Nearly 40% of Adults with Alopecia Areata Taking OLUMIANT® 4-mg Saw at Least 80% Scalp Hair Coverage at 52 Weeks in Lilly’s Pivotal Phase 3 Studies

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New England Journal of Medicine published OLUMIANT 36-week alopecia areata data today

INDIANAPOLIS, March 26, 2022 /PRNewswire/ -- Adults with severe alopecia areata (AA) who took OLUMIANT® (baricitinib) achieved significant scalp, eyelash and eyebrow hair regrowth and nearly 75% of those who responded to OLUMIANT 4-mg achieved 90% scalp coverage at 52 weeks, Eli Lilly and Company (NYSE: LLY) and Incyte (NASDAQ:INCY) announced today at the American Academy of Dermatology (AAD) Annual Meeting. In February 2022, the U.S. Food and Drug Administration (FDA) granted priority review for OLUMIANT in severe AA as a potential first-in-disease medicine. Lilly expects regulatory decisions in the U.S., European Union and Japan in 2022.

In the pooled 52-week analysis, patients at baseline had a mean Severity of Alopecia Tool (SALT) score of 85.5 (85.5% scalp hair loss, or 14.5% scalp hair coverage); severe AA is defined as having a SALT score ≥50 (≥50% scalp hair loss). At baseline, 69.4% and 57.9% had significant eyebrow and eyelash hair loss, respectively, as defined by Clinician-Reported Outcome (ClinRO) scores ≥2. Patients' average age was 37.6 years, with hair loss starting around age 25 and a mean of 12.2 years since symptom onset.

Among patients who took OLUMIANT 4-mg, two out of five (39.0%, n=201/515) achieved significant scalp hair regrowth, defined as a SALT score ≤20, or 80% or more scalp hair coverage, and nearly three out of four of those patients (74.1%, n=149/201) also achieved a SALT score ≤10, or 90% hair coverage, at 52 weeks. Separately, more than two out of five patients with ClinRO baseline scores ≥2 (eyebrow: 44.1%, n=154/349; eyelash: 45.3%, n=139/307) saw full regrowth or regrowth with minimal gaps in eyebrow and eyelash hair.

Among patients who took OLUMIANT 2-mg, more than one out of five (22.6%, n=77/340) achieved significant scalp hair regrowth and two out of three of those patients (67.5%, n=52/77) achieved 90% or more hair coverage at 52 weeks. Separately, more than one in five and one in four patients, respectively (eyebrow: 22.9%, n=55/240; eyelash: 25.5%, n=51/200), saw full regrowth or regrowth with minimal gaps in eyebrow and eyelash hair.

These 52-week pooled analyses demonstrate continued improvement in scalp, eyebrows and eyelash hair regrowth from 36-week results published today in the New England Journal of Medicine and presented at the 2021 European Academy of Dermatology and Venereology (EADV) Congress.

"Whether people with alopecia areata suffer loss of all the hair on their body or bald spots and missing eyebrows or eyelashes, this autoimmune disease can be devastating. The disease affects people of all ages," said Brett King, M.D., Ph.D., F.A.A.D., associate professor of dermatology at Yale School of Medicine and lead author of these analyses. "In 2022, OLUMIANT could become the first medicine ever approved to treat adults with alopecia areata. It's remarkable that nearly 40% of patients on OLUMIANT 4-mg, all of whom started out with at least 50% scalp hair loss, experienced full or nearly full scalp hair coverage, and similar improvements were achieved among those patients with significant eyebrows or eyelashes involvement."

In an evaluation of OLUMIANT 4-mg and 2-mg long-term safety, incidence rates of frequently reported adverse events up to 52 weeks (median 56 weeks exposure) were consistent with the 36-week, placebo-controlled period and included upper respiratory tract infection, headache, acne, urinary tract infection and increases in muscle-related blood markers. There were no new safety signals.

