



Pfizer Announces Oral Tofacitinib Meets Primary Endpoints In Pivotal Phase 3 Psoriasis Trials

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Detailed Results from OPT Pivotal Studies Along with Integrated Analysis of Safety Data from Psoriasis Global Clinical Development Program Presented at 73rd American Academy of Dermatology (AAD) Annual Meeting

Pfizer Inc. (NYSE:PFE) announced today the presentation of detailed pooled results from two pivotal Phase 3 studies from the Oral treatment Psoriasis Trials (OPT) program at the 73rd American Academy of Dermatology (AAD) Annual Meeting. These results, evaluating the efficacy and safety of tofacitinib citrate for the treatment of adults with moderate to severe chronic plaque psoriasis who are candidates for systemic therapy or phototherapy, have been selected for oral presentation during the Pearls from the Posters New and Noteworthy Research Finds [abstract 2020]. Additionally, an integrated analysis of safety data from the OPT global clinical development program for tofacitinib was presented during the Late-Breaking Research in Dermatology Forums [abstract 2587].

"We are excited about the data presented at AAD as it adds to the body of evidence for oral tofacitinib in patients with moderate to severe plaque psoriasis. Results from these studies, which are part of the Phase 3 OPT clinical development program, supported Pfizer's recent FDA filing seeking a psoriasis indication in the United States," said Steve Romano, MD, senior vice president and Head, Global Medicines Development for the Pfizer Global Innovative Pharmaceutical business.

OPT Pivotal #1 and OPT Pivotal #2 Data Results

The detailed, pooled analysis of 16 week data from the OPT Pivotal #1 and OPT Pivotal #2 studies showed that tofacitinib 10 mg and 5 mg tablets twice daily met the co-primary efficacy endpoints of superiority over placebo at 16 weeks in the proportion of patients achieving a Physician's Global Assessment (PGA) response of "clear" or "almost clear," and the proportion of patients achieving at least a 75% reduction in Psoriasis Area and Severity Index (PASI75), two commonly used measures of efficacy in psoriasis. Both the tofacitinib 10 mg and 5 mg twice-daily doses showed statistically significant superiority over placebo for key secondary efficacy endpoints presented at AAD, including proportion of patients achieving $\geq 90\%$ reduction in PASI (PASI90) relative to baseline at Week 16, percent change from baseline in Body Surface Area (BSA) at Week 16, change from baseline in Dermatology Life Quality Index (DLQI) at Week 16, and percent change from baseline in Nail Psoriasis Severity Index (NAPSI) at Week 16 in patients with nail psoriasis.

| OPT Pivotal #1 and OPT Pivotal #2 Pooled Efficacy Results at Week 16 Primary Endpoints* | | | | | | | | | |
|---|--|--|-------------|--|--|--|--|--|--|
| Tofacitinib | | | Placebo | | | | | | |
| 10 mg | | | 5 mg | | | PGA response "clear" or "almost clear" (% of patients) | | | |
| 59.4% | | | 43.1% | | | 59.1% | | | |
| 8.9% | | | 8.9% | | | PASI75 (% of patients) | | | |
| 59.4% | | | 43.1% | | | 59.1% | | | |
| Secondary Endpoints* | | | Tofacitinib | | | Placebo | | | |
| 10 mg | | | 5 mg | | | | | | |
| PASI90 (% of patients) | | | 39.1% | | | 22.2% | | | |
| 39.1% | | | 22.2% | | | 3.0% | | | |
| DLQI (mean change from baseline) | | | -8.9 | | | -7.1 | | | |
| -8.9 | | | -7.1 | | | -2.4 | | | |
| BSA (% of patients) | | | -20.2 | | | -15.8 | | | |
| -20.2 | | | -15.8 | | | -1.6 | | | |
| NAPSI (% change from baseline) | | | -10.5 | | | -7.9 | | | |
| -10.5 | | | -7.9 | | | -0.4 | | | |

*p<0.0001 vs. placebo for all endpoints

The safety profile of tofacitinib in the OPT Pivotal #1 and OPT Pivotal #2 studies was similar to previous Phase 3 studies, and no new safety signals were observed in the studies. Among the approximately 1,800 patients in the Week 0-16 study data, the most common adverse events (AEs) ($\geq 5\%$ in any treatment group in the pooled data for OPT Pivotal #1 and OPT Pivotal #2) reported in both studies were nasopharyngitis, upper respiratory infection and headache. Rates of serious AEs were similar between active treatment and placebo arms.

