# Treatment Utilization and Treatment Duration of Patients With Psoriasis Diagnosed With Psoriatic Arthritis in a US Commercial Administrative Claims Database

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## Introduction

- Psoriasis (PsO) is a chronic, autoimmune-related, inflammatory skin disease that causes scaly red plaques across the body
- Psoriatic arthritis (PsA) is an inflammatory joint condition related to psoriasis
- PsA is a major comorbidity for patients with PsO, with an estimated 20% of patients with PsO also developing PsA<sup>1</sup>
- Despite this significance, little is known about real-world treatment use following PsA diagnosis

# Objectives

• This study described the treatment utilization and duration of patients with PsO and comorbid PsA, before and after PsA diagnosis.

# Methods

- A retrospective claims analysis was conducted using the Inovalon Closed Claims administrative database of commercially insured members in the US.
- Patients aged 18 years or older were included if they had ≥2 medical claims,
  ≥30 days apart, with a diagnosis code for PsO between January 1, 2016 and
  December 31, 2022.
- Patient had to also have ≥2 medical claims, ≥30 days apart with a diagnosis code for PsA between January 1, 2017 and December 31, 2022, where the first claim had to occur after the initial PsO diagnosis. The date of the claim for the initial PsA diagnosis was considered the index date.
- In order to measure treatment utilization pre- and post-PsA diagnosis, included patients were required to have 12 months of pre-index (i.e., the baseline period) and post-index (i.e., the follow up period) continuous enrollment in medical and pharmacy benefits
- Baseline demographic characteristics including age, sex, and census region were captured at index for the study sample.
- Primary outcomes included utilization of branded systemic and oral generic treatments and the mean number of disease-related physician office visits during the pre- and post-index period, and treatment duration in the post-index period only.
  - Utilization was defined as the presence of at least 1 claim with a code for treatment of interest at any point during the index period. The mean number of claims per patient for branded systemic treatments was also captured.
- Time on treatment (in days) was measured from index for patients on therapy at index, or from treatment initiation for patients who initiated treatment in the follow-up period to the end of the last captured days supply.
- Disease-related physician office visits were identified based on visits with presence of a diagnosis code for PsO and/or PsA.

# Results

- A total of 38,301 patients with comorbid PsO and PsA were included.
- The mean (SD) age was 51.0 (11.0) years, and the majority of patients were <65 (93.5%). Additionally, 55% of patients in the sample were female and the majority lived in the South or Midwest region of the US at index (Table 1).

Table 1. Baseline Characteristics of Patients with PsO Diagnosed with PsA

Baseline Characteristics	No (n%)
Unique Patients	
Number of Patients	38,301 (100%)
Age	
Mean (SD)	51.0 (11.0)
25th Percentile	44
Median	53
75th Percentile	59
<65, N (%)	3,5811 (93.5%)
65-74, N (%)	2,132 (5.6%)
75-79, N (%)	253 (0.7%)
80+, N (%)	105 (0.3%)
Sex	
Male	17,265 (45%)
Female	21,034 (55%)
Census Region, N (%)	
Northeast	5,490 (14%)
Midwest	11,773 (31%)
South	13,487 (35%)
West	7,516 (20%)
Unknown	35 (0.09%)

- Prior to PsA diagnosis, the top 5 most utilized branded systemic therapies were apremilast (9.5%), secukinumab (4.3%), infliximab (2.7%), ixekizumab (1.3%), and golimumab (1.0%) and the top 3 most utilized oral generics were methotrexate (20.5%), acitretin (0.3%), and cyclosporine (0.2%).
- Following PsA diagnosis, the utilization of branded systemic therapies in the study cohort was higher, though the top 5 most utilized remained the same: apremilast (11.9%), secukinumab (8.3%), infliximab (2.8%), ixekizumab (2.7%), and golimumab (1.4%). Similarly, the top 3 most utilized oral generics were the same: methotrexate (25.6%), acitretin (0.3%), and cyclosporine (0.2%) (see Figure 1).
- Further, mean treatment duration for the branded systemic therapies was higher than for oral generics post-PsA diagnosis (see Figure 2). There were also a higher number of PsO/PsA-related physician office visits per patient in the 12 months following PsA diagnosis versus the 12 months before PsA diagnosis (see Figure 3).

