Impact of Alternate Mechanism of Action Biologics on Tumor Necrosis Factor Inhibitor (TNF) Prescribing in Psoriatic Arthritis: Results From a National Patient Chart Audit

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Background

Tumor necrosis factor-inhibitor (TNF) therapy has long been the standard of care for adult patients diagnosed with moderate to severe psoriatic arthritis (PsA), though several new biologics and small molecules have recently received FDA approval for the treatment of PsA.

Objectives

This research sought to understand the extent to which biologics and small molecules with a different mechanism of action (MOA) have been adopted for the treatment of psoriatic arthritis and their impact on the use of well-established TNFs in the United States.

Methods

A retrospective chart review (derived from 200 rheumatologists) of patients diagnosed with psoriatic arthritis (n=1,008) who had switched from one biologic therapy or apremilast to another in the prior twelve weeks was conducted. Data were collected in April 2017 and included clinical and non-clinical patient demographics, as well as physician demographics and attitudinal survey responses. This study was a non-longitudinal trending analysis to a 2016 audit following the same methodology.

Results

78% of the participating rheumatologists reported recent changes to the management of their patients with psoriatic arthritis (PsA). The two most commonly recalled treatment shifts were: more aggressive use of biologics in general and an increased use of non-TNF agents for the treatment of PsA (Fig. 1). With increased treatment options, US rheumatologists are switching patients more frequently and faster than previously recorded. In 2017, US rheumatologists reported that, over the course of a year, 29% of their biologic and apremilast treated patients were switched to a different brand, a figure significantly up from 2016 (25%) (Fig. 2). Furthermore, a higher percent of the audited switches occurred within six months of initiating the prior agent compared to the prior year (56% vs. 40%) (Fig. 3). In 2017, switching between TNF agents significantly decreased from 52% in 2016 to 41% in 2017, and switches from a TNF to an alternate mechanism of action (AMOA) biologic significantly increased from 13% to 20%, respectively (Fig. 3). The growth in the switching share of alternative MOAs was driven primarily by increased use of secukinumab, an interleukin-17 inhibitor approved in January 2016. While most of the secukinumab patients originated from TNF inhibitors, ustekinumab switching share was also impacted (Fig. 4). Indeed, rheumatologists indicated that 28% of the patients switched to secukinumab in 2017 would have been placed on ustekinumab if secukinumab had not been available (Fig. 5).

Conclusions

Increased biologic and small molecule options for the treatment of PsA has resulted in US rheumatologists switching patients more frequently and faster than in the past. Though TNF inhibitors remain the predominant mechanism of action for the treatment of PsA, the introduction of secukinumab has had a direct impact on the PsA switching environment in 2017 and recent approvals in the form of tofacitinib, ixekizumab, and abatacept are hypothesized to further impact the PsA switching environment in 2018.

References: RealWorld Dynamic™: Biologic and Apremilast Switching in Psoriatic Arthritis, 2017

Disclosure of Interest: None declared


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