| OPT Pivotal #1 and OPT Pivotal #2 Pooled Safety Results at Week 16 Most Common Adverse Events | | | | | | | | | |
|---|--|--|---------|------|--|-----------------|--|--|--|
| Tofacitinib | | | Placebo | | | | | | |
| 10 mg | | | 5 mg | | | Nasopharyngitis | | | |
| 8.2% | | | 7.0% | | | 8.3% | | | |
| 8.3% | | | 6.1% | | | 4.7% | | | |
| 2.9% | | | 2.9% | | | 2.9% | | | |
| Upper respiratory infection | | | 6.1% | 4.7% | | | | | |
| 6.1% | | | 4.7% | | | 2.9% | | | |
| Headache | | | 5.7% | 5.5% | | | | | |
| 5.7% | | | 5.5% | | | 2.9% | | | |
| Serious Adverse Events | | | 2.0% | 2.6% | | | | | |
| 2.0% | | | 2.6% | | | 1.9% | | | |
| Rates of serious adverse events | | | 2.0% | 2.6% | | | | | |
| 2.0% | | | 2.6% | | | 1.9% | | | |

Occurrences of serious infections were similar between active treatment groups and placebo (0.3% in tofacitinib 10 mg twice-daily dose, 0.4% in tofacitinib 5 mg twice-daily dose and 0.5% in placebo). Two deaths were reported in the tofacitinib 5 mg treatment group within the first 16 weeks, one each in OPT Pivotal #1 and OPT Pivotal #2. Neither of the deaths was considered by the investigators to be related to tofacitinib. There were no deaths reported in the tofacitinib 10 mg treatment group in either study. There was one death reported in the placebo group of OPT Pivotal #2.

“The robust data seen in the OPT Pivotal studies presented at this meeting provide important information on the profile of oral tofacitinib for moderate to severe psoriasis, and underscore that if approved, tofacitinib may offer a clinically meaningful option in oral therapy as the first potential treatment in a new class of medicines for this chronic condition,” said lead investigator Kim A. Papp, MD, PhD, FRCPC, Probit Medical Research.

Top-line results for the studies were previously announced in April 2014.

Integrated Safety Analysis

The integrated safety analysis summarizes safety information gathered from the tofacitinib psoriasis clinical development program and included one Phase 2 trial, three 1-year Phase 3 randomized controlled trials and an ongoing long-term extension study. The safety endpoints analyzed include: serious infections, herpes zoster, malignancy (excluding non-melanoma skin cancer [NMSC]), NMSC and major adverse cardiovascular events (MACE).

Additional Pfizer Data at AAD

The following studies are also being presented at AAD:

“Comparative assessment of PASI and variations of PGAxBSA as measures of psoriasis severity in a clinical trial of moderate to severe psoriasis,” Walsh J, Mallbris L, Tan H, et. al. [1830; March 22, 2015, 9:00 a.m. – 9:05 a.m.] “Undertreatment of patients with moderate to severe psoriasis in the United States: a study of medication usage with health-plan data,” Armstrong A, Koning J, Rowse S, et. al. [2006; March 22, 2015, 4:50 p.m. – 4:55 p.m.] “Early clinical response as a predictor of efficacy in moderate to severe psoriasis patients treated with tofacitinib in a Phase 2 study,” Gordon K, Strober B, Tan H, et. al. [2001; March 22, 2015, 9:55 a.m. – 10:00 a.m.] “A model-based meta-analysis for dose-response comparison of psoriasis treatments,” Gupta P, Mandema J, Ahadieh S, et. al. [1953; March 22, 2015, 7:05 a.m. – 7:10 a.m.]

A supplemental new drug application (sNDA) for tofacitinib 10 mg and 5 mg tablets is currently under review with the U.S. Food and Drug Administration (FDA) for the treatment of adult patients with moderate to severe chronic plaque psoriasis who are candidates for systemic therapy or phototherapy. The FDA has provided an anticipated Prescription Drug User Fee Act (PDUFA) date of October 2015.

About the OPT Clinical Trial Program

The Phase 3 OPT clinical trial program is a global, comprehensive clinical development program that includes over 3,600 patients in 36 countries, and is one of the largest global clinical trial programs in moderate to severe chronic plaque psoriasis to date. In addition to the OPT Pivotal #1 and OPT Pivotal #2 studies, the OPT Program includes the following Phase 3 studies of tofacitinib in adults with moderate to severe chronic plaque psoriasis:

OPT Compare (A3921080): A 12-week, Phase 3 study comparing the efficacy and safety of tofacitinib 5 mg and 10 mg twice daily to ENBREL® (etanercept) 50 mg twice weekly as well as to placebo. OPT Retreatment (A3921111): A Phase 3 study evaluating the efficacy and safety of the withdrawal from, and then the retreatment with, tofacitinib 5 mg and 10 mg twice daily compared to placebo. OPT Extend (A3921061): An ongoing long-term extension study evaluating the safety and tolerability of tofacitinib. Patients who participated in the Phase 2 or Phase 3 studies had the option, if eligible, to enroll in this study.

About Plaque Psoriasis

Psoriasis is a chronic, immune-mediated inflammatory skin disease, affecting the skin and other parts of the body, such as nails. It affects approximately two-to-three percent of people worldwide and 7.4 million people in the United States.^{1,2,3,4,5,6,7} The most common form is plaque psoriasis, which affects about 80 percent of people who have the condition.⁸ Of those, as many as 20 percent have moderate to severe chronic plaque psoriasis.⁶ A need for additional therapies remains. According to recently published surveys, approximately 50 percent of patients with psoriasis are dissatisfied with their treatment. Under-treatment also represents a significant problem. Even though guidelines typically state that patients with moderate to severe psoriasis are candidates for systemic therapy, many treated adult plaque psoriasis patients appear to be undertreated, with approximately 30 percent of treated moderate patients and 22 percent of treated severe patients receiving only topical therapy in the United States.⁹

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DISCLOSURE NOTICE: The information contained in this release is as of March 20, 2015. 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 potential new indication for tofacitinib for the treatment of adult patients with moderate-to-severe chronic plaque psoriasis (the "Potential Indication"), including its 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, without limitation, the possibility of unfavorable clinical trial results, including unfavorable new clinical data and additional analyses of existing clinical data; whether and when any applications may be filed with regulatory authorities in jurisdictions other than the United States for tofacitinib for the Potential Indication; whether and when the FDA may approve the supplemental new drug application for tofacitinib for the Potential Indication and whether and when regulatory authorities in other jurisdictions may approve any such other applications, which will depend on the assessment by such regulatory authorities of the benefit-risk profile suggested by the totality of the efficacy and safety information submitted; decisions by regulatory authorities regarding labeling and other matters that could affect the availability or commercial potential of tofacitinib for the Potential Indication; 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, 2014 and in its subsequent reports on Form 10-Q, including in the sections thereof captioned "Risk Factors" and "Forward-Looking Information That May Affect Future Results", as well as in its subsequent reports

on Form 8-K, all of which are filed with the SEC and available at www.sec.gov and www.pfizer.com.

1 Levy L, Solomon S, Emer J. Dove Medical Press Ltd. Psoriasis: Targets and Therapy 2012;2 29-43.

2 Rachakonda T, Schupp CW, Armstrong AW. Psoriasis prevalence among adults in the United States. J Am Acad Dermatol 2014; 70 (3):512-16.

3 Augustin M, Alvaro-Gracia JM, Bagot M., et al. A framework for improving the quality of care for people with psoriasis. J Eur Acad Dermatol. 2012;26 (Suppl. 4):1-16.

4 Perera GK, Di Meglio P, Nestle FO. Psoriasis. Annu Rev Pathol Mech Dis. 2012;7:385-422.

5 Nestle FO, Kaplan DH, Barker J. Psoriasis. N Engl J Med. 2009;361(5):496-509.

6 Menter A, Gottlieb A, Feldman SR, et al. Guidelines of care for the management of psoriasis and psoriatic arthritis: Section 1. Overview of psoriasis and guidelines of care for the treatment of psoriasis with biologics. J Am Acad Dermatol. 2008;58(5):826-50.

7 Johnson MA, Armstrong AW. Clinical and histologic diagnostic guidelines for psoriasis: a critical review. Clin Rev Allerg Immunol. 2013;44(2):166-172.

8 American Academy of Dermatology. Psoriasis. Available at: <https://www.aad.org/media-resources/stats-and-facts/conditions/psoriasis>. January 13, 2015.

9 Armstrong, A. Undertreatment, Treatment Trends, and Treatment Dissatisfaction Among Patients With Psoriasis and Psoriatic Arthritis in the United States. Findings From the National Psoriasis Foundation Surveys, 2003-2011. JAMA Dermatology. 2013; 5264.

Pfizer Inc. Media: Steven Danehy, M: 978-273-3946
Steven.Danehy@pfizer.com or Investor: Chuck Triano, O: 212-733-3901
Charles.E.Triano@pfizer.com