ATOPIC ECZEMA/DERMATITIS

SAFETY OF DUPILUMAB IN MODERATE-TO-SEVERE ATOPIC DERMATITIS PATIENTS INADEQUATELY CONTROLLED WITH, INTOLERANT TO, OR INADVISABLE FOR CYCLOSPORINE-A: LABORATORY FINDINGS FROM THE LIBERTY-AD-CAFÉ TRIAL

K. Reich [1] - J.c. Szepietowski [2] - C.h. Smith [3] - A..d. Irvine [4] - G. Ogg [5] - A. Tsianakas [6] - A.b. Rossi [7] - Z. Chen [8] - M. Ardeleanu [8] - E. Rizova [7] - B. Shumel [8]

Dermatologikum Berlin, Department Of Dermatology, Georg-august-universität, Göttingen, Germany [1] - Department Of Dermatology, Venereology And Allergology, Wroclaw Medical University, Wroclaw, Poland [2] - St John's Institute Of Dermatology, Guy's And St Thomas' Nhs Foundation Trust, London, United Kingdom [3] - Department Of Paediatric Dermatology, National Children's Research Centre, Our Lady's Children's Hospital Crumlin, Department Of Clinical Medicine, Trinity College Dublin, Dublin, Ireland [4] - Mrc Human Immunology Unit, Mrc Weatherall Institute Of Molecular Medicine, And Radcliffe Department Of Medicine, University Of Oxford, Oxford, United Kingdom [5] - Department Of Dermatology, Fachklinik Bad Bentheim, Bad Bentheim, Germany [6] - Sanofi Genzyme, Sanofi Genzyme, Cambridge, Ma, United States [7] - Regeneron Pharmaceuticals, Inc., Regeneron Pharmaceuticals, Inc., Tarrytown, Ny, United States [8]

Introduction: Phase 3 studies of dupilumab (anti-IL-4Rα monoclonal antibody) demonstrated efficacy on multiple clinical endpoints and a favorable safety profile, including laboratory safety, in patients with moderate-to-severe atopic dermatitis (AD) inadequately controlled with topical medications. Dupilumab is approved in the EU for treatment of moderate-to-severe AD in adults who are candidates for systemic therapy.

Objective: We report laboratory outcomes in patients with moderate-to-severe AD inadequately controlled with, intolerant to, or medically inadvisable for cyclosporine-A from the LIBERTY-AD-CAFÉ trial.

Materials and Methods: CAFÉ was a 16-week (Wk), randomized, double-blinded, placebo-controlled, phase 3 trial. Patients were randomized 1:1:1 to dupilumab 300mg weekly (qw) or every 2 Wks (q2w) or placebo; patients received concomitant low-/medium-potency topical corticosteroids (TCS). Laboratory outcomes were summarized descriptively.

Results: Safety was assessed in 325 patients. Treatment groups had similar baseline

disease/laboratory characteristics. Small transient increases from baseline in eosinophils were observed in dupilumab+TCS-treated vs placebo+TCS-treated patients; with the highest mean increase observed at Wk8 for q2w+TCS (placebo+TCS/q2w+TCS/qw+TCS: 0.02/0.26/0.10 x109/L) and Wk12 for qw+TCS (placebo+TCS/q2w+TCS/qw+TCS: −0.02/0.20/0.15 x109/L). Incidences of eosinophilia (≥0.65x109/L) were similar across groups throughout treatment (placebo+TCS/q2w+TCS/qw+TCS: 49.1%/57.0%/50.9%). Severe eosinophilia (>5.0x109/L) was reported in one patient in q2w+TCS. Eosinophils returned to pre-baseline levels by Wk16. No clinical alterations were associated with eosinophilia. Lactate dehydrogenase (LDH), a marker of tissue damage that correlates with AD disease activity and severity, showed a greater mean decrease from baseline through Wk16 in the dupilumab+TCS groups vs placebo+TCS group (placebo+TCS/q2w+TCS/qw+TCS: −6.9/−56.6/−62.6 U/L); mean LDH values in each group were within normal range throughout the study. No clinically meaningful changes were observed between treatment groups in other hematologic, chemistry, or urinalysis parameters.

Conclusions: No clinically meaningful adverse changes in laboratory parameters were reported in CAFÉ. These findings are consistent with EU product labeling, which does not recommend laboratory tests before initiation/during treatment with dupilumab.