# Association of Ruxolitinib Cream Initiation With Continued Reduction in Use of Other Topical Treatments, Oral Corticosteroids, and Biologics for Atopic Dermatitis

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## Objective

- To describe treatment patterns before (6 months) and after (6 and 12 months) the initiation of ruxolitinib cream among patients with AD)

## Conclusions

- **Over 12 months, patients averaged 2.1 ruxolitinib cream fills**
  - **There was a continued reduction in the use of other topical therapies and oral corticosteroids during months 1–6 and 7–12 of the follow-up period**
  - **More than 90% of biologic-naive patients avoided biologics during months 1–6 and 7–12 after starting ruxolitinib cream**
  - **Approximately 25% of patients who used biologics at baseline did not continue use in the 7 to 12-month period, an increase compared with 16% in the first 6 months**
- **This 12-month analysis further supports earlier 6-month findings[7] that ruxolitinib cream may reduce the need of other topical therapies, oral corticosteroids, and biologics in patients with AD**

## Abbreviations

AD, atopic dermatitis; FDA, Food and Drug Administration; HIRD®, Healthcare Integrated Research Database; JAK, Janus kinase; PDE-4, phosphodiesterase-4; TCI, topical calcineurin inhibitor; TCS, topical corticosteroid

## Disclosures

JL and DS are employees and shareholders of Incyte Corporation. KD, C-CT, GS, PC, and VW are employees of Carelon Research, which received funding from Incyte Corporation to perform this research. KD, C-CT, PC, and VW are shareholders of Elevance Health, the parent company of Carelon Research.

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## References

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## Introduction

- AD is a chronic, heterogeneous, highly pruritic, relapsing inflammatory skin disease[1]
- Topical therapies are the mainstay of treatment for AD; however, TCSs are not recommended for use on sensitive areas or long-term use, and TCIs and topical PDE-4 inhibitors are associated with application site reactions[2]
- Inadequate disease control is reported in many patients who apply topical therapy and in some patients who escalate to systemic therapies[3]
- In September 2021, ruxolitinib (selective JAK1 and JAK2 inhibitor)[4] cream was approved by the FDA for the treatment of mild to moderate AD in patients aged ≥12 years[5]

## Methods

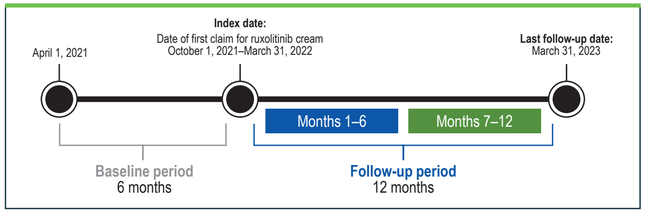
### *Study Design and Patients*

- This retrospective, observational study used data from the HIRD® from October 1, 2021, to March 31, 2022, to identify new ruxolitinib cream users (**Figure 1**)
- Patients aged ≥12 years with AD who had continuous enrollment in a commercial or managed Medicare plan during the 6-month baseline period prior to the index date (first claim for ruxolitinib cream) and the 12-month follow-up period were included in the analysis

### *Analyses*

- Treatment patterns before and after ruxolitinib cream use were summarized using descriptive statistics

**Figure 1. Study Design**




## Results

### *Demographics and Baseline Characteristics*

- 556 patients were included in the analysis (**Table 1**)

**Table 1. Baseline Demographic and Clinical Characteristics**

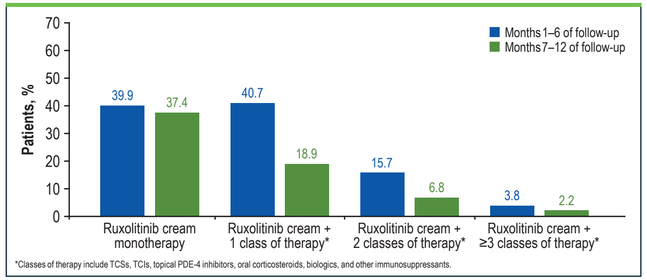
| Characteristic | Patients (N=556) |
|---|---|
| Age, mean (SD), y | 40.3 (17.3) |
| 12–17 y, n (%) | 64 (11.5) |
| ≥18 y, n (%) | 492 (88.5) |
| Female, n (%) | 338 (60.8) |
| Race or ethnicity, n (%) | |
| White | 357 (64.2) |
| Asian | 46 (8.3) |
| Black | 40 (7.2) |
| Hispanic or Latino | 34 (6.1) |
| Other race | 11 (2.0) |
| Unknown or undisclosed | 68 (12.2) |
| Insurance type, n (%) | |
| Commercial | 537 (96.6) |
| Medicare Advantage | 19 (3.4) |
| Elixhauser comorbidities, n (%)*† | |
| Hypertension | 83 (14.9) |
| Chronic pulmonary disease | 77 (13.9) |
| Depression | 73 (13.1) |
| Hypothyroidism | 42 (7.6) |
| Obesity | 37 (6.7) |
| Diabetes without chronic complication | 29 (5.2) |
| Comorbidities of interest, n (%)* | |
| Allergic rhinitis | 93 (16.7) |
| Anxiety | 72 (13.0) |
| Asthma | 70 (12.6) |
| Type 2 diabetes | 33 (5.9) |
| Skin infections | 32 (5.8) |

