

# Efficacy of abrocitinib therapy in daily practice: clinician- and patient-reported outcomes in a heterogeneous TREATgermany registry cohort using AHEAD criteria

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## Introduction and Objectives

Atopic dermatitis (AD) is a chronic skin condition that can impact quality of life. Although recent advances have been made, existing treatments may not fully meet patients' needs, underscoring the ongoing need for better management approaches. The **AHEAD (Aiming High in Eczema/Atopic Dermatitis) recommendations define moderate and optimal treatment targets (MT and OT)** using clinician- and patient-reported outcomes (CRO and PRO) in AD, emphasizing patient-centered management. This retrospective study evaluates the effectiveness of the JAK inhibitor abrocitinib in the TREATgermany registry for patients with moderate-to-severe AD.

## Materials, Methods and Limitations

TREATgermany is the German registry for adult patients with moderate-to-severe AD with ~2,700 patients enrolled in 91 centers all over Germany. The inclusion criteria are: age ≥18 years, AD according to the UK Working Party diagnostic criteria, oSCORAD >20 or currently anti-inflammatory systemic treatment for AD or previous anti-inflammatory systemic treatment for AD within past 24 months. In this retrospective, observational and descriptive analysis, validated TREATgermany registry data up to December 30, 2024 were used to identify patients with at least **one documented episode of abrocitinib treatment** given at different approved dose levels.

A total of 68 patients were included in the abrocitinib cohort. Demographics of the abrocitinib cohort are summarized in Table 1. Achievement of the **MT and OT of the AHEAD concept** was evaluated in patients from the abrocitinib sub-cohort after 3 and 6 months of therapy (Table 2). The individual patient preferences and the shared decision-making process could not be considered. Patients with prior episodes on systemic therapies as present in daily practice were included in the analysis, while patients with parallel systemic therapies were excluded. No imputation of missing values was performed. In the AHEAD criteria for AD, side effects are explicitly considered during the shared decision-making process and therapy adjustments, ensuring patient-reported adverse effects influence treatment goals and choices. In this retrospective analysis, side effects were not considered. The HADS (Hospital Anxiety and Depression Scale) is not included in TREATgermany and was instead substituted by the CES-D (Center for Epidemiologic Studies Depression Scale).

## Conclusion

In conclusion, the treatment with abrocitinib has a strong and comprehensive impact, effectively reducing the clinical signs of the disease while simultaneously alleviating patient-perceived symptoms such as itch, pain, and sleep disturbance, thereby enhancing overall quality of life. The AHEAD concept differentiates between **moderate (MT) and optimal (OT) treatment targets**, emphasizing that although many patients achieve MT, fewer attain the more stringent OT. The relevance of OT in daily practice remains to be examined.

## References

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## Results and Discussion

Characteristics	Item	[%] of the cohort, value	Baseline disease burden	Value at therapy initiation
Study site	Clinic	27.2	EASI	19.0 ± 11.4
Biological sex	Female	32.4	SCORAD	56.8 ± 17.2
Age [yrs]		38.8 ± 13.1	IGA	3.3 ± 0.9
BMI		27.0 ± 4.5	BSA	37.6 ± 22.9
Smoking status	Smoking	21.1	Pruritus NRS	6.7 ± 2.7
	Ex-smoking	33.3	Peak pruritus NRS	6.2 ± 2.6
	Non-smoking	45.6	Pain NRS	4.7 ± 2.6
Allergic comorbidities	Rhinitis	54.1	Sleep NRS	5.7 ± 3.4
	Asthma	45.3	DLQI	14.3 ± 7.4
Common non-allergic comorbidities (>1%)	Hypertension	14.9	POEM	18.6 ± 6.8
	Depression	12.5	CES-D <sup>1</sup>	17.4 ± 10.4
	Alopecia areata	3.4		
	Diabetes type II	3.1		
Diabetes type I	1.5			
Further details from medial history (>1%)	Serious infection	3.1		

**Table 1: Demographic characteristics of the abrocitinib cohort (n=68).** The cohort consisted of 27.2% clinic-based patients, with less women in the cohort than men (32.4% female). The age varied from 19 to 81 years and the BMI was between 19.7 – 40.2, indicating a population with a broad range of body weights. Smoking status varied, with 21.1% smokers, 33.3% ex-smokers, and 45.6% non-smokers. Allergic comorbidities were common, particularly rhinitis (54.1%) and asthma (45.3%). Among non-allergic comorbidities, hypertension (14.9%) and depression (12.5%) were the most prevalent, while diabetes type II and I were less frequent (3.1% and 1.5%). Additional medical history revealed some patients with past serious infections (3.1%). These characteristics indicated a large and diverse cohort covering a broad spectrum of the German population. The right side of the table summarizes the **baseline disease burden of patients** at therapy initiation. Key measures include an EASI of 19.0 ± 11.4, SCORAD of 56.8 ± 17.2, and IGA of 3.3 ± 0.9, reflecting significant disease activity. Extensive skin involvement (BSA 37.6% ± 22.9%) and high patient-reported burdens, such as pruritus (6.7 ± 2.7), sleep disturbances (5.7 ± 3.4), and impaired quality of life (DLQI 14.3 ± 7.4, POEM 18.6 ± 6.8), were observed. Depressive symptoms were also notable (CES-D 17.4 ± 10.4). Values are presented as mean ± standard deviation.

