Lilly to present initial clinical data for first-in-class type II JAK2 inhibitor in patients with previously treated myelofibrosis at the 2026 EHA Annual Meeting

June 13, 2026

INDIANAPOLIS, June 13, 2026 /PRNewswire/ -- Eli Lilly and Company (NYSE: LLY) today announced new data from the Phase 1 AJX-101 study showing that its investigational type II JAK2 inhibitor (AJ1-11095) demonstrated an encouraging safety profile and promising clinical activity in patients with myelofibrosis who have been failed by a type I JAK2 inhibitor. This first-in-class type II JAK2 inhibitor was designed to selectively bind the type II conformation of the JAK2 kinase in order to potentially provide greater efficacy than existing therapies and a novel treatment option for patients who become resistant to type I JAK2 inhibitors. Lilly recently added this program to its pipeline following the completion of the acquisition of Ajax Therapeutics, Inc.

These data will be highlighted in an oral presentation at the 2026 European Hematology Association (EHA) Annual Meeting taking place in Stockholm, Sweden (Abstract number: S218) and featured in the meeting's press program.

"Patients with myelofibrosis who have been previously treated with an existing type I JAK2 inhibitor face very limited treatment options, highlighting an urgent need for new therapies," said John Mascarenhas, MD, professor of medicine, Icahn School of Medicine at Mount Sinai and principal investigator of the AJX-101 study. "These early clinical findings suggest that selective targeting of the type II conformation of JAK2 may provide a differentiated approach. With an encouraging safety profile, meaningful spleen size reduction, symptom improvement, and decrease in underlying mutant disease burden, these data, while early, point to the potential to meaningfully impact treatment options for people with certain myeloproliferative neoplasms."

AJX-101 is the first clinical trial to evaluate a type II selective JAK2 inhibitor in patients with myelofibrosis. The trial enrolled 23 patients across five dose levels (25, 50, 75, 100, and 125 mg once daily) in its dose escalation phase. Patients had received a median of two prior therapies, and all had previously received a type I JAK2 inhibitor. The trial enrolled patients across all major myelofibrosis subtypes and driver mutations.

AJ1-11095 demonstrated responses across the standard efficacy endpoints of spleen volume reduction and symptom improvement.[1] The SVR35 rate, a reduction in spleen volume of at least 35%, was observed as best response in 70% of patients. The TSS50 rate, indicating at least a 50% improvement in symptom burden, was also seen in 70% of patients at week 12. In addition, reductions in driver mutation variant allele frequency (VAF) were observed in 21 out of 23 patients. Among the 17 patients who reached week 24 of treatment, 59% saw a reduction of 20% or greater and 35% saw a reduction of 50% or greater, including JAK2, MPL, and CALR type 1 and type 2 mutations. VAF reductions are uncommonly observed with existing type I JAK2 inhibitors.[2]

The overall safety profile for the medicine was generally manageable. No dose-limiting toxicities were observed, and most patients enrolled in the dose escalation phase remain on study (78%).[3] The most common treatment-emergent adverse events across all dose levels included anemia, dysgeusia, decreased platelet count, and increased alanine aminotransferase.

"The depth of response seen across spleen, symptoms, and VAF from these early phase results is in excess of what has been seen historically in this disease setting," said Jacob Van Naarden, executive vice president and president of Lilly Oncology. "These data provide clear proof of concept for what this selective type II JAK2 inhibitor could mean for patients with myelofibrosis and shed light on the conviction we brought to the acquisition of Ajax. With this program now officially part of Lilly's pipeline, we are committed to rapidly advancing it through clinical development and further exploring its potential to meaningfully improve outcomes for people with myeloproliferative neoplasms across a range of disease settings."

AJ1-11095 is currently being evaluated in an expansion cohort in second-line myelofibrosis, with plans to investigate in patients with high-risk polycythemia vera and those with myelofibrosis who have not yet received a JAK2 inhibitor. Details on the AJX-101 trial can be found by visiting clinicaltrials.gov.

About AJ1-11095
AJ1-11095 is an investigational, oral, first-in-class type II JAK2 inhibitor. AJ1-11095 is designed to bind JAK2 in its inactive conformation — an approach intended to more completely suppress the aberrant signaling that drives myelofibrosis, in contrast to currently approved JAK2 inhibitors that bind JAK2 in its active state. AJ1-11095 demonstrated superior activity compared to ruxolitinib in preclinical models of myelofibrosis. AJ1-11095 is currently being studied in AJX-101, a global, open-label, multicenter, Phase 1 study in patients with primary myelofibrosis, post-polycythemia vera myelofibrosis, or post-essential thrombocythemia myelofibrosis who have previously been treated with a type I JAK2 inhibitor, NCT06343805.

About Lilly
Lilly is a medicine company turning science into healing to make life better for people around the world. We've been pioneering life-changing discoveries for 150 years, and today our medicines help tens of millions of 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/news, or follow us on Facebook, Instagram, and LinkedIn. P-LLY

Trademarks and Trade Names
All trademarks or trade names referred to in this press release are the property of the company, or, to the extent trademarks or trade names belonging to other companies are referenced in this press release, the property of their respective owners. Solely for convenience, the trademarks and trade names in this press release are referred to without the ® and ™ symbols, but such references should not be construed as any indicator that the company or, to the extent applicable, their respective owners will not assert, to the fullest extent under applicable law, the company's or their rights thereto. We do not intend the use or display of other companies' trademarks and trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

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 AJ1-11095 as a potential treatment for adults with myelofibrosis and other myeloproliferative neoplasms, and the timeline for future studies, regulatory submissions, presentations, and other milestones relating to AJ1-11095 and the AJX-101 clinical program, and reflects Lilly'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 is no guarantee that planned or ongoing studies will be completed as planned or that future study results will be consistent with study results to date. For further discussion of these and other risks and uncertainties that could cause actual results to differ from Lilly's expectations, see Lilly's 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: Megan Talon; megan.talon@lilly.com (Media)
Michael Czapar; czapar_michael_c@lilly.com (Investors)

---

[1] May 28, 2026 data cutoff
[2] Meyer SC et al Cancer Cell 2015: 28:P15-28
[3] May 12, 2026 data cutoff

View original content to download multimedia:https://www.prnewswire.com/news-releases/lilly-to-present-initial-clinical-data-for-first-in-class-type-ii-jak2-inhibitor-in-patients-with-previously-treated-myelofibrosis-at-the-2026-eha-annual-meeting-302799309.html

SOURCE Eli Lilly and Company