

OLUMIANT® Showed Significant Improvements in the Severity and Extent of Atopic Dermatitis and Other Patient-Reported Outcomes in Phase 3 Study Analyses

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- Extended safety analysis across eight studies helps further define the known safety profile of OLUMIANT 2-mg in atopic dermatitis -

INDIANAPOLIS, April 23, 2021 /PRNewswire/ -- Through new analyses of BREEZE-AD5 Phase 3 clinical trial data and an extended safety analysis across multiple trials, Eli Lilly and Company (NYSE: [LLY](#)) and Incyte's (NASDAQ: [INCY](#)) OLUMIANT® (baricitinib) 2-mg tablet taken once daily showed improvement in key measured treatment outcomes compared to placebo, and helped further characterize the long-term safety profile in adults with moderate to severe atopic dermatitis (AD). In one BREEZE-AD5 analysis, OLUMIANT provided concurrent improvements in the severity and extent of AD, other key symptoms and quality of life as early as one week, as measured by percent change from baseline compared to placebo. In a separate BREEZE-AD5 analysis, adults with AD on 10-50% of their bodies at baseline who were treated with OLUMIANT showed significant improvements in the severity and extent of disease compared to placebo. In the integrated safety analysis of eight AD studies of OLUMIANT, there were no increases in rates for treatment-emergent adverse events, serious adverse events or serious infections with long-term OLUMIANT therapy compared to the placebo-controlled period. These results are being presented virtually at the American Academy of Dermatology's Virtual Meeting Experience (AAD VMX), April 23-25, 2021.

"Atopic dermatitis is the most common chronic, inflammatory skin disease among adults and can pose significant challenges for those who suffer from this debilitating disease," said Lotus Mallbris, M.D., Ph.D., vice president of immunology development at Lilly. "We are encouraged by these additional new analyses of the BREEZE-AD5 study results, in which OLUMIANT showed early improvement across multiple symptoms among patients with moderate to severe atopic dermatitis. We are pleased the extended safety analysis helps further define the long-term safety profile of OLUMIANT in atopic dermatitis."

OLUMIANT 2-mg Concurrently Improved Extent, Severity and Key Symptoms of AD in as Early as One Week

In a post-hoc analysis of BREEZE-AD5, patients treated with OLUMIANT 2-mg showed statistically significant and concurrent improvements in the extent and severity of AD, as well as key symptoms such as itch, nighttime awakenings due to itch, skin discomfort and pain, and quality of life, as early as one week as measured by percent change from baseline compared to placebo. Patients taking OLUMIANT had statistically significant improvements from baseline ($p < 0.05$) across all measures compared to placebo at one week and four weeks:

- Skin Measures:
 - Eczema Area and Severity Index (EASI), which is a validated, clinical scoring system measuring the extent and severity of AD:
 - At one week: 25.3% for OLUMIANT vs. 7.2% for placebo
 - At four weeks: 50.9% for OLUMIANT vs. 24.0% for placebo
- Key Symptoms:
 - Itch Numeric Rating Scale (NRS):
 - At one week: 13.5% for OLUMIANT vs. -0.2% for placebo
 - At four weeks: 29.0% for OLUMIANT vs. 12.5% for placebo
 - Skin Pain NRS (Skin discomfort and pain):
 - At one week: 12.0% for OLUMIANT vs. 2.6% for placebo
 - At four weeks: 27.6% for OLUMIANT vs. 13.6% for placebo
 - AD Sleep Scale (ADSS) Item 2 (number of nighttime awakenings due to itch):
 - At one week: 20.9% for OLUMIANT vs. 3.9% for placebo
 - At four weeks: 37.6% for OLUMIANT vs. 14.1% for placebo
- Composite Outcomes, Including Quality of Life:
 - Dermatology Life Quality Index (DLQI):
 - At one week: 27.2% for OLUMIANT vs. 12.9% for placebo
 - At four weeks: 40.4% for OLUMIANT vs. 17.5% for placebo
 - Patient Oriented Eczema Measure (POEM):
 - At one week: 18.0% for OLUMIANT vs. 6.7% for placebo
 - At four weeks: 29.3% for OLUMIANT vs. 10.8% for placebo

For methodology, see "About the Analyses" section below.

