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Lilly's Ixekizumab Superior to Etanercept and Placebo in Phase 3 Psoriasis Studies

INDIANAPOLIS, Aug. 21, 2014 /PRNewswire/ --

- *Ixekizumab met all primary and key secondary objectives across three pivotal studies of 3,866 patients, the largest Phase 3 moderate-to-severe plaque psoriasis program to date*
- *Ixekizumab was superior to etanercept on all measures of skin clearance in both active comparator studies*
- *Lilly plans regulatory submissions for ixekizumab in 1st half of 2015*

Eli Lilly and Company's (NYSE: LLY) investigational medicine ixekizumab was statistically superior to etanercept and placebo on all skin clearance measures in Phase 3 studies, the company said today in disclosing top-line results from its pivotal UNCOVER studies in moderate-to-severe plaque psoriasis.

"These data are important for people suffering from moderate-to-severe plaque psoriasis, as up to 41 percent of those treated with ixekizumab were able to achieve clear skin at week 12, with just one injection per dose. These results give us confidence that if approved, ixekizumab could make complete resolution of psoriasis possible for significantly more people," said David Ricks, Lilly senior vice president, and president, Lilly Bio-Medicines.

Study design
In the three UNCOVER studies, patients were assigned to receive either placebo or ixekizumab (80 mg every two or four weeks) for 12 weeks, following a 160 mg starting dose. In the two active comparator studies (UNCOVER-2 and 3), patients could be assigned to receive etanercept 50 mg twice weekly for 12 weeks. In UNCOVER-1, responders to treatment were assigned to continue treatment on either placebo or ixekizumab (80 mg every 4 or 12 weeks) for up to 60 weeks.

Results
Patients treated with both dosing regimens of ixekizumab had significantly greater levels of skin clearance compared to placebo and to etanercept at the 12-week endpoint. Skin clearance was measured by standard primary endpoints for psoriasis studies: the Psoriasis Area and Severity Index (PASI) and the Static Physician Global Assessment (sPGA).

For patients treated with ixekizumab either every four weeks or every two weeks, between 78 to 90 percent of patients achieved at least a 75 percent reduction in PASI score (PASI 75) at 12 weeks. Additionally, 31 to 41 percent of these patients achieved PASI 100, or clear skin, at week 12. For comparison, between 5 to 7 percent of patients treated with etanercept in the UNCOVER-2 and 3 studies achieved PASI 100.

Statistically significant improvements in skin clearance measures for patients treated with ixekizumab were observed as early as the first week when compared to either placebo or etanercept, and continued through week 12. In the UNCOVER-1 study, high levels of response were maintained through 60 weeks of treatment.

Adverse events were comparable for patients receiving ixekizumab in the 12-week, randomized control portion across all three studies. The overall rates and severities of adverse events observed were comparable to those for etanercept in the two active comparator trials. The most frequently reported events (more than five percent across all three studies) were nasopharyngitis and injection site reaction. Most injection site reactions were mild, and most patients who experienced an injection site reaction continued treatment with ixekizumab.

"Moderate-to-severe plaque psoriasis can have a devastating life impact for patients," Ricks said. "Clear skin is their goal, but many patients are not able to achieve complete resolution using currently-available treatments."

Lilly plans to submit full data from the UNCOVER studies for disclosure at scientific meetings and in peer-reviewed journals in 2015. The company intends to submit ixekizumab to regulatory authorities in the first half of 2015.

"Ixekizumab was discovered and engineered to achieve high affinity and specificity to the IL-17A cytokine by Lilly Research Laboratories scientists, and is the most advanced asset in Lilly's pipeline of biotechnology-based medicines for the treatment of autoimmune diseases," said Tom Bumol, Ph.D., senior vice president of biotech discovery research, Lilly Research Laboratories, and president, Applied Molecular Evolution. "These data appear to confirm our hypothesis -- that IL-17A is a major driver of excess keratinocyte (skin cell) proliferation and activation in psoriasis. We're encouraged that this discovery by

Lilly scientists could provide a new treatment option for patients with moderate-to-severe plaque psoriasis."

About the UNCOVER studies
Patients enrolled in the UNCOVER studies had a confirmed diagnosis of chronic plaque psoriasis for at least six months prior to randomization. Additionally, at screening and at randomization they demonstrated at least 10 percent Body Surface Area (BSA) of psoriasis, an sPGA score of at least 3 and PASI score of at least 12. UNCOVER-1 compared the safety and efficacy of different dosing regimens of ixekizumab to placebo after 12 weeks and 60 weeks of treatment. UNCOVER-2 and 3 evaluated different dosing regimens of ixekizumab compared to either placebo or etanercept for 12 weeks.

About ixekizumab
Ixekizumab is a monoclonal antibody with high affinity and specificity that binds to and neutralizes the pro-inflammatory cytokine interleukin-17A (IL-17A). In psoriasis, IL-17A plays a major role in driving excess keratinocyte (skin cell) proliferation and activation. Ixekizumab does not bind to cytokines IL-17B, IL-17C, IL-17D, IL-17E or IL-17F. Ixekizumab is administered via subcutaneous injection (under the skin). Ixekizumab is also in clinical development for the treatment of psoriatic arthritis.

About Moderate-to-Severe Plaque Psoriasis
Psoriasis is a chronic, noncontagious autoinflammatory disease that appears on the skin. It occurs when the immune system sends out faulty signals that speed up the growth cycle of skin cells.[i] It is the most common inflammatory disease in the United States, affecting as many as 7.5 million Americans and an estimated 125 million people worldwide.[ii] Psoriasis can occur on any part of the body and is associated with other serious health conditions, such as diabetes and heart disease.[iii] [iv]

The most common form of psoriasis, plaque psoriasis, appears as raised, red patches covered with a silvery white buildup of dead skin cells. Approximately 17 percent of psoriasis patients have moderate-to-severe plaque psoriasis.[v]

About Eli Lilly and Company
Lilly is a global healthcare leader that unites caring with discovery to make life better for people around the world. We were founded more than a century ago by a man committed to creating high-quality medicines that meet real needs, and today we remain true to that mission in all our work. Across the globe, Lilly employees work to discover and bring life-changing medicines to those who need them, improve the understanding and management of disease, and give back to communities through philanthropy and volunteerism. To learn more about Lilly, please visit us at www.lilly.com and http://newsroom.lilly.com/social-channels.

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This press release contains forward-looking statements about ixekizumab as a potential treatment for moderate-to-severe plaque psoriasis and reflects Lilly's current belief. However, as with any pharmaceutical product, there are substantial risks and uncertainties in the process of development and commercialization. For further discussion of these and other risks and uncertainties, see Lilly's filings with the United States Securities and Exchange Commission. Lilly undertakes no duty to update forward-looking statements.

[i] National Psoriasis Foundation®, File, Communications, Psoriasis, http://www.psoriasis.org/file/communications---all-documents/MediaKit.pdf (Accessed August 20, 2014).
[ii] Ibid.
[iii] Rapp SR, Feldman SR, Exum ML, Fleischer AB, Reboussin DM. Psoriasis causes as much disability as other major medical diseases. J Am Acad Dermatol 1999;41:401-7.
[iv] Kurd SK, et al. The Risk of Depression, Anxiety, and Suicidality in Patients With Psoriasis. Arch Dermatol. 2010;146(8):891-895.
[v] National Psoriasis Foundation®, "Psoriasis Severity," http://psoriasis.org/about-psoriasis/treatments/severity (Accessed July 15, 2014.)

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