Figure 1. Utilization of Top Branded Systemic and Oral Generic Treatments Before and After PsA Diagnosis

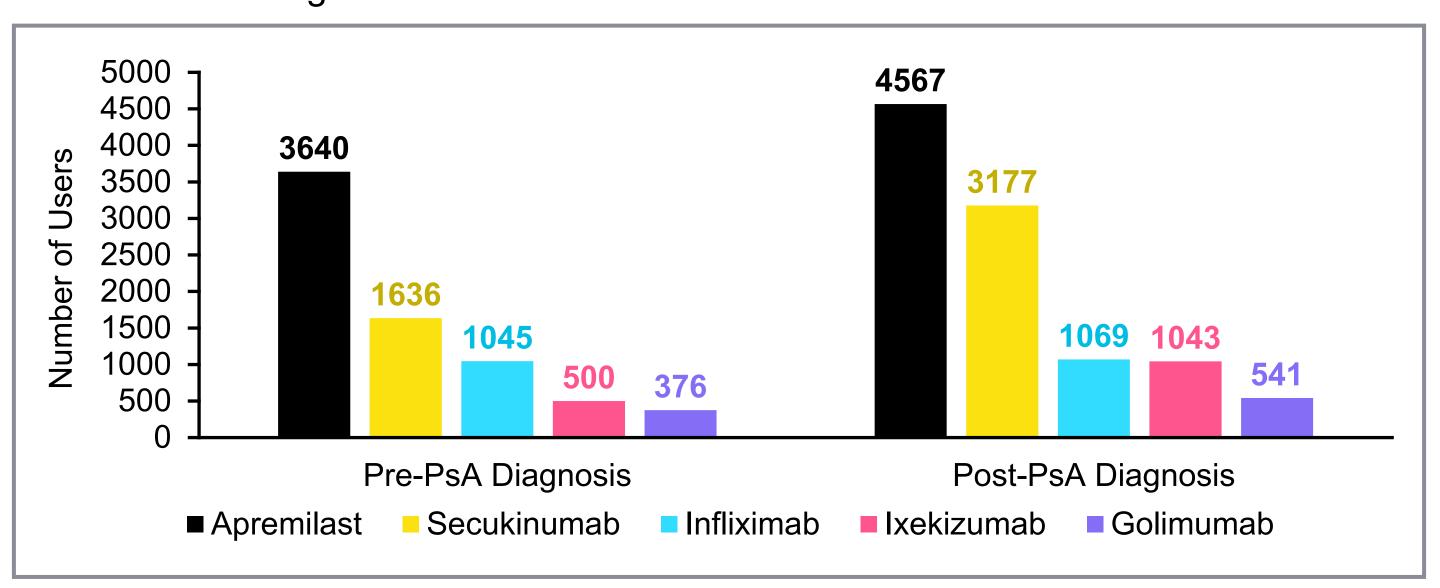
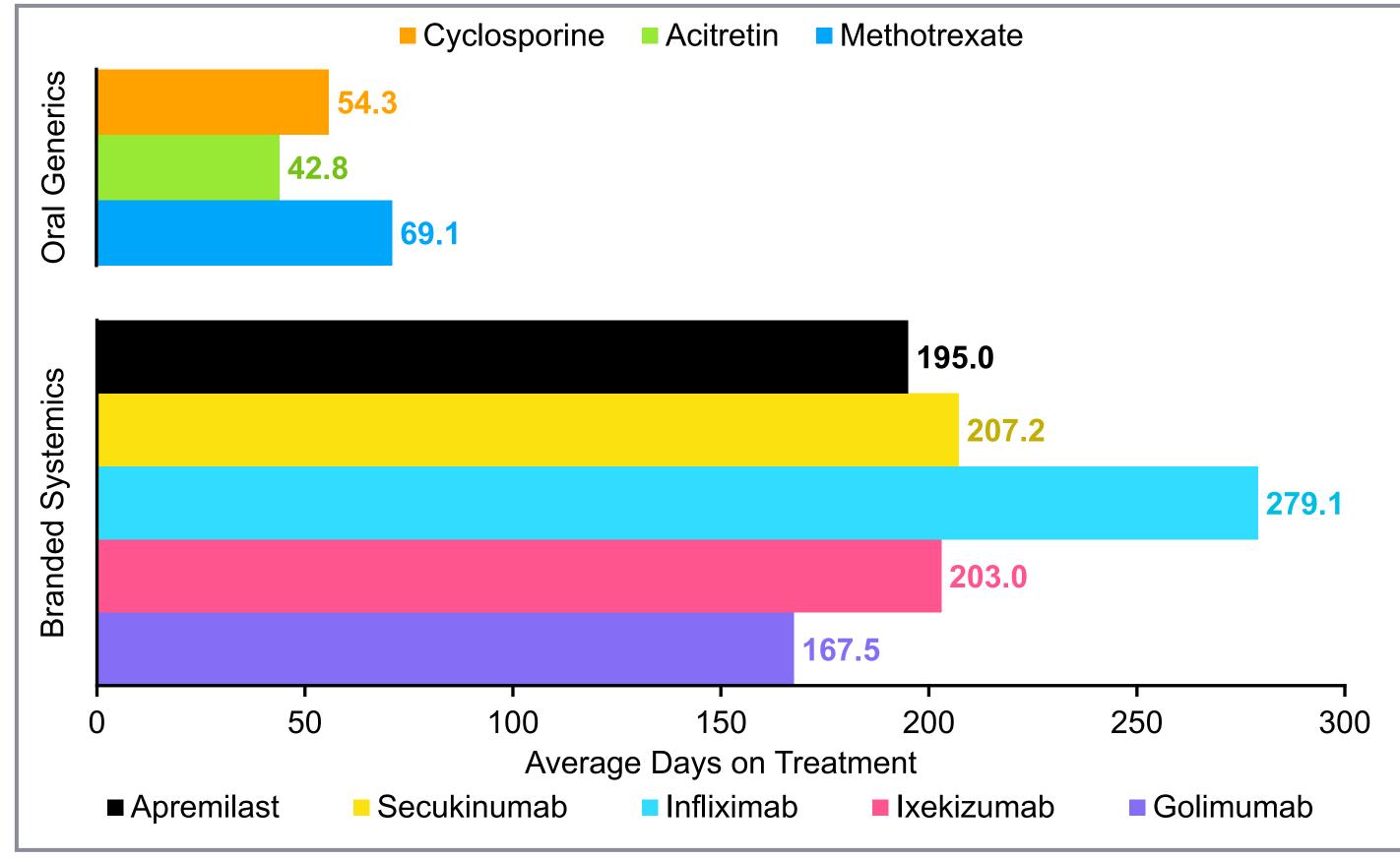
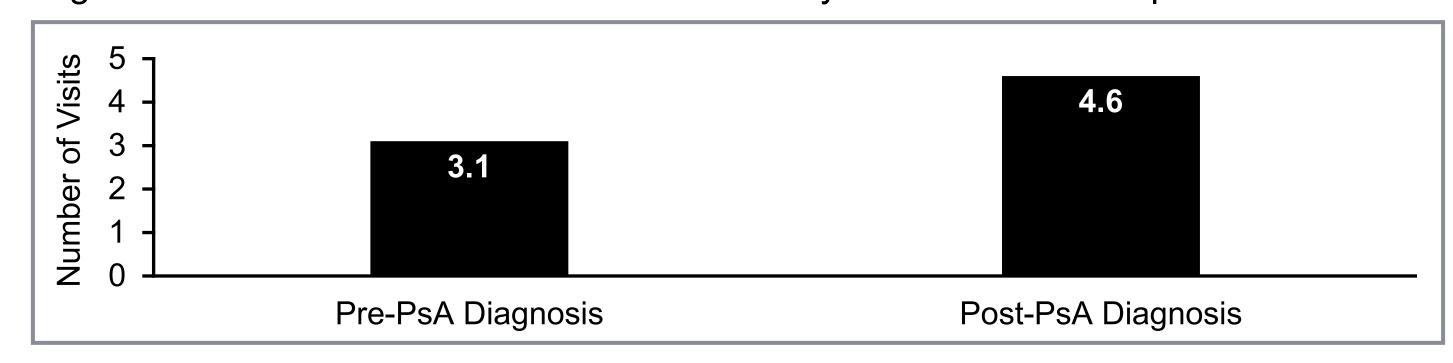


Figure 2. Mean Time on Treatment (In Days) for Branded Systemic versus Oral Generic Treatments Post- PsA Diagnosis\*



\*Time-on treatment is measured from index, if a patient is on therapy at index, or from treatment initiation, for patients initiating therapy in the follow-up period to the end of the last captured days supply

Figure 3. Mean Number of PsO/PsA-related Physician Office Visits per Patient



### Conclusions

- Branded systemic use among patients with PsO was common and increased following PsA diagnosis.
- These branded biologic treatments may offer longer treatment duration compared to oral generics.
- Providers should consider these treatment options upon comorbid diagnoses.

### References

- 1. Alinaghi, F, et al. *J Am Acad Dermatol*. 2019; 80(1):251–265
- 2. Surname A, et al. *Journal Abbrev*. 2023;13:1191–205