



## Lilly and Incyte Announce Baricitinib Efficacy and Safety Data from the Open-Label, Long-Term Extension of the Phase 2b JADA Study in Patients with Rheumatoid Arthritis

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### - Results from 52-week study presented at EULAR 2013 -

MADRID, June 13, 2013 /PRNewswire/ -- Eli Lilly and Company (NYSE: LLY) and Incyte Corporation (Nasdaq: INCY) today announced 52-week efficacy and safety data from the open-label, long-term extension of the Phase 2b JADA study of baricitinib in patients with active rheumatoid arthritis (RA). Baricitinib, formerly LY3009104 (INCB28050), is an orally available Janus kinase (JAK) inhibitor being studied for use in the treatment of certain autoimmune conditions, including RA. Among patients completing the open-label extension, clinical improvements observed at week 24 were sustained at the end of 52 weeks. The results were presented at the European League Against Rheumatism (EULAR) Annual European Congress of Rheumatology in Madrid, Spain [EULAR abstract OP0047: *Baricitinib, an Oral Janus Kinase Inhibitor, in the Treatment of Rheumatoid Arthritis: Safety and Efficacy in Open-Label, Long-Term Extension Study*].

The long-term extension of the JADA study evaluated the efficacy and safety of baricitinib in 201 patients taking either 4 mg (n=108) or 8 mg (n=93) once daily for up to 52 weeks. Doses could be escalated to 8 mg once daily at 28 or 32 weeks at the investigator's discretion when the patient presented more than six tender and swollen joints.

As previously reported, in the initial 12-week portion of this study, baricitinib was associated with statistically significant improvements in the signs and symptoms of RA disease versus placebo[1] and these responses were maintained or improved during an additional 12 weeks of blinded treatment.[2]

In the long-term extension, the clinical improvements observed at week 24 were sustained through 52 weeks in RA patients. The following chart summarizes selected efficacy results:

Disease Improvement / Activity Measure	24-Week Responders/Total Patients (Percent Responders)	52-Week Responders/Total Patients (Percent Responders)
ACR20	149/201 (74%)	139/196 (71%)
ACR50	83/201 (41%)	96/197 (49%)
ACR70	43/201 (21%)	53/197 (27%)
CDAI Remission	34/200 (17%)	40/195 (21%)
SDAI Remission	30/195 (15%)	42/194 (22%)
DAS28 ESR <2.6	35/200 (18%)	47/195 (24%)
DAS28 ESR	55/200 (28%)	82/195 (42%)
DAS28 CRP <2.6	59/195 (30%)	80/194 (41%)
DAS28 CRP	93/195 (48%)	116/194 (60%)
Boolean Remission	19/195 (10%)	32/194 (16%)

### Safety Results

Safety signals observed during the open-label extension were consistent with previously reported results of baricitinib. Among patients who remained on the 4 mg dose, treatment-emergent adverse events (TEAEs) occurred in 57 (53 percent); serious adverse events (SAEs) in 11 (10 percent); infections in 34 (31 percent); and serious infections in four (4 percent). Among patients who received the 8 mg dose, TEAEs occurred in 59 (63 percent); SAEs in eight (9 percent); infections in 37 (40 percent); and serious infections in two (2 percent). No opportunistic infections or tuberculosis cases were observed. There was one death in the 8 mg group due to a suspected myocardial infarction.

"In this clinical trial baricitinib showed statistically and clinically significant improvements in the features of this condition, which were maintained throughout a year of treatment. To date, baricitinib has demonstrated an acceptable safety profile and side effects have generally been straightforward to manage. These encouraging findings support further investigation of this new drug in rheumatoid arthritis," said Peter Taylor, M.A., Ph.D., F.R.C.P., Norman Collisson Chair of Musculoskeletal Sciences in the Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences at the University of Oxford, and steering committee member for the study.

A copy of the EULAR oral presentation can be accessed at: [2013 EULAR - JADA 52-Week Presentation](#)

### Trial Design

This randomized, open-label, long-term extension of Phase 2b JADA study included 201 (95 percent) of the eligible 212 patients. Of the 201 patients, 184 completed 52 weeks of treatment, 15 discontinued treatment, and two patients had not yet completed the full 52 weeks of treatment. Patients received either 4 mg or 8 mg once-daily doses of baricitinib beginning at week 24 through week 52.

In the initial 12-week treatment duration, patients received one of four doses of baricitinib (1 mg, 2 mg, 4 mg or 8 mg) or placebo, administered once daily. In the 12- to 24-week portion of the study, patients initially randomized to placebo or the 1 mg baricitinib dose were re-randomized to receive

either 4 mg once daily or 2 mg twice daily for an additional 12 weeks; patients initially randomized to the 2 mg, 4 mg and 8 mg doses continued therapy with those doses.

