Frequency of Inadequate Response to Treatment Among Psoriasis Patients on First-Line Biologics

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OBJECTIVE

To understand the frequency of inadequate response to first-line biologic therapies in patients with psoriasis, and the reasons underlying this lack of response, in a real-world setting.

BACKGROUND

- Psoriasis (PSO) is an immune-mediated inflammatory disease, affecting around 3% of adults in the United States¹ and 2–6% in Europe.²
- PSO can have a substantial impact on patients' quality of life, with psychosocial and emotional effects such as depression and fatigue in addition to physical symptoms.³
- Whilst treatment of patients with moderate to severe disease with biologic agents such as tumor necrosis factor inhibitors (anti-TNFs), anti-interleukin (IL)-17s and anti-IL12/13s is well-established, sub-optimal efficacy or adverse events may require switching to another biologic to improve patient outcomes.
- However, studies describing the occurrence of inadequate response (IR) to biologic treatments in the real-world setting are currently lacking.

An understanding of the frequency and reasons underlying IR may help to identify and address unmet treatment needs.

METHODS

Study Design and Inclusion Criteria

- A retrospective analysis of a commercial US healthcare claims database was conducted, including claims data from 2012–2016.
- Included patients had:
  - A qualifying PSO ICD-9/COD code
  - Initiated treatment with an anti-TNF approved for PSO, secukinumab, ustekinumab or apremilast (index date) within 2 months
  - ≥1 year of database enrollment both before and after the index date
  - Patients with prior biologic exposure in the year prior to the index date were excluded.

Definition of IR

IR was defined as:
1. ≥1 claim with a biologic dose >100% of the label-recommended dose for ≥30 days ("Above-label dosing")
2. Cessation (>2 months with no treatment) of a 1st line biologic ("Non-switch discontinuation")
3. Cessation of a 1st line biologic followed by initiation of a new biologic within 2 months ("Switch to another biologic")
4. Addition of a corticosteroid, immunosuppressant, or biologic with ≥30 days' supply overlap ("Add-on treatment")

RESULTS

Treatment Response Outcomes

- Of 13,995 patients who met the inclusion criteria, 10,213 (73.0%) experienced an IR event in the 12-month follow-up period.
- The most common IR event was non-switch discontinuation (Figure 1).

Methods and Materials

- Add-on Treatment
- Switch to another biologic
- Non-switch discontinuation
- IR (all qualifying events)
- Above-label dosing
- Switch to other biologic
- Non-switch discontinuation
- Add-on treatment

CONCLUSIONS

- Inadequate response in first-line PSO biologic treatment is common, with non-switch discontinuation being the most frequent type.
- Analysis of the longer-term outcomes of non-switch discontinuation patients may help to better characterize the reasons these patients are not persistent on the first line biologic currently. It is difficult to determine why patients would discontinue without initiating an alternate biologic.
- This highlights an opportunity to optimize available treatment options, and better understand patient needs.
- Therapeutic options with improved durability may help optimize the management of PSO, but further analysis is necessary to identify underlying causes of IR.

References:

Author Contributions:
Substantial contributions to study conception or design, acquisition, or analysis of data: AS, EL, LP, MY, RS. Drafting of the manuscript or revising it critically for important intellectual content: AS, EL, LP, MY, RS. Final approval of the publication: AS, EL, LP, MY, RS.

Acknowledgments: The study was funded by UCB Pharma. The author would like to thank the UCB website (http://www.UCB.com) for assistance with data analysis. Project funding was provided by UCB Pharma, Grunberg, USA, for publication coordination and web management. Deps: Coelho, M., and K. Clarke, C., for editorial assistance. All costs associated with development of this paper were funded by UCB Pharma.