Patients with AD on 10-50% of Their Bodies at Baseline Treated with OLUMIANT 2-mg Experienced Significant Improvements in Severity and Extent of AD

A post-hoc analysis of BREEZE-AD5 was conducted to evaluate the efficacy of OLUMIANT 2-mg based on baseline Body Surface Area (BSA), which measures the extent to which a patient's skin is affected by AD. At two weeks, 2 out of 10 patients with a BSA 10-50% at baseline who were treated with OLUMIANT saw significant improvements in the severity and extent of their AD compared to placebo (20.2% vs. 5.9%, $p \leq 0.01$), as measured by a

75% improvement in Eczema Area Severity Index (EASI 75).

At 16 weeks, nearly 4 out of 10 patients with a BSA 10-50% at baseline who were treated with OLUMIANT saw significant improvements in the severity and extent of their AD compared to placebo (37.5% vs. 9.9%, $p \leq 0.001$) as measured by EASI 75.

At 16 weeks, approximately 3 out of 10 patients with a BSA 10-50% at baseline who were treated with OLUMIANT saw significant improvements in the severity and extent of the AD compared to placebo (31.7% vs. 6.9%, $p \leq 0.001$) based on achievement of clear or almost clear skin, as measured by the validated Investigator Global Assessment for Atopic Dermatitis [vIGA-AD (0,1)].

OLUMIANT was also evaluated in patients with BSA >50% at baseline. Among these patients, results for OLUMIANT were numerically higher but not statistically significant compared to placebo. Safety for the baseline BSA 10-50% subgroup was consistent with the overall safety population across the OLUMIANT clinical program in AD.

For methodology, see "About the Analyses" section below.

"Patients with moderate to severe atopic dermatitis may have different treatment needs given the extent and severity of their disease," said Eric Simpson, M.D., M.C.R., Professor of Dermatology and Director of Clinical Research at Oregon Health & Science University in Portland and co-author of these analyses. "These results are exciting because they can help provide more clarity to dermatologists on how patients with atopic dermatitis on 10-50% of their bodies may respond to a systemic therapy, such as OLUMIANT."

Long-Term Analysis Supports Safety Profile of OLUMIANT 2-mg in AD

The safety profile for OLUMIANT 2-mg was evaluated in eight AD clinical studies (six double-blind, randomized, placebo-controlled studies and two long-term extension studies). In the 16-week placebo-controlled period, there was no observed increase in rates of serious adverse events or serious infections with OLUMIANT therapy compared to placebo, and rates remained similar in the long-term extensions. There were no reports of deep vein thrombosis and pulmonary embolism across these studies.

OLUMIANT showed no increase in anemia, neutropenia, lymphopenia or elevated liver enzymes compared to placebo as measured by mean change from baseline, and there was no additional increase in these lab changes with long-term therapy. There was no increase in risk of eczema herpeticum with OLUMIANT compared to placebo (0.2% vs. 0.4%), but an increase in cases of herpes simplex (2.0% vs. 0.9%) was observed.

For methodology, see "About the Analyses" section below.

"Given how challenging this multidimensional disease is to treat, patients with AD need additional options that can help them manage their disease when other therapies have not been effective," Dr. Mallbris continued. "OLUMIANT has the potential to be the first oral JAK inhibitor approved for adults with moderate to severe atopic dermatitis in the U.S. When approved, it would also have one of the largest sets of available safety data in its class for AD."