"OLUMIANT’s long-term efficacy data reveal significant regrowth of scalp, eyelash and eyebrow hair and we’re delighted by what these results can mean for patients. Our alopecia areata safety data adds further evidence to one of the largest and longest sets of safety data in the JAK inhibitor class, including nine years and 19,000 patient years across our program," said Lotus Mallbris, M.D., Ph.D., vice president of global immunology development and medical affairs at Lilly. "We're excited OLUMIANT may be a potential first-in-disease medicine approved this year for adults with severe alopecia areata."

About BRAVE-AA1 and BRAVE-AA2

In these double-blind, placebo-controlled Phase 3 trials, 1,200 patients with severe AA were randomized to receive once-daily OLUMIANT 4-mg, OLUMIANT 2-mg or placebo. Patients randomized to OLUMIANT received the same treatment for 52 weeks while placebo non-responders were rescued to OLUMIANT at 36 weeks. The primary endpoint was SALT score ≤20 (≤20% scalp hair loss). Secondary endpoints included the proportion of patients who achieved a SALT score ≤10 (≤10% scalp hair loss), Clinician-Reported Outcome (ClinRO) Measure for Eyebrow Hair Loss™ and ClinRO Measure for Eyelash Hair Loss™ scores of patients achieving eyebrow and eyelash hair loss scores of 0 or 1 (full coverage or minimal gaps) with a ≥2-point improvement from baseline among patients with baselines scores ≥2. In the BRAVE studies, 51.7% of patients were white (n=620/1,200), 36.3% were Asian (n=435/1,200), 8.2% were Black (n=98/1,200).

About OLUMIANT®

OLUMIANT, a once-daily, oral JAK inhibitor was discovered by Incyte and licensed to Lilly. It is approved in the U.S. and more than 75 countries as a treatment for adults with moderate to severe rheumatoid arthritis and is approved in more than 50 countries, including the European Union and Japan, for the treatment of adult patients with moderate to severe atopic dermatitis who are candidates for systemic therapy. To date, more than 343,000 patients have been treated with OLUMIANT worldwide across approved indications. Marketing authorization for the treatment of hospitalized patients with COVID-19 has been granted for OLUMIANT in multiple countries. The U.S. FDA-approved labeling for OLUMIANT includes a Boxed Warning for Serious Infections, Mortality, Malignancy, Major Adverse Cardiovascular Events, and Thrombosis. See the full Prescribing Information here. OLUMIANT is also being investigated in COVID-19, alopecia areata (AA) and juvenile idiopathic arthritis (JIA).
In December 2009, Lilly and Incyte announced an exclusive worldwide license and collaboration agreement for the development and commercialization of OLMIANT and certain follow-on compounds for patients with inflammatory and autoimmune diseases.

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

OLMIANT® (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: Not recommended for use in combination with other JAK inhibitors, biologic disease-modifying antirheumatic drugs (DMARDs), or with potent immunosuppressants such as azathioprine and cyclosporine.

IMPORTANT SAFETY INFORMATION FOR OLMIANT (baricitinib) tablets

WARNING: SERIOUS INFECTIONS, MALIGNANCY, MAJOR ADVERSE CARDIOVASCULAR EVENTS, 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.

The most common serious infections reported with Olumiant included pneumonia, herpes zoster, and urinary tract infection. Among opportunistic infections, tuberculosis, multidermalosomal 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 use of 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.

Consider anti-TB therapy prior to initiation of 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.

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.

MORTALITY

In a large, randomized, postmarketing safety study in rheumatoid arthritis (RA) patients 50 years of age and older with at least one cardiovascular risk factor comparing another Janus kinase (JAK) inhibitor to tumor necrosis factor (TNF) blockers, a higher rate of all-cause mortality, including sudden cardiovascular death, was observed with the JAK inhibitor.

Consider the benefits and risks for the individual patient prior to initiating or continuing therapy with Olumiant.

