

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Figure Legends

Fig 1. XTEND study design. *Q4W*, every 4 weeks; *UAS7*, 7-day Urticaria Activity Score.

*Patients not meeting criteria for randomization (eg, because of nonresponse to omalizumab during the open-label treatment period) returned for a final follow-up visit 12 weeks after the week 24 visit, which included assessments for adverse events and patient-reported outcomes. Patients were not required to complete the electronic diary during this 12-week period.

[†]At week 24, patients were randomized 3:2 (omalizumab: placebo).

[‡]The final 2 weeks of the open-label treatment period were scheduled to occur during weeks 23 and 24. Double-blind randomization not permitted after day 190 from baseline.

[§]Patient eligibility to transition to open-label omalizumab, at the discretion of the investigator, was based on investigator-judged clinically significant worsening of their CIU accompanied by *UAS7* score of ≥ 12 for at least 2 consecutive weeks.

Fig 2. Protocol-defined (*UAS7* score of ≤ 6) and complete (*UAS7* score = 0) responders during the 24-week open-label period. *UAS7*, 7-day Urticaria Activity Score.