About The Analyses

- **Rapid and Concurrent Improvements in the Signs and Symptoms of Atopic Dermatitis with Baricitinib in the Phase 3 Study, BREEZE-AD5**
 - 440 patients from the Phase 3 BREEZE-AD5 trial were randomized 1:1:1 to once-daily placebo or OLUMIANT 1-mg or 2-mg. Percent changes from baseline were assessed for the following measures in the first four weeks of the study: EASI, itch NRS, skin pain NRS, ADSS item 2, DLQI and POEM. P-values shown above were not adjusted for multiplicity.
- **Efficacy of Baricitinib 2-mg Stratified by Baseline Body Surface Area in Adults with Moderate to Severe Atopic Dermatitis**
 - In a post-hoc analysis, 293 patients from the Phase 3 BREEZE-AD5 trial were divided into subgroups of baseline BSA 10-50% and >50%. Subgroups were evaluated for the proportion of patients achieving a $\geq 75\%$ reduction in EASI (EASI 75) and vIGA-AD™ (0,1). Safety was also assessed in the subgroup of patients with BSA 10-50% at baseline. P-values shown above were not adjusted for multiplicity.
- **Extended Safety Analysis of Baricitinib 2-mg in Adult Patients with Atopic Dermatitis: An Integrated Analysis from 8 Randomized Clinical Trials**
 - OLUMIANT 2-mg was studied in six double-blind, randomized, placebo-controlled studies and two long-term extension studies. Incidence rates (IR)/100 patient-years at risk (PYR) were calculated. The analysis included 1,598 patients who received OLUMIANT 2-mg for 1,434.2 combined patient years of exposure (median 330 days).

OLUMIANT, an oral JAK inhibitor discovered by Incyte and licensed to Lilly, is currently under review by the U.S. Food and Drug Administration as an investigational medication for the treatment of adults with moderate to severe AD. Outside the U.S., it is the first JAK inhibitor approved for AD in more than 40 countries. It is also being investigated for the treatment of adults with alopecia areata, systemic lupus erythematosus, juvenile idiopathic arthritis, COVID-19 and for its approved indication for rheumatoid arthritis.

About OLUMIANT®

OLUMIANT is a once-daily, oral JAK inhibitor approved in the U.S. and more than 70 countries as a treatment for adults with moderate to severe rheumatoid arthritis (RA). It is also approved in the European Union, Japan and other countries for the treatment of adult patients with moderate to severe atopic dermatitis who are candidates for systemic therapy. The U.S. FDA-approved labeling for Olumiant includes a Boxed Warning for Serious Infections, Malignancy, and Thrombosis. See the full Prescribing Information [here](#).

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 patients with inflammatory and autoimmune diseases.

Indication and Usage for OLUMIANT (baricitinib) tablets (in the United States) for RA patients

OLUMIANT® (baricitinib) 2-mg is indicated for the treatment of adult patients with moderately to severely active rheumatoid arthritis who have had an inadequate response to one or more tumor necrosis factor (TNF) antagonist therapies. Limitation of Use: Use of OLUMIANT in combination with other JAK inhibitors, biologic disease-modifying antirheumatic drugs (DMARDs), or with potent immunosuppressants such as azathioprine and cyclosporine is not recommended.

IMPORTANT SAFETY INFORMATION FOR OLUMIANT (baricitinib) tablets

WARNING: SERIOUS INFECTIONS, MALIGNANCY, AND THROMBOSIS

SERIOUS INFECTIONS: Patients treated with Olumiant are at risk for developing serious infections that may lead to hospitalization or death. Most patients who developed these infections were taking concomitant immunosuppressants such as methotrexate or corticosteroids. If a serious infection develops, interrupt Olumiant until the infection is controlled. Reported infections include:

- **Active tuberculosis (TB), which may present with pulmonary or extrapulmonary disease. Test patients for latent TB before initiating Olumiant and during therapy. If positive, start treatment for latent infection prior to Olumiant use.**
- **Invasive fungal infections, including candidiasis and pneumocystosis. Patients with invasive fungal infections may present with disseminated, rather than localized, disease.**
- **Bacterial, viral, and other infections due to opportunistic pathogens.**

Carefully consider the risks and benefits of Olumiant prior to initiating therapy in patients with chronic or recurrent infection.

Closely monitor patients for the development of signs and symptoms of infection during and after treatment with Olumiant including the possible development of TB in patients who tested negative for latent TB infection prior to initiating therapy.

MALIGNANCIES: Lymphoma and other malignancies have been observed in patients treated with Olumiant.

THROMBOSIS: Thrombosis, including deep venous thrombosis (DVT) and pulmonary embolism (PE), has been observed at an increased incidence in patients treated with Olumiant compared to placebo. In addition, there were cases of arterial thrombosis. Many of these adverse events were serious and some resulted in death. Patients with symptoms of thrombosis should be promptly evaluated.

