Onset and Maintenance of Optimal Itch Response in Adult Patients With Moderate-to-Severe Atopic Dermatitis Treated With Dupilumab: Post Hoc Analysis From LIBERTY AD CHRONOS

Sonja Ständer1,2, Gil Yosipovitch3,4,5,6,7,8,9,10,11, Brian S. Kim2,10, Kenji Kabashima12,13, Bastian M14, Sandra Hagen15,16, Mike Bastian17,18

1University Hospital Münster, Münster, Germany; 2University of Miami, Miami, FL, USA; 3Oregon Health & Science University, Portland, OR, USA; 4Yale School of Medicine at Mount Sinai, New York, NY, USA; 5Kyoto University Graduate School of Medicine, Kyoto, Japan; 6University of Lübeck, Lübeck, Germany; 7Charité – Universitätsmedizin Berlin, Berlin, Germany; 8Yasuehiko Institute for Translational Medicine and Pharmacology (ITMP), Berlin, Germany; 9Regeneron Pharmaceuticals Inc., Tarrytown, NY, USA; 10Regeneron GmbH, Munich, Germany; 11Sanofi, Frankfurt, Germany

These authors contributed equally to this work.

Background

• Pruritus is one of the essential features of AD and is consistently reported by patients as the most burdensome symptom of the disease

• Itch not only impacts quality of life but also contributes to furthering AD pathogenesis through the itch-scratch cycle and additional breakdown of the epidermal barrier

• A T2T concept established goals to guide treatment with systemic therapies in AD, including those for itch

• To assess onset and maintenance of optimal itch response according to the treat-to-target concept in adult patients with moderate-to-severe AD treated with dupilumab + TCS

• The median (IQR) PP-NRS score at visit 1 was 7.7 (6.8–8.5) for patients treated with dupilumab + TCS and 7.6 (6.3–8.6) for patients who received placebo + TCS

• The median time (95% CI) to achieve optimal itch response was 29 (22–43) days for patients treated with dupilumab + TCS and 64 (43–105) days for patients treated with placebo + TCS (HR [95% CI] = 1.668 [1.292–2.153]; P < 0.0001)

Methods

• LIBERTY AD CHRONOS (NCT03200306), a 52-week trial, enrolled patients aged ≥18 years with moderate-to-severe AD; patients treated with dupilumab + TCS or placebo + TCS were included in this post hoc analysis.

• Optimal itch response per the treat-to-target concept was defined as PP-NRS score of ≤4, to be achieved after 6-months of treatment

• We assessed time to optimal itch response, percentage of patients achieving optimal itch response, and maintenance of optimal itch response

• For maintenance of optimal itch response, the total number and percentage of weeks with PP-NRS ≤4 were calculated for each patient, and maximum duration of optimal itch response was assessed as the longest period of consecutive weeks with PP-NRS ≤4 for each patient

Results

• The median (IQR) PP-NRS score at baseline was 7.7 (6.6–8.5) for patients treated with dupilumab + TCS and 7.6 (6.3–8.6) for patients who received placebo + TCS

• The median time (95% CI) to achieve optimal itch response was 29 (22–43) days for patients treated with dupilumab + TCS and 64 (43–105) days for patients treated with placebo + TCS (HR [95% CI] = 1.668 [1.292–2.153]; P < 0.0001)

Conclusions

• Patients treated with dupilumab + TCS achieved optimal itch response rapidly and considerably earlier than the 6 months proposed per the T2T concept (median time to response: 29 days)

• Most patients treated with dupilumab + TCS achieved optimal itch response during the 52-week treatment period and this response was maintained during the 52-week treatment period

Figure 1. Percent of patients achieving optimal itch response (weekly average of daily PP-NRS ≤4) until 52 weeks.

Figure 2. Number (A), percentage (B), and maximum duration (C) of weeks with optimal itch response (weekly average of daily PP-NRS ≤4) through 52 weeks.

References


Acknowledgments and funding sources:

• Research was funded by Sanofi and Regeneron Pharmaceuticals Inc. ClinicalTrials.gov Identifier: NCT02260986. Medical writing assistance was provided by Mark H. Howell Jr, PhD, of Excerpta Medica, and was funded by Sanofi and Regeneron Pharmaceuticals Inc., according to the Standard Deviation Method.

• The authors report no relevant conflicts of interest.

• Funding sources: Sanofi, Regeneron Pharmaceuticals Inc.