* Comorbidities occurring in ≥5% of patients.
† For privacy and confidentiality reasons, the substance abuse indicator for Elixhauser is not reported. The Elixhauser Comorbidity Index includes comorbidity measures for use in administrative data analyses[6]

### *Treatment Patterns*

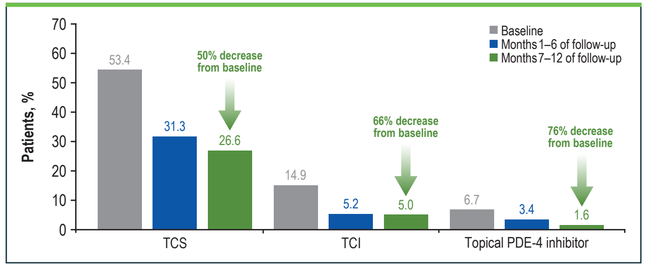
- The mean number of ruxolitinib cream fills in the overall 12-month follow-up period was 2.1 (SD, 1.8; range, 1–12)
- Nearly 40% of patients applied ruxolitinib cream monotherapy during the 1 to 6– and 7 to 12–month follow-up periods (**Figure 2**)
- 72.5% and 73.9% of patients did not receive a new class of AD treatment during months 1–6 and 7–12 of the follow-up period, respectively

**Figure 2. Number of Distinct Therapeutic Classes After Initiation of Ruxolitinib Cream**



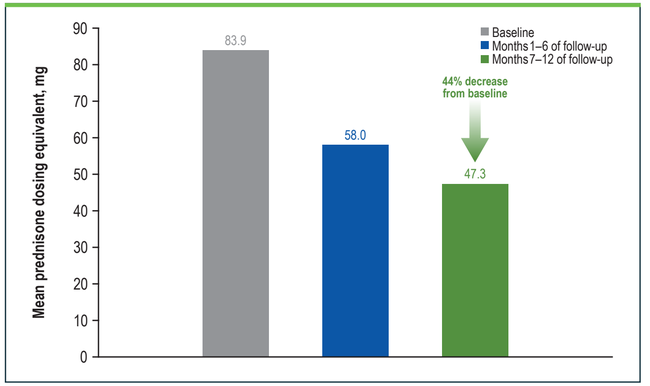

- During months 7–12 of follow-up, use of TCSs, TCIs, and topical PDE-4 inhibitors was reduced by 50%, 66%, and 76%, respectively (**Figure 3**)

**Figure 3. Topical Treatment Use for AD Before and After Initiation of Ruxolitinib Cream**




- The mean cumulative prednisone-equivalent dose was reduced by 44% during months 7–12 of the follow-up period (**Figure 4**)

**Figure 4. Oral Corticosteroid Use Before and After Initiation of Ruxolitinib Cream**




- Among patients who did not receive AD biologic therapy during the baseline period (n=431), >90% remained off biologics during the follow-up periods (**Table 2**)
- Among patients who received AD biologic therapy during the baseline period (n=125), 26% did not continue biologics during months 7–12 of the follow-up periods (**Table 2**)

**Table 2. Biologics Use for AD Before and After Initiation of Ruxolitinib Cream**

| | Biologic free during follow-up, n (%) | |
|---|---|---|
| Biologic status at baseline | Months 1–6 | Months 7–12 |
| Biologic naive (n=431) | 398 (92.3) | 394 (91.4) |
| Biologic experienced (n=125) | 20 (16.0) | 33 (26.4) |