

Eight out of Ten Patients Maintained Skin Clearance at One Year in Lilly's Lebrikizumab Atopic Dermatitis Monotherapy Trials

June 7, 2022

80% of lebrikizumab responders maintained improvements in skin clearance and disease severity at 52 weeks; lasting improvements in itch were also observed

Data supported both once every two week and once every four week maintenance dosing, with consistent and durable responses

INDIANAPOLIS, June 7, 2022 /PRNewswire/ -- Eli Lilly and Company (NYSE: LLY) today announced topline results from one-year analyses of the efficacy and safety of lebrikizumab, the company's investigational IL-13 inhibitor for the treatment of patients with moderate-to-severe atopic dermatitis (AD). The new findings from the Phase 3 clinical trials (ADvocate 1 and 2) showed eight out of ten patients who achieved clinical response (EASI-75*) with lebrikizumab monotherapy at 16 weeks maintained skin clearance at one year of treatment with the once every two weeks or four weeks regimen. Additionally, patients treated with lebrikizumab maintained itch relief across the two trials over the one-year period. These results build upon positive data from the 16-week, double-blind, placebo-controlled part of the ADvocate program.

"Atopic dermatitis is a complex disease that requires personalized treatment approaches, including flexible dosing options for patients. In these studies, patients treated with lebrikizumab maintained skin clearance and lasting relief from intense itch at one year. We believe this supports the potential of lebrikizumab to become a first-line biologic and may support less frequent dosing," said Lotus Mallbris, M.D., Ph.D., vice president of global immunology development and medical affairs at Lilly. "We look forward to providing an important new medicine and helping patients find the relief they so desperately seek from the varied and debilitating symptoms of this disease, contingent upon FDA approval."

AD, or atopic eczema, is a chronic, relapsing, heterogenous skin disease characterized by intense itching, dry skin and inflammation that can be present on any part of the body. 1-2 Lebrikizumab is a novel, monoclonal antibody (mAb) that binds to the interleukin-13 (IL-13) protein with high affinity to specifically prevent the formation of IL-13Rα1/IL-4Rα (Type 2 receptor) which blocks downstream signaling through the IL-13 pathway. 3-7 IL-13 plays the central role in AD, promoting Type 2 inflammation that drives skin barrier dysfunction, itch, skin thickening and infection. 8-10

In ADvocate 1, 79% of patients who received lebrikizumab every four weeks and 79% of patients who received lebrikizumab every two weeks maintained 75% or greater skin improvement (EASI-75) at one year of treatment. Additionally, 85% of patients who received lebrikizumab every four weeks and 77% of patients who received lebrikizumab every two weeks maintained EASI-75 response in ADvocate 2 at one year of treatment.

The frequency of adverse events and the overall safety profile among these patients treated with lebrikizumab were consistent with the induction phase of the trials as well as previous lebrikizumab studies in AD. No new safety signals were observed in this patient population.

"ADvocate 1 and 2 results add to the exciting growing body of evidence from our Phase 3 clinical trial program and demonstrate that this medicine may provide much-needed relief for those seeking new treatment options. We look forward to continuing our collaboration with Lilly and advancing in our clinical program, aiming to obtain approval in the European Union," stated Karl Ziegelbauer, Ph.D., Almirall S.A.'s Chief Scientific Officer.

With these data, Lilly plans to submit a Biologics License Application (BLA) to the U.S. Food and Drug Administration (FDA) for lebrikizumab in AD in the second half of 2022, followed by submissions to other regulatory agencies around the world. Almirall also plans to submit these results this year to the European Medicines Agency (EMA) for authorization.

These studies are part of the comprehensive clinical development program for lebrikizumab in AD evaluating more than 2,000 patients. Full one-year results from the Phase 3 monotherapy studies will be disclosed at upcoming congresses and in publications in 2022. Additional Phase 3 clinical trials are enrolling for lebrikizumab in AD.

Lilly has exclusive rights for development and commercialization of lebrikizumab in the United States and the rest of the world outside Europe. Almirall has licensed the rights to develop and commercialize lebrikizumab for the treatment of dermatology indications, including AD, in Europe.

*EASI=Eczema Area and Severity Index, EASI-75=75 percent reduction in EASI from baseline to Week 16

About ADvocate 1 and ADvocate 2 and the Phase 3 Program

ADvocate 1 and ADvocate 2 are 52-week randomized, double-blind, placebo-controlled, parallel-group, global, Phase 3 studies designed to evaluate lebrikizumab as monotherapy in adult and adolescent patients (aged 12 to less than 18 years of age and weighing at least 40 kg) with moderate-to-severe AD. During the 16-week treatment period, patients received lebrikizumab 500-mg initially and at two weeks, followed by lebrikizumab 250-mg or placebo every two weeks. In the maintenance period, patients with moderate-to-severe AD who achieved a clinical response after 16 weeks of lebrikizumab treatment were re-randomized to receive lebrikizumab every two weeks or four weeks or placebo for an additional 36 weeks. Patients who required rescue treatment during the induction period or who did not achieve clinical response (lebrikizumab non-responders) at 16 weeks received lebrikizumab every two weeks for an additional 36 weeks. The primary endpoints were measured by an Investigator Global Assessment (IGA) score of clear (0) or almost clear (1) skin with a reduction of at least two points from baseline and at least 75 percent change in baseline in the Eczema Area and Severity Index (EASI-75) score at 16 weeks. EASI measures extent and severity of the disease. Key secondary endpoints were measured by IGA, EASI, the Pruritus Numeric Rating Scale, Sleep-Loss due to Pruritus and the Dermatology Life Quality Index.