WARNINGS AND PRECAUTIONS

SERIOUS INFECTIONS: The most common serious infections reported with Olumiant included pneumonia, herpes zoster, and urinary tract infection. Among opportunistic infections, tuberculosis, multidermatomal herpes zoster, esophageal candidiasis, pneumocystosis, acute histoplasmosis, cryptococcosis, cytomegalovirus, and BK virus were reported with Olumiant. Some patients have presented with disseminated rather than localized disease, and were often taking concomitant immunosuppressants such as methotrexate or corticosteroids. Avoid Olumiant in patients with an active, serious infection, including localized infections. Consider the risks and benefits of treatment prior to initiating Olumiant in patients:

- with chronic or recurrent infection
- who have been exposed to TB
- with a history of a serious or an opportunistic infection
- who have resided or traveled in areas of endemic tuberculosis or endemic mycoses; or
- with underlying conditions that may predispose them to infection.

Closely monitor patients for infections during and after Olumiant treatment. Interrupt Olumiant if a patient develops a serious infection, an opportunistic infection, or sepsis. Do not resume Olumiant until the infection is controlled.

Tuberculosis – Before initiating Olumiant, evaluate and test patients for latent or active infection and treat patients with latent TB with standard antimycobacterial therapy. Olumiant should not be given to patients with active TB. Consider anti-TB therapy prior to initiating Olumiant in patients with a history of latent or active TB in whom an adequate course of treatment cannot be confirmed, and for patients with a negative test for latent TB but who have risk factors for TB infection. Monitor patients for TB during Olumiant treatment.

Viral Reactivation – Viral reactivation, including cases of herpes virus reactivation (e.g., herpes zoster), were reported in clinical studies with Olumiant. If a patient develops herpes zoster, interrupt Olumiant treatment until the episode resolves.

The impact of Olumiant on chronic viral hepatitis reactivation is unknown. Screen for viral hepatitis in accordance with clinical guidelines before initiating Olumiant.

MALIGNANCY AND LYMPHOPROLIFERATIVE DISORDERS: Malignancies were observed in Olumiant clinical studies. Consider the risks and benefits of Olumiant prior to initiating therapy in patients with a known malignancy other than a successfully treated non-melanoma skin cancer (NMSC) or when considering continuing Olumiant in patients who develop a malignancy. NMSCs were reported in patients treated with Olumiant. Periodic skin examination is recommended for patients who are at increased risk for skin cancer.

THROMBOSIS: Thrombosis, including DVT and PE, has been observed at an increased incidence in Olumiant-treated patients compared to placebo. In addition, arterial thrombosis events in the extremities have been reported in clinical studies with Olumiant. Many of these adverse events were serious and some resulted in death. There was no clear relationship between platelet count elevations and thrombotic events. Use Olumiant with caution in patients who may be at increased risk of thrombosis. If clinical features of DVT/PE or arterial thrombosis occur, evaluate patients promptly and treat appropriately.

GASTROINTESTINAL PERFORATIONS: Gastrointestinal perforations have been reported in Olumiant clinical studies, although the role of JAK inhibition in these events is not known. Use Olumiant with caution in patients who may be at increased risk for gastrointestinal perforation (e.g., patients with a history of diverticulitis). Promptly evaluate patients who present with new onset abdominal symptoms for early identification of gastrointestinal perforation.

LABORATORY ABNORMALITIES:

Neutropenia – Olumiant treatment was associated with an increased incidence of neutropenia (absolute neutrophil count [ANC] <1000 cells/mm³) compared to placebo. Avoid initiation or interrupt Olumiant treatment in patients with an ANC <1000 cells/mm³. Evaluate at baseline and thereafter according to routine patient management.

Lymphopenia – Absolute lymphocyte count (ALC) <500 cells/mm³ were reported in Olumiant clinical trials. Lymphocyte counts less than the lower limit of normal were associated with infection in patients treated with Olumiant, but not placebo. Avoid initiation or interrupt Olumiant treatment in patients with an ALC <500 cells/mm³. Evaluate at baseline and thereafter according to routine patient management.

Anemia – Decreases in hemoglobin levels to <8 g/dL were reported in Olumiant clinical trials. Avoid initiation or interrupt Olumiant treatment in patients with hemoglobin <8 g/dL. Evaluate at baseline and thereafter according to routine patient management.

