Background: There are no direct comparisons of real-world outcomes, including costs, between apremilast and biologic therapies in moderate-to-severe plaque psoriasis (Ps). The objective of this study was to report real-world costs per persisting patient among Ps patients treated with apremilast or biologic therapy and to identify factors associated with treatment discontinuation.

Methods: Study design was a retrospective cohort analysis conducted with MarketScan Commercial and Medicare Supplemental Databases (2014–2016). Patients were included if they had a diagnosis code for Ps on different calendar dates at least 6 months apart and at least 3 months post-index. The index date was defined as the first date of apremilast or biologic therapy in the study period. Biologic users had to be treatment-naive to index medication in the pre-index period; prior use of another biologic was allowed. Apremilast cohort included patients who had at least 6 months of continuous enrollment before the index date and patients who started apremilast up to 6 months prior to the index date. Biologic users included those who started any biologic up to 6 months prior to the index date. The 6-month follow-up period ended 6 months post-index. Studies were classified as apremilast or biologic based on their users' index medication during the index period.

Results: Baseline characteristics were balanced between cohorts, except mean age (apremilast: 50.4y; biologics: 46.1y; P<0.001). Baseline Ps disease severity (10% PASI), age, gender, and income were similar between cohorts. Baseline Ps-related resource use was greater in the apremilast cohort (68.5% vs. 67.2%; P<0.001).

Conclusion: This study used a strict index date and required at least 6 months of continuous enrollment before the index date to capture clinical and patient reported outcomes measures of efficacy. Future studies may use more comprehensive databases, such as electronic medical records, to balance potential miscoding of practices of physicians’ offices, outpatient pharmacies, and hospitals; therefore, potential miscoding of medical claims and missing data are possible. This analysis only included discontinuations at 6 months among those patients who had at least 6 months of continuous insurance coverage.

REFERENCES

1. Rachakonda TD, Schupp CW, Armstrong AW. Psoriasis prevalence among adults in the United States.
6. Biologic cohort: n=1,981 (6.2%)
7. Apremilast cohort: n=839 (2.6%)
8. In US dollars.
9. Results for biologics.
10. The cost per persisting patient was lower for apremilast than for biologics.
11. Mean cumulative cost per patient over the 6-month follow-up period was $12,534 with apremilast and $18,652 with biologics. This analysis only included discontinuations at 6 months among those patients who had at least 6 months of continuous insurance coverage.
12. This analysis only included discontinuations at 6 months among those patients who had at least 6 months of continuous insurance coverage.
13. Patients with ≥2 diagnosis for Ps on different calendar dates at least 6 months apart were classified in the biologic cohort.
14. Patients were required to be continuously enrolled with full access to medical and pharmacy claims for 6 months following the index date.
15. Mean cumulative cost per patient over the 6-month follow-up period was $12,534 with apremilast and $18,652 with biologics. This analysis only included discontinuations at 6 months among those patients who had at least 6 months of continuous insurance coverage.
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46. Patients were required to be continuously enrolled with full access to medical and pharmacy claims for 6 months following the index date.
47. Mean cumulative cost per patient over the 6-month follow-up period was $12,534 with apremilast and $18,652 with biologics. This analysis only included discontinuations at 6 months among those patients who had at least 6 months of continuous insurance coverage.
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50. Patients were required to be continuously enrolled with full access to medical and pharmacy claims for 6 months following the index date.