The U.S. Food and Drug Administration (FDA) granted lebrikizumab Fast Track designation in AD in December 2019. The lebrikizumab Phase 3 program consists of five key global studies including two monotherapy studies, a combination study (ADhere), as well as long-term extension (ADjoin)

and adolescent open label (ADore) studies. Lilly has also initiated a first-of-its-kind <u>clinical study</u> dedicated to people of color living with AD. The study will further evaluate the efficacy and safety of lebrikizumab in people of color to generate additional data and disease information to help investigators and clinicians provide better diagnoses and treatment options.

About Lebrikizumab

Lebrikizumab is a novel, investigational, monoclonal antibody designed to bind IL-13 with high affinity to specifically prevent the formation of the IL-13R α 1/IL-4R α heterodimer complex and subsequent signaling, thereby inhibiting the biological effects of IL-13 in a targeted and efficient fashion. IL-13 is the central pathogenic mediator of AD, promoting Type 2 inflammation that drives skin barrier dysfunction, itch, skin thickening and infection. $^{6-8}$

About Lilly

Lilly unites caring with discovery to create medicines that make life better for people around the world. We've been pioneering life-changing discoveries for nearly 150 years, and today our medicines help more than 47 million people across the globe. Harnessing the power of biotechnology, chemistry and genetic medicine, our scientists are urgently advancing new discoveries to solve some of the world's most significant health challenges, redefining diabetes care, treating obesity and curtailing its most devastating long-term effects, advancing the fight against Alzheimer's disease, providing solutions to some of the most debilitating immune system disorders, and transforming the most difficult-to-treat cancers into manageable diseases. With each step toward a healthier world, we're motivated by one thing: making life better for millions more people. That includes delivering innovative clinical trials that reflect the diversity of our world and working to ensure our medicines are accessible and affordable. To learn more, visit Lilly.com and Lilly.com/newsroom or follow us on Eacebook, Instagram, Twitter and LinkedIn. P-LLY

Lilly Cautionary Statement Regarding Forward-Looking Statements

This press release contains forward-looking statements (as that term is defined in the Private Securities Litigation Reform Act of 1995) about lebrikizumab as a potential treatment for patients with atopic dermatitis and reflects Lilly's current beliefs and expectations. However, as with any pharmaceutical product, there are substantial risks and uncertainties in the process of research, development and commercialization. Among other things, there can be no guarantee that planned or ongoing studies will be completed as planned, that future study results will be consistent with the results to date, or that lebrikizumab will receive regulatory approvals, or be commercially successful. For further discussion of these and other risks and uncertainties, see Lilly's most recent Form 10-K and Form 10-Q filings with the United States Securities and Exchange Commission. Except as required by law, Lilly undertakes no duty to update forward-looking statements to reflect events after the date of this release.

Refer to: Carla Cox; cox_carla@lilly.com; +1-317-750-3923 (Lilly media)

Kevin Hern; hern_kevin_r@lilly.com; +1-317-277-1838 (Lilly investors)



¹ Weidinger S, Novak N. *Lancet.* 2016;387:1109-1122.

² Langan SM, et al. *Arch Dermatol.* 2008;142:1109.

³ Moyle M, et al. Exp Dermatol. 2019;28(7):756-768.

⁴ Ultsch M, et al. *J Mol Biol.* 2013;425(8):1330-1339.

⁵ Zhu R, et al. *Pulm Pharmacol Ther*. 2017;46:88-98.

⁶ Simpson EL, et al. J Am Acad Dermatol. 2018;78(5):863-871.e11.

⁷ Okragly A, et al. *Comparison of the Affinity and in vitro Activity of Lebrikizumab, Tralokinumab, and Cendakimab.* Presented at the Inflammatory Skin Disease Summit, New York, November 3-6, 2021.

⁸ Tsoi L, et al. *Journal of Investigative Dermatology*. 2019;139(7):1480-1489.

⁹ Ratnarajah K, et al. *Journal of Cutaneous Medicine and Surgery*. 2021;25(3):315-328.

¹⁰ Bieber T. Allergy. 2020;75(1):54-62.

C View original content to download multimedia: https://www.prnewswire.com/news-releases/eight-out-of-ten-patients-maintained-skin-clearance-at-one-year-in-lillys-lebrikizumab-atopic-dermatitis-monotherapy-trials-301562237.html

SOURCE Eli Lilly and Company