Treatment patterns and effectiveness of Abrocitinib in atopic dermatitis- Interim analysis on real-world data in Abrocitinib Chinese rEgistry on AD (AHEAD)

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AHEAD
Abrocitinib CHinese rEgistry on AD

INTRODUCTION AND OBJECTIVES

Atopic dermatitis (AD) is a chronic inflammatory skin disease characterized by pruritis and lichennification. While previous clinical trials have confirmed the efficacy of Abrocitinib in patients with moderate-to-severe AD, there has been a lack of real-world data on its usage among Chinese AD patients. Abrocitinib Chinese rEgistry on AD (AHEAD) is an ongoing prospective, multicenter registry that included AD patients receiving Abrocitinib treatment from approximately 40 cities in China.
This report presents the results of an interim analysis based on AHEAD data, aiming to describe the treatment pattern and to evaluate the effectiveness of Abrocitinib in Chinese AD patients.

METHODS

Study design

- **An observational, prospective, multi-center, registry study in China**
- **Study population:** Inclusion criteria included 1) Patients aged ≥ 18 years; 2) Diagnosed with AD; 3) Abrocitinib-naïve or had discontinued previous Abrocitinib treatment for > 30 days at enrollment.
- **Data collection:** The data generated in participating sites were collected prospectively and entered into the research platform through electronic case report forms or outpatient records/scientific medical records. Patient reported outcomes and/or physician-reported data were collected using remote tools.
- **Baseline period:** 30 days before index date to the day before index date
- **Recruitment period:** 18 months
- **Duration of follow-up:** 15 months
- **Index date:** the date of Abrocitinib treