

Ruxolitinib Cream Is Associated With Reduced Treatment Burden in Atopic Dermatitis: A US Payer Claim Analysis

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Objective

- To characterize longer-term treatment patterns in the 6 months before and 12 months after initiating ruxolitinib cream for AD, stratified by prior biologic use

Conclusions

- Ruxolitinib cream initiation was associated with sustained reductions in claims for other topical therapies and oral corticosteroids, regardless of biologic treatment history
- Most biologic-naive patients (>90%) did not start biologics by months 7–12 of follow-up after initiation of ruxolitinib cream therapy
- Approximately 1 in 3 patients who had biologic treatment during baseline did not receive biologics during months 7–12 of follow-up, highlighting the potential of ruxolitinib cream as an alternative AD treatment to biologics
- This 12-month analysis confirms previous 6-month findings^{10,12} that treatment with ruxolitinib cream may reduce the use of other AD therapies

Abbreviations

AD, atopic dermatitis; FDA, US Food and Drug Administration; 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. BHB, NUO, and TB are employees of Optum, Inc., which received funding from Incyte Corporation for this study.

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References

- Guttman-Yassky E, et al. *Lancet*. 2025;405(10478):P583-P596. 2. Sidbury R, et al. *J Am Acad Dermatol*. 2023;89(1):e1-e20. 3. Quintás-Cardama A, et al. *Blood*. 2010;115(15):3109-3117. 4. Eichenfield LF, et al. *J Am Acad Dermatol*. 2025;93(3):689-698. 5. Eichenfield LF, et al. 52-week safety and disease control with ruxolitinib cream in children aged 2–11 years with atopic dermatitis: results from the phase 3 TRuE-AD3 study. Presented at: 33rd European Academy of Dermatology and Venereology (EADV) Congress; September 25-28, 2024; Amsterdam, The Netherlands. 6. Papp K, et al. *J Am Acad Dermatol*. 2023;88(5):1008-1016. 7. Papp K, et al. *J Am Acad Dermatol*. 2021;85(4):863-872. 8. Opzelura® (ruxolitinib cream). Full Prescribing Information. Incyte Corporation; 2025. 9. Liu J, et al. Association of ruxolitinib cream initiation with continued reduction in use of other topical treatments, oral corticosteroids, and biologics for atopic dermatitis. Presented at: Fall Clinical Dermatology Conference; October 24-27, 2024; Las Vegas, NV, USA. 10. Liu J, et al. *Clinicoecon Outcomes Res*. 2025;17:69-77. 11. Hu W, et al. *Am J Clin Dermatol*. 2024;25(2):327-332. 12. Liu J, et al. Ruxolitinib cream utilization reduced other topical therapy, corticosteroid, and biologic use in patients with atopic dermatitis: US claims database analysis. Presented at: Academy of Managed Care Pharmacy Nexus; October 14-17, 2024; Las Vegas, NV, USA.



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Introduction

- AD is a chronic, heterogeneous, highly pruritic, relapsing inflammatory skin disease¹
- 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 reactions²
- Ruxolitinib (selective JAK1 and JAK2 inhibitor)³ cream has shown efficacy with a well-tolerated safety profile in patients aged ≥2 years with mild to moderate AD in clinical trials⁴⁻⁷
- In September 2021, ruxolitinib cream was approved by the FDA for the treatment of mild to moderate AD in patients aged ≥12 years; in September 2025, it was approved in children aged 2–11 years⁸
- Early real-world data in adolescents and adults have shown efficacy and safety results consistent with clinical trial observations⁹⁻¹¹
- Prior analyses using claims data with short-term (6-month) follow-up have demonstrated that initiation of ruxolitinib cream may reduce the use of other AD therapies^{10,12}

Results

Demographics and Baseline Characteristics

- Of 1551 included patients, 196 received biologics during the baseline period, and 1355 had no baseline biologic use (Table 1)

Table 1. Baseline Demographics and Clinical Characteristics

Characteristic	Biologic-experienced patients (n=196)	Biologic-naive patients (n=1355)
Age, mean (SD), y	50.0 (20.1)	46.9 (20.3)
12–17, n (%)	14 (7.1)	129 (9.5)
≥18, n (%)	182 (92.9)	1226 (90.5)
Female, n (%)	106 (54.1)	869 (64.1)
Race or ethnicity, n (%)		
White	99 (50.5)	704 (52.0)
Black	21 (10.7)	108 (8.0)
Asian	19 (9.7)	102 (7.5)
Hispanic	12 (6.1)	90 (6.6)
Unknown	2 (1.0)	20 (1.5)
No data	43 (21.9)	331 (24.4)
Insurance type, n (%)		
Commercial	133 (67.9)	985 (72.7)
Medicare	63 (32.1)	370 (27.3)
Comorbidities of interest, n (%)*		
Anxiety	32 (16.3)	234 (17.3)
Allergic rhinitis	24 (12.2)	202 (14.9)
Type 2 diabetes	24 (12.2)	131 (9.7)
Asthma	22 (11.2)	122 (9.0)
Atherosclerotic cardiovascular disease	21 (10.7)	105 (7.8)
Skin infections	11 (5.6)	127 (9.4)

*Comorbidities occurring in ≥5% of patients in either subgroup.