Liver Enzyme Elevations – Olumiant treatment was associated with increased incidence of liver enzyme elevation compared to placebo. Increases of ALT ≥5x upper limit of normal (ULN) and increases of AST ≥10x ULN were observed in patients in Olumiant clinical trials.

Evaluate at baseline and thereafter according to routine patient management. Promptly investigate the cause of liver enzyme elevation to identify potential cases of drug-induced liver injury. If increases in ALT or AST are observed and drug-induced liver injury is suspected, interrupt Olumiant until this diagnosis is excluded.

Lipid Elevations – Treatment with Olumiant was associated with increases in lipid parameters, including total cholesterol, low-density lipoprotein cholesterol, and high-density lipoprotein cholesterol. Assess lipid parameters approximately 12 weeks following Olumiant initiation. Manage patients according to clinical guidelines for the management of hyperlipidemia.

VACCINATIONS: Avoid use of live vaccines with Olumiant. Update immunizations in agreement with current immunization guidelines prior to initiating Olumiant therapy.

HYPERSENSITIVITY: Reactions such as angioedema, urticaria, and rash that may reflect drug sensitivity have been observed in patients receiving Olumiant, including serious reactions. If a serious hypersensitivity reaction occurs, promptly discontinue Olumiant while evaluating the potential causes of the reaction.

ADVERSE REACTIONS

Adverse reactions (occurring in ≥1% of Olumiant-treated patients in placebo-controlled trials) include: upper respiratory tract infections, headache, abdominal pain, nausea, herpes simplex, urinary tract infection, acne, and herpes zoster.

USE IN SPECIFIC POPULATIONS

PREGNANCY AND LACTATION: No information is available to support the use of Olumiant in pregnancy or lactation. Advise women not to breastfeed during treatment with Olumiant.

HEPATIC AND RENAL IMPAIRMENT: Olumiant is not recommended in patients with severe hepatic impairment or in patients with severe renal impairment.

Please click to access full [Prescribing Information](#), including **Boxed Warning about Serious infections, Malignancies, and Thrombosis**, and [Medication Guide](#).

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About Atopic Dermatitis

Atopic dermatitis (AD), or atopic eczema, is a chronic, relapsing skin disease characterized by intense itching, dry skin and inflammation that can be present on any part of the body.¹ AD is a heterogeneous disease both biologically and clinically, but may be characterized by a highly variable appearance in which flares occur in an unpredictable manner.

Moderate to severe AD is characterized by intense itching, which leads to an itch-scratch cycle that further damages the skin.¹ Like other chronic inflammatory diseases, AD is immune-mediated and involves a complex interplay of immune cells and inflammatory cytokines.²

About Lilly in Dermatology

By following the science through uncharted territory, we continue Lilly's legacy of delivering innovative medicines that address unmet needs and have significant impacts on people's lives around the world. Skin-related diseases are more than skin deep. We understand the devastating impact this can have on people's lives. At Lilly, we are relentlessly pursuing a robust dermatology pipeline to provide innovative, patient-centered solutions so patients with skin-related diseases can aspire to live life without limitations.

About Eli Lilly and Company

Lilly is a global health care leader that unites caring with discovery to create medicines that 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 lilly.com and lilly.com/newsroom.

About Incyte

Incyte is a Wilmington, Delaware-based, global biopharmaceutical company focused on finding solutions for serious unmet medical needs through the discovery, development and commercialization of proprietary therapeutics. For additional information on Incyte, please visit incyte.com and

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This press release contains forward-looking statements (as that term is defined in the Private Securities Litigation Reform Act of 1995) about OLUMIANT (baricitinib) as a treatment for patients with rheumatoid arthritis and a possible treatment for patients with atopic dermatitis and other conditions and reflects Lilly's and Incyte'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, and that OLUMIANT will receive additional regulatory approvals, or be commercially successful. For further discussion of these and other risks and uncertainties, see Lilly's and Incyte's most recent respective Form 10-K and Form 10-Q filings with the United States Securities and Exchange Commission. Except as required by law, Lilly and Incyte undertake no duty to update forward-looking statements to reflect events after the date of this release.