



Pfizer Announces Positive Top-Line Results from Third Phase 3 Trial of Abrocitinib for Moderate to Severe Atopic Dermatitis, Which Showed Improvements in Skin Clearance, Disease Extent and Severity, and Itch

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JADE COMPARE trial met all co-primary endpoints Study included dupilumab in active control arm Safety profile for abrocitinib consistent with previous studies

Pfizer Inc. (NYSE:PFE) announced today that JADE COMPARE (B7451029) met its co-primary efficacy endpoints. The Phase 3 study evaluated the safety and efficacy of abrocitinib, an investigational oral once-daily Janus kinase 1 (JAK1) inhibitor, in adults with moderate to severe atopic dermatitis who were also on background topical therapy. The study also included an active control arm, dupilumab, a biologic treatment administered by subcutaneous injection, compared with placebo.

“It was helpful to study abrocitinib in combination with topical therapies to provide data relevant to the real-world setting,” said Michael Corbo, PhD, Chief Development Officer, Inflammation & Immunology, Pfizer Global Product Development. “The addition of an active control was also important to better understand the significance of this potential new medicine and we’re encouraged by the positive data from this trial.”

These data, along with other results from other pivotal trials, MONO-1 and MONO-2, will support filings with regulatory bodies, starting with the US Food and Drug Administration

(FDA) planned for later this year.

JADE COMPARE Top-Line Results

Results showed that the percentage of patients achieving each co-primary efficacy endpoint at Week 12 was statistically superior with both doses of abrocitinib than with placebo. Superiority to placebo with both doses was maintained at Week 16. Dupilumab, the active control on these primary endpoints, demonstrated superiority to placebo at Week 12 and Week 16.

As a key secondary endpoint, the percentage of patients who had a clinically significant reduction in itch by Week 2 of treatment was statistically superior for the 200mg abrocitinib dose compared to dupilumab and numerically higher, but not statistically significantly higher, for the 100mg abrocitinib dose compared to dupilumab.

The safety profile seen with abrocitinib was consistent with previous studies. Safety results showed that a larger percentage of patients receiving abrocitinib 200mg experienced adverse events (61.9%) than in other treatment arms. The percentages of patients experiencing adverse events were similar for placebo (53.4%), abrocitinib 100mg (50.8%), and dupilumab (50%). The percentage of patients experiencing serious adverse events and adverse events leading to study discontinuation were similar across the placebo (3.8% each), abrocitinib 100mg (2.5% each), abrocitinib 200mg (0.9% and 4.4%, respectively), and dupilumab (0.8% and 3.3%, respectively) treatment arms.

JADE COMPARE Trial Design

The co-primary endpoints in the study were the proportion of patients who achieved an Investigator's Global Assessment (IGA) of clear (0) or almost clear (1) and a two-point or greater reduction from baseline at Week 12; and the proportion of patients who achieved at least a 75% or greater change from baseline in their Eczema Area and Severity Index (EASI) score at Week 12. The key secondary endpoints were the proportion of patients achieving the IGA and EASI measures at Week 16; and the proportion of patients achieving a four-point or larger reduction in itch severity from baseline measured with the Peak Pruritus Numerical Rating Scale (PP-NRS) at Week 2. The relative pruritus relief of abrocitinib was only formally compared to dupilumab at Week 2.

Full results from JADE COMPARE will be submitted for presentation at a future scientific meeting and publication in a medical journal.

The study was the third trial in the JAK1 Atopic Dermatitis Efficacy and Safety (JADE) global development program for abrocitinib. The findings follow positive results announced last year from the companion monotherapy pivotal studies included in the JADE program: JADE MONO-1 and JADE MONO-2.

Additional Details About the JADE COMPARE Study

Study participants in JADE COMPARE used non-medicated emollients at least twice a day and medicated topical therapy such as corticosteroids, calcineurin inhibitors or PDE4 inhibitors, as per protocol guidance, to treat active lesions during the study. Treatment duration was 20 weeks.

