Background

Tofacitinib (Xeljanz®) is an oral Janus kinase inhibitor used to treat rheumatoid arthritis. Its availability has led to an increase in utilization among patients with rheumatoid arthritis. However, the long-term persistence of tofacitinib in the real world remains largely unknown.

Methods

To evaluate tofacitinib utilization patterns and persistence in order to develop management strategies, these programs should emphasize the use of a tofacitinib real world utilization patterns and persistency analysis were limited to tofacitinib and Blue Shield clients with a combined average of over 0.5 years follow-up. As RA is a chronic disease, this is a high discontinuation rate after a short period of therapy.

Conclusions

Although tofacitinib utilization has been low, it has increased steadily from the FDA approval of the drug in 2012. This has led to an increase in the number of RA patients who are being treated with tofacitinib. However, the long-term persistence of tofacitinib in the real world remains largely unknown.

The data in this study is limited to a continuously enrolled commercial population in the United States. Existing records were not available for Medicare populations for the purpose of this study. Eligibility criteria for this study were as follows: RA patients with a diagnosis of RA from January 2012 to December 2015. This population was censored in the future.

Price and concurrent DMARD assessment

Price and concurrent DMARD assessment was defined as a DMARD claim in the 12 months preceding the tofacitinib index date for at least 4 months and a concurrent DMARD claim in the 12 months preceding the tofacitinib index date for at least 4 months. The number of members with a tofacitinib claim who had a concurrent DMARD claim was 129 (16.7 percent) for any biologic DMARD, 528 (61.3 percent) for any non-biologic DMARD, and 642 (74.5 percent) for any non-biologic DMARD.

Tofacitinib utilizers without an RA diagnosis had an inadequate response or intolerance to prior DMARD therapy. The most common reasons for changing to a biologic DMARD was a lack of response or intolerance to a prior DMARD in 74 percent of members in this study versus 80 percent in the retrospective cohort analysis, a biologic DMARD claim was 74 percent in this study versus 80 percent in the retrospective cohort analysis.

DMARD claim between the tofacitinib index date and the last tofacitinib claim before discontinuation was active for approximately 80 percent of the year follow-up. As RA is a chronic disease, this is a high discontinuation rate after a short period of therapy.

Eligibility: 862 members in this graph were commercially insured, continuously enrolled from 2012 to 2015, and less than 70 years of age as of Dec. 31, 2015 with at least one tofacitinib index date during Dec. 2012. The number of members with at least one tofacitinib claim in the 12 months before tofacitinib therapy was: a medical claim was 61 percent versus 67 percent, a tumor necrosis factor (TNF) inhibitor claim was 44 percent versus 50 percent, and a biologic DMARD claim was 61 percent versus 68 percent. Persistence analysis

Tofacitinib utilizers were defined as patients with at least one tofacitinib claim and at least one medical claim between the members' tofacitinib index date and Dec. 31, 2015.

The analysis included 4.4 million continuously enrolled commercially insured members over four years.

Results

Tofacitinib analyzable population

Tofacitinib utilizers were identified from a continuously enrolled cohort of members between January 2012 and December 2015. The mean follow-up was 16.6 months.

Tofacitinib utilization per month among a million continuously enrolled commercially insured members from 2012 through 2015 (Figure 1)

Tofacitinib utilization growth rate was as high as 350 members per 100,000 continuously enrolled members from January 2012 through December 2015. The utilization rate at 50 members per 100,000 commercially insured members per month was lower than expected. Tofacitinib utilizers were identified as patients with at least one tofacitinib claim in the 12 months before tofacitinib therapy was: a medical claim was 61 percent versus 67 percent, a tumor necrosis factor (TNF) inhibitor claim was 44 percent versus 50 percent, and a biologic DMARD claim was 61 percent versus 68 percent.

Tofacitinib utilization per month among a million continuously enrolled commercially insured members from 2012 through 2015 (Figure 2)

Tofacitinib utilizers were identified as patients with at least one tofacitinib claim in the 12 months before tofacitinib therapy was: a medical claim was 61 percent versus 67 percent, a tumor necrosis factor (TNF) inhibitor claim was 44 percent versus 50 percent, and a biologic DMARD claim was 61 percent versus 68 percent.

Tofacitinib utilization per million among a million continuously enrolled commercially insured members from 2012 through 2015 (Figure 3)

Tofacitinib utilizers were identified as patients with at least one tofacitinib claim in the 12 months before tofacitinib therapy was: a medical claim was 61 percent versus 67 percent, a tumor necrosis factor (TNF) inhibitor claim was 44 percent versus 50 percent, and a biologic DMARD claim was 61 percent versus 68 percent.

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