Treatment Patterns

- The mean number of ruxolitinib cream fills in the overall 12-month follow-up period was 2.98 (SD, 2.47; range, 1–13) in biologic-experienced patients and 2.17 (SD, 1.93; range, 1–14) in biologic-naive patients

Methods

Study Design and Patients

- This analysis used administrative claims data from the Optum Research Database from November 1, 2021, to September 30, 2023, to identify new ruxolitinib cream users (Figure 1)
- Patients aged ≥12 years who had ≥1 medical claim for an AD diagnosis, no evidence of vitiligo during the 6-month baseline period prior to the index date (first claim for ruxolitinib cream), and continuous enrollment in a commercial or Medicare Advantage health plan during the baseline and follow-up periods were included in the analysis

Analyses

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

- During months 7–12 of follow-up, use of TCSs, TCIs, and topical PDE-4 inhibitors was reduced by 40%, 72%, and 73%, respectively, in biologic-experienced patients (Figure 2) and by 48%, 68%, and 65% in biologic-naive patients (Figure 3)

Figure 2. Topical Treatment Use for AD Before and After Initiation of Ruxolitinib Cream Among Biologic-Experienced Patients (n=196)

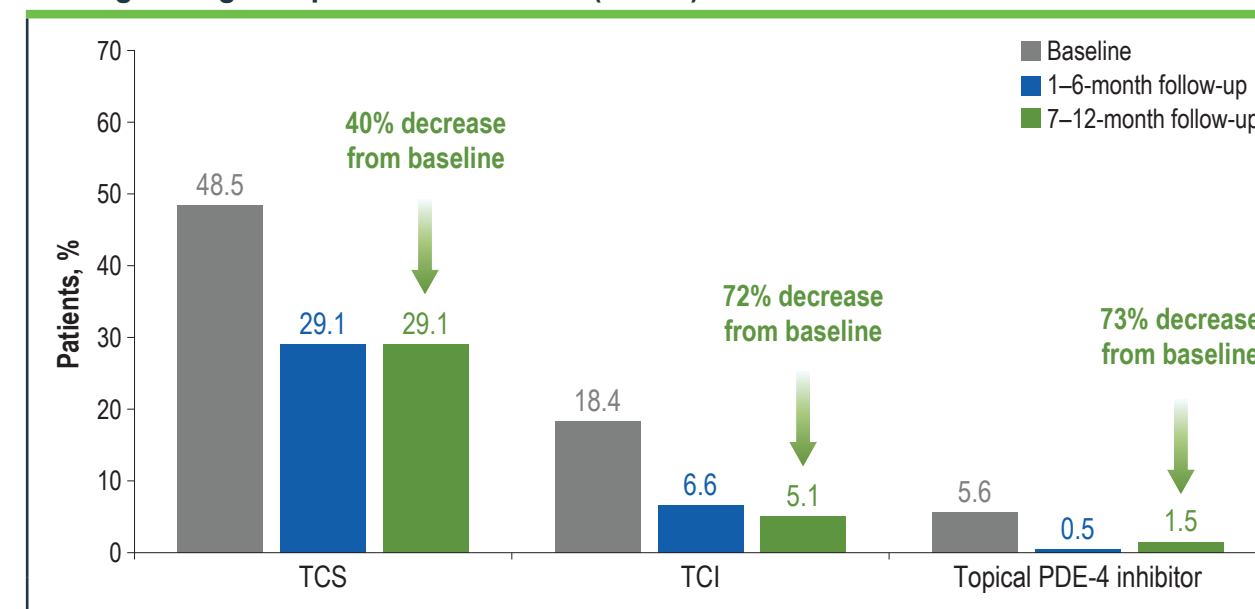


Figure 3. Topical Treatment Use for AD Before and After Initiation of Ruxolitinib Cream Among Biologic-Naive Patients (n=1355)