A total of 837 subjects were randomized to five treatment arms:

Abrocitinib (100mg) with dupilumab matching placebo administered by subcutaneous injection every other week from Day 1 to Week 16, followed by abrocitinib (100mg) until Week 20
Abrocitinib (200mg) with dupilumab matching placebo administered by subcutaneous injection every other week from Day 1 to Week 16, followed by abrocitinib (200mg) until Week 20
Dupilumab (300mg; with a 600mg loading dose at baseline) administered every other week with abrocitinib matching orally administered placebo once-daily from Day 1 to Week 16, followed by abrocitinib matching orally administered placebo once-daily until Week 20
Abrocitinib matching orally administered placebo once-daily with dupilumab matching subcutaneously injected placebo administered every other week from Day 1 to Week 16, followed by abrocitinib (100mg) until Week 20
Abrocitinib matching orally administered placebo once-daily with dupilumab matching subcutaneously injected placebo administered every other week from Day 1 to Week 16, followed by abrocitinib (200mg) until Week 20

For additional information about the JADE COMPARE study, please visit <https://www.clinicaltrials.gov>.

About Abrocitinib

Abrocitinib is an oral small molecule that selectively inhibits Janus kinase (JAK) 1. Inhibition of JAK1 is thought to modulate multiple cytokines involved in pathophysiology of atopic dermatitis, including interleukin (IL)-4, IL-13, IL-31, IL-22 and interferon gamma.

Abrocitinib received Breakthrough Therapy designation from the FDA for the treatment of patients with moderate to severe AD in February 2018. Breakthrough Therapy designation was initiated as part of the Food and Drug Administration Safety and Innovation Act (FDASIA) signed in 2012. As defined by the FDA, a breakthrough therapy is

a drug intended to be used alone or in combination with one or more other drugs to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. If a drug is designated as a Breakthrough Therapy, the FDA will expedite the development and review of such drug.¹

About Atopic Dermatitis

AD is a chronic skin disease characterized by inflammation of the skin and skin barrier defects.^{2,3} Lesions of AD are characterized by erythema (redness), itching, induration (hardening)/papulation (formation of papules), and oozing/crusting.^{2,3}

AD is one of the most common, chronic, relapsing childhood dermatoses, affecting up to 10% of adults and up to 20% of children worldwide.^{4,5}

About Pfizer's Immunokinase Inhibitor Leadership

The JAK pathways are believed to play an important role in inflammatory processes as they are involved in signaling for over 50 cytokines and growth factors, many of which drive immune-mediated conditions.⁶ JAK inhibition may offer patients with these conditions a potential new advanced treatment option.⁷

Pfizer's leading JAK biology and chemistry expertise combined with our research experience, has uniquely enabled the company to take a different R&D approach to that of other companies involved in JAK research, resulting in one of the broadest immunokinase inhibitor pipelines. Instead of studying a single molecule for all its potential uses, where it may not be optimal for some, Pfizer's candidates with unique selectivity profiles are purposefully matched to the conditions where we believe they have the greatest potential to, if approved, address unmet need. Pfizer has five unique immunokinase inhibitors in late-stage clinical trials for the potential treatment of ten immune-mediated diseases:

Abrocitinib: A JAK inhibitor in phase 3 clinical trials for the potential treatment of moderate-to-severe AD among adolescents and adults
PF-06651600: An oral, JAK3/TEC family kinase inhibitor in a phase 3 clinical trial for the potential treatment of alopecia areata (AA) and in phase 2 for vitiligo, Crohn's disease (CD), and ulcerative colitis (UC)
PF-06700841: A tyrosine kinase 2 (TYK2)/JAK1 inhibitor in phase 2 clinical trials for the potential treatment of psoriasis and AD in topical formulation, and, in oral formulation for psoriatic arthritis, CD, UC, vitiligo, systemic lupus erythematosus (SLE), AA and hidradenitis suppurativa (HS)
PF-06826647: A TYK2 inhibitor under investigation in phase

2 clinical trials for the potential treatment of psoriasis and HS PF-06650833: An IL-1 receptor associated kinase 4 (IRAK4) inhibitor under investigation for the potential treatment of rheumatoid arthritis and HS in phase 2 clinical trials

Pfizer Inc.: Breakthroughs that Change Patients' Lives

At Pfizer, we apply science and our global resources to bring therapies to people that extend and significantly improve their lives. We strive to set the standard for quality, safety and value in the discovery, development and manufacture of health care products, including innovative medicines and vaccines. Every day, Pfizer colleagues work across developed and emerging markets to advance wellness, prevention, treatments and cures that challenge the most feared diseases of our time. Consistent with our responsibility as one of the world's premier innovative biopharmaceutical companies, we collaborate with health care providers, governments and local communities to support and expand access to reliable, affordable health care around the world. For more than 150 years, we have worked to make a difference for all who rely on us. We routinely post information that may be important to investors on our website at www.pfizer.com. In addition, to learn more, please visit us on www.pfizer.com and follow us on Twitter at @Pfizer and @Pfizer_News, LinkedIn, YouTube and like us on Facebook at [Facebook.com/Pfizer](https://www.facebook.com/Pfizer).

DISCLOSURE NOTICE: The information contained in this release is as of March 18, 2020. Pfizer assumes no obligation to update forward-looking statements contained in this release as the result of new information or future events or developments.

This release contains forward-looking information about a product candidate, abrocitinib, and Pfizer's ongoing investigational programs in kinase inhibitor therapies, including their potential benefits, that involves substantial risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements. Risks and uncertainties include, among other things, the uncertainties inherent in research and development, including the ability to meet anticipated clinical endpoints, commencement and/or completion dates for our clinical trials, regulatory submission dates, regulatory approval dates and/or launch dates, as well as the possibility of unfavorable new clinical data and further analyses of existing clinical data; the risk that clinical trial data are subject to differing interpretations and assessments by regulatory authorities; whether regulatory authorities will be satisfied with the design of and results from our clinical studies; whether and when drug applications may be filed in any jurisdictions for any potential indication for abrocitinib or any other investigational kinase inhibitor therapies; whether and when any such applications may be approved by regulatory authorities, which will depend on myriad factors, including making a

determination as to whether the product's benefits outweigh its known risks and determination of the product's efficacy and, if approved, whether abrocitinib or any such other investigational kinase inhibitor therapies will be commercially successful; decisions by regulatory authorities impacting labeling, manufacturing processes, safety and/or other matters that could affect the availability or commercial potential of abrocitinib or any other investigational kinase inhibitor therapies; and competitive developments.

A further description of risks and uncertainties can be found in Pfizer's Annual Report on Form 10-K for the fiscal year ended December 31, 2019 and in its subsequent reports on Form 10-Q, including in the sections thereof captioned "Risk Factors" and "Forward-Looking Information and Factors That May Affect Future Results", as well as in its subsequent reports on Form 8-K, all of which are filed with the U.S. Securities and Exchange Commission and available at www.sec.gov and www.pfizer.com.

1 U.S. Food and Drug Administration. Fact Sheet: Breakthrough Therapies at <https://www.fda.gov/RegulatoryInformation/LawsEnforcedbyFDA/SignificantA...> accessed on August 16, 2019. 2 Hanifin JM, Reed ML. A population-based survey of eczema in the United States. *Dermatitis*. 2007;18(2):82-91. 3 Bieber T. Atopic dermatitis. *Dermatology*. 2012;1(3):203-217. 4 Oszukowska M, Michalak I, Gutfreund K, et al. Role of primary and secondary prevention in atopic dermatitis. *Postep Derm Alergol*. 2015;32(6):409-420. 5 Nutten S. Atopic dermatitis: global epidemiology and risk factors. *Ann Nutr Metab*. 2015;66(suppl 1):8-16. 6 Banerjee, S., Biehl, A., Gadina, M. et al. JAK-STAT Signaling as a Target for Inflammatory and Autoimmune Diseases: Current and Future Prospects. *Drugs*. 2017;77: 521. <https://doi.org/10.1007/s40265-017-0701-9>. 7 Telliez JB, Dowty ME, Wang L, Jussif J, Lin T, Li L, et al. Discovery of a JAK3-selective inhibitor: functional differentiation of JAK3-selective inhibition over pan-JAK or JAK1-selective inhibition. *ACS Chem Biol*. 2016;11(12):3442-51. doi:10.1021/acscchembio.6b00677.

Media: Steve Danehy 212-733-1538 Steven.Danehy@pfizer.com Investors: Ryan Crowe 212-733-8160 Ryan.Crowe@pfizer.com