MALIGNANCIES

Lymphoma and other malignancies have been observed in patients treated with Olumiant. In RA patients treated with another JAK inhibitor, a higher rate of malignancies (excluding non-melanoma skin cancer [NMSC]) was observed when compared with TNF blockers. Patients who are current or past smokers are at additional increased risk. A higher rate of lymphomas was observed in patients treated with the JAK inhibitor compared to those treated with TNF blockers. A higher rate of lung cancers and an additional increased risk of overall malignancies were observed in current or past smokers treated with the JAK inhibitor compared to those treated with TNF blockers.

Consider the benefits and risks for the individual patient prior to initiating or continuing therapy with Olumiant, particularly in patients with a known malignancy (other than successfully treated NMSC), who develop a malignancy, and patients who are current or past smokers.

NMSCs have been reported in patients treated with Olumiant. Periodic skin examination is recommended for patients who are at increased risk for skin cancer.

MAJOR ADVERSE CARDIOVASCULAR EVENTS

In RA patients 50 years of age and older with at least one cardiovascular risk factor treated with another JAK inhibitor, a higher rate of major adverse cardiovascular events (MACE) (defined as cardiovascular death, myocardial infarction [MI], and stroke) was observed when compared with TNF blockers. Patients who are current or past smokers are at additional increased risk. Discontinue Olumiant in patients...
that have experienced a myocardial infarction or stroke.

Consider the benefits and risks for the individual patient prior to initiating or continuing therapy with Olumiant, particularly in patients who are current or past smokers and patients with other cardiovascular risk factors. Inform patients about the symptoms of serious cardiovascular events and the steps to take if they occur.

**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. In RA patients 50 years of age and older with at least one cardiovascular risk factor treated with another JAK inhibitor, a higher rate of thrombosis was observed when compared with TNF blockers. Avoid Olumiant in patients at risk. Discontinue Olumiant and promptly evaluate patients with symptoms of thrombosis.

**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/mm$^3$) compared to placebo. Avoid initiation or interrupt Olumiant treatment in patients with an ANC <1000 cells/mm$^3$. Evaluate at baseline and thereafter according to routine patient management.

- **Lymphopenia** – Absolute lymphocyte count (ALC) <500 cells/mm$^3$ 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/mm$^3$. 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**

Most common adverse reactions include: upper respiratory tract infections (16.3%, 11.7%), nausea (2.7%, 1.6%), herpes simplex (0.8%, 0.7%), and herpes zoster (1.0%, 0.4%) for Olumiant 2 mg and placebo, respectively.

**PREGNANCY AND LACTATION**

Limited data on Olumiant use in pregnant women are not sufficient to inform a drug-associated risk for major birth defects or miscarriage. Advise women not to breastfeed during treatment with Olumiant.

**HEPATIC AND RENAL IMPAIRMENT**

Olumiant is not recommended in patients with severe hepatic or severe renal impairment.

Please click to access full Prescribing Information, including Boxed Warning about Serious Infections, Mortality, Malignancy, Major Adverse Cardiovascular Events, and Thrombosis, and Medication Guide.

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About Lilly in Immunology

Lilly is bringing our heritage of championing groundbreaking, novel science to immunology and is driven to change what's possible for people living with autoimmune diseases. There are still significant unmet needs, as well as personal and societal costs, for people living with a variety of
autoimmune diseases and our goal is to minimize the burden of disease. Lilly is investing in leading-edge clinical approaches across its immunology portfolio in hopes of transforming the autoimmune disease treatment experience. We’ve built a deep pipeline and are focused on advancing cutting edge science to find new treatments that offer meaningful improvements to support the people and the communities we serve.

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. P-LLY

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 follow @Incyte.

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Lilly Forward-Looking Statement

This press release contains forward-looking statements (as that term is defined in the Private Securities Litigation Reform Act of 1995) about OLMUANT (baricitinib) as a treatment for patients with rheumatoid arthritis and as a possible treatment for 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 drug 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 OLMUANT 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.


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