Outcome measure	Moderate Target (MT)	Optimal Target (OT)	Value after 3 months ± 2 weeks	[%] MT met after 3 months	[%] OT met after 3 months	Value after 6 months ± 4 weeks	[%] MT met after 6 months	[%] OT met after 6 months
<b>Clinician-Reported Outcomes</b>								
EASI	EASI 75 or EASI ≤7	EASI 90 or EASI ≤3	3.8 ± 4.2	89.2	54.1	6.3 ± 9.2	75.9	65.5
SCORAD	SCORAD 50 or SCORAD ≤24	SCORAD 75 or SCORAD ≤10	24.5 ± 14.1	65.4	23.1	32.6 ± 18.1	44.8	13.8
IGA and BSA	IGA ≤2 and 50% BSA improvement	IGA 0/1 and BSA ≤2%	1.6 ± 1.0 6.9 ± 7.3	75.7	29.7	1.9 ± 1.1 9.9 ± 14.8	64.3	27.6
<b>Patient-reported Outcomes</b>								
Peak pruritus NRS	≥4-point reduction	≤1	2.2 ± 2.1	68	30.8	3.0 ± 2.9	40.9	37.9
Pain NRS	≥3-point reduction	≤1	1.9 ± 1.8	60	46.2	2.1 ± 2.5	40.9	51.7
Sleep NRS	≥3-point reduction	≤1	1.3 ± 2.3	64	76.9	2.2 ± 3.1	40.9	65.5
POEM	≥4-point reduction	≤2	6.3 ± 6.2	92	34.6	9.4 ± 8.4	63.6	31
CES-D <sup>1</sup>	<22	<16	11.0 ± 8.2	88.5	84.6	11.5 ± 9.2	88.9	81.5
DLQI	≥4-point reduction	≤1	3.7 ± 3.9	76	46.2	4.7 ± 5.8	59.1	41.4
1xCRO only				94.6	54.1		79.3	65.5
1xPRO only				100	88.5		82.8	82.8
1xCRO and 1xPRO				96.2	53.8		72.4	58.6

**Table 2: AHEAD treatment outcomes at 3 and 6 months, comparing MT and OT for CRO and PRO.** Therapy start values indicate a high disease burden, with improvements observed after 3 months (for n=37 patients with a visit in this time frame) and further progress by 6 months (for n=29 patients with a visit in this time frame). For CRO, the majority of patients met MT, such as EASI 75 or EASI ≤7 (89.2% after 3 months and 75.9% after 6 months), while fewer achieved stricter OT, such as EASI 90 or EASI ≤3 (54.1% and 65.5%). Similar trends were observed for SCORAD and IGA/BSA. For PRO, high proportions met MT, such as ≥4-point reductions in POEM (92.0% after 3 months and 63.6% after 6 months), while OT, such as POEM ≤2, were less frequently achieved (34.6% and 31.0%). For the combined 1xCRO and 1xPRO assessment, MT and OT were achieved in 96.2% and 53.8% of patients at month 3, and in 72.4% and 58.6% at month 6, respectively.



Abrocitinib therapy demonstrated good effectiveness, leading to improvements across both CRO and PRO over a 6-month period. The most pronounced effects were observed within the first 3 months of treatment. CRO showed a reduction in disease severity. The average EASI score decreased from 19.0 at initiation to 3.8 after three months. Similarly, the SCORAD score fell from 56.8 to 24.5, and the average BSA dropped from 37.6% to 6.9%. PRO mirrored this positive trend, indicating a reduction in symptom burden. The average score for peak pruritus on the Numerical Rating Scale (NRS) was reduced from 6.2 to 2.2, while pain scores fell from 4.7 to 1.9. Sleep disturbance also improved, with the average NRS score decreasing from 5.7 to 1.3. Furthermore, quality of life and mental well-being improved, as shown by the DLQI dropping from 13.1 to 3.7 and the CES-D depression score decreasing from 17.0 to 11.0. While the scores at 6 months showed a slight increase from the 3-month lows in some categories, they remained lower than the values recorded at the start of the therapy, indicating a positive treatment effect.

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<sup>§</sup> The TREATgermany Study Group members are listed on the registry website [www.treatgermany.org](http://www.treatgermany.org) (short link: <https://t1p.de/tgstgr22>)  
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