Patients who completed week 24 were eligible to receive either the 4- or 8-mg once daily dose through week 52. The study is ongoing, with all patients who are continuing in the study receiving baricitinib 4 mg once daily.

#### About JAK Inhibition

There are four known JAK enzymes: JAK1, JAK2, JAK3 and TYK2.[3] These enzymes are critical components of signaling mechanisms used by a number of cytokines and growth factors, including several that are elevated in patients with RA. Cytokines such as interleukin-6, -12 and -23 and both type 1 and type 2 interferons signal through these pathways. JAK-dependent cytokines have been implicated in the pathogenesis of a number of inflammatory and autoimmune diseases, suggesting that JAK inhibitors may be useful for the treatment of a broad range of inflammatory conditions.

#### About Baricitinib

Baricitinib is an orally administered selective JAK1 and JAK2 inhibitor. Baricitinib is in Phase III development as a potential treatment for rheumatoid arthritis. It is in Phase II development as a potential treatment for psoriasis and diabetic nephropathy.

In December 2009, Lilly and Incyte announced an exclusive worldwide license and collaboration agreement for the development and commercialization of baricitinib and certain follow-on compounds for inflammatory and autoimmune diseases.

#### About Rheumatoid Arthritis

Rheumatoid arthritis is an autoimmune disease that is characterized by inflammation and progressive destruction of joints.[4] Current treatment of RA includes the use of non-steroidal anti-inflammatory drugs, oral disease-modifying antirheumatic drugs such as methotrexate, and injectable biological response modifiers that target selected mediators implicated in the pathogenesis of RA.[5]

#### About Eli Lilly and Company

Lilly, a leading innovation-driven corporation, is developing a growing portfolio of pharmaceutical products by applying the latest research from its own worldwide laboratories and from collaborations with eminent scientific organizations. Headquartered in Indianapolis, Ind., Lilly provides answers -- through medicines and information -- for some of the world's most urgent medical needs. Additional information about Lilly is available at <http://www.lilly.com/>.

#### About Incyte

Incyte Corporation is a Wilmington, Delaware-based biopharmaceutical company focused on the discovery, development and commercialization of proprietary small molecule drugs for oncology and inflammation. For additional information on Incyte, please visit the company's website at <http://www.incyte.com/>.

*This press release contains certain forward-looking statements about baricitinib as a potential treatment for patients with rheumatoid arthritis and reflects Lilly and Incyte's current beliefs. However, as with any pharmaceutical product, there are substantial risks and uncertainties in the process of development and commercialization. There is no guarantee that future study results and patient experience will be consistent with study findings to date, that the product will receive regulatory approval, or, if approved, that the product will be commercially successful. For further discussion of these and other risks and uncertainties, see Lilly's and Incyte's filings with the United States Securities and Exchange Commission. Lilly and Incyte undertake no duty to update forward-looking statements.*

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[1] E. Keystone, P. Taylor, M. Genovese, D. Schlichting, S. Beattie, C. Gaich, R. Fidelus Gort, M. Luchi, W.L. Macias. 12-week results of a phase 2b dose-ranging study of LY3009104 (INCB028050), an oral JAK1/JAK2 inhibitor in combination with traditional DMARDs in patients with rheumatoid arthritis. *Annals Rheumatic Disease*. 2012; 71(Suppl3):152.

[2] M Genovese, E Keystone, P Taylor, P-Y Berclaz, C Lee, D Schlichting, S Beattie, M Luchi, W Macias. 24-week results of a blinded phase 2b dose-ranging study of baricitinib, an oral janus kinase 1/ janus kinase 2 inhibitor, in combination with traditional disease modifying antirheumatic drugs in patients with rheumatoid arthritis. *Arthritis and Rheumatism*. 2012; 64(10(suppl)):S1049.

[3] S. Verstovsek. Therapeutic potential of JAK2 inhibitors. *American Society of Hematology*. 2009: 636.

[4] Arthritis Foundation, What is Rheumatoid Arthritis, <http://www.arthritis.org/types-what-is-rheumatoid-arthritis.php> (Accessed: May 15, 2013).

[5] Arthritis Foundation, Medications for Rheumatoid Arthritis, <http://www.arthritistoday.org/about-arthritis/types-of-arthritis/rheumatoid-arthritis/treatment-plan/medication-overview/ra-medications.php> (Accessed: May 15, 2013).

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