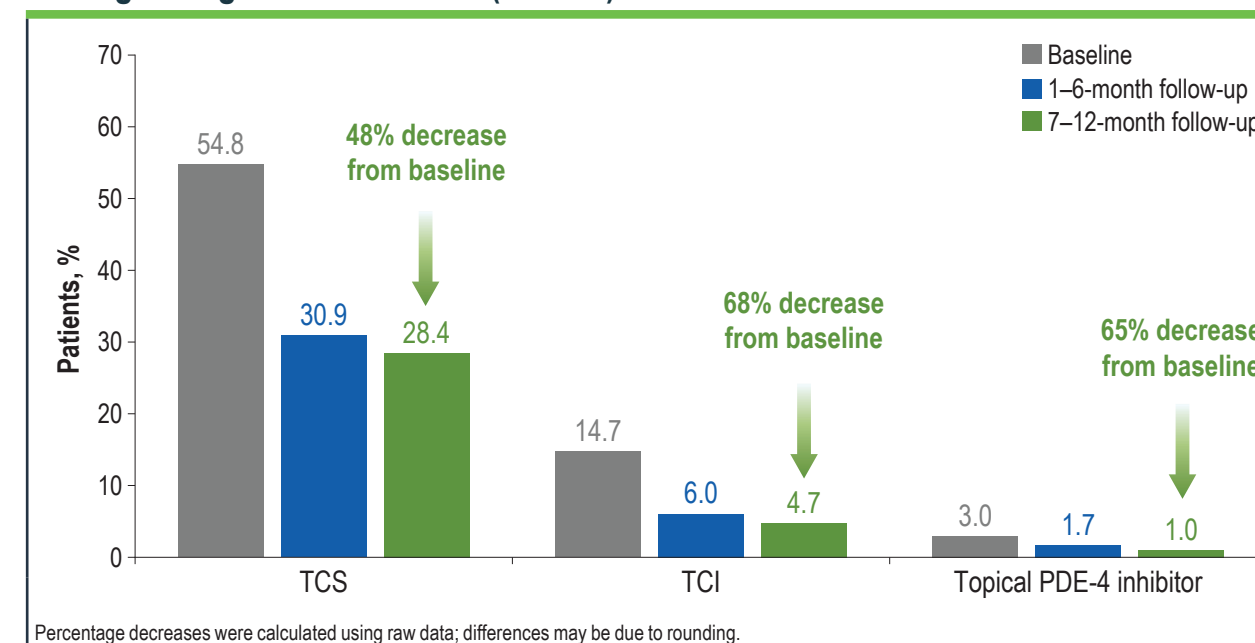
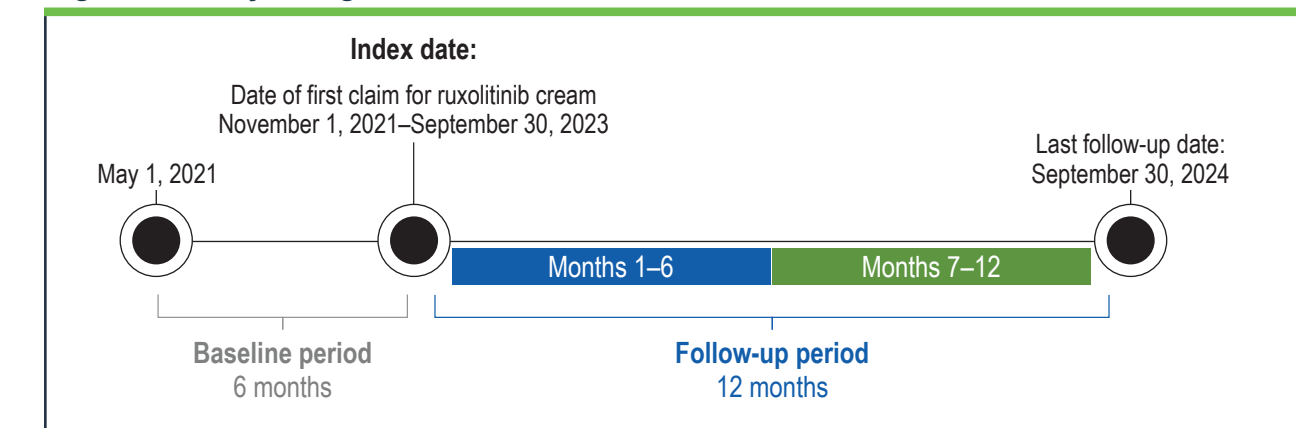
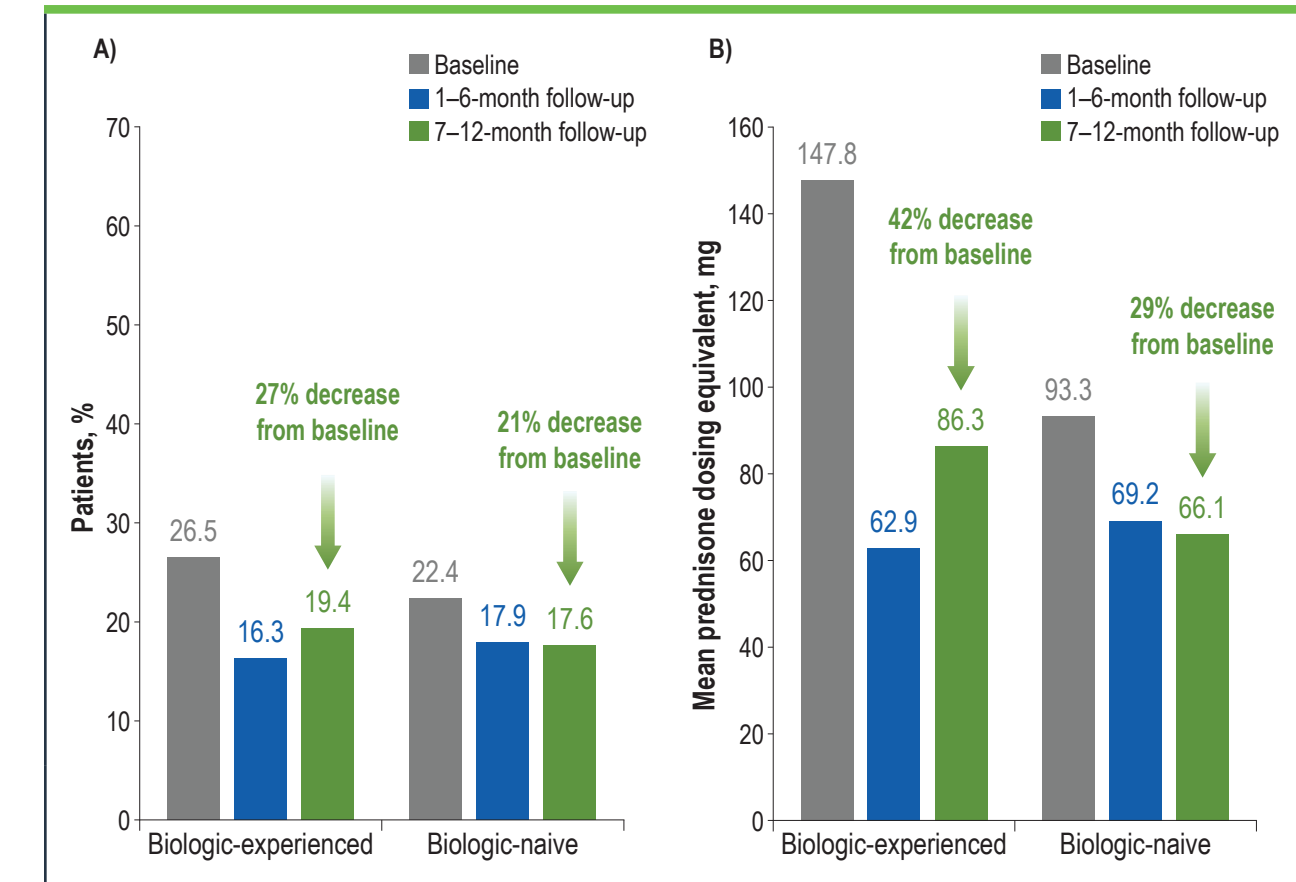


Figure 1. Study Design



- By months 7–12 of follow-up, systemic corticosteroid use was reduced by 27% in biologic-experienced patients and by 21% in biologic-naive patients (Figure 4A)
- The mean cumulative prednisone-equivalent dose for systemic corticosteroids decreased by 42% in biologic-experienced patients and by 29% in biologic-naive patients (Figure 4B)

Figure 4. (A) Oral Corticosteroid Use and (B) Mean Prednisone Dosing Equivalent Before and After Initiation of Ruxolitinib Cream



- Among biologic-experienced patients (n=196), 35.7% did not receive biologic therapy during months 7–12 of follow-up (Table 2)
- Among biologic-naive patients (n=1355), 90.1% did not initiate biologics during months 7–12 of follow-up (Table 2)

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

Biologic status at baseline	Biologic free during follow-up, n (%)	
	Months 1–6	Months 7–12
Biologic experienced (n=196)	40 (20.4)	70 (35.7)
Biologic-naive (n=1355)	1259 (92.9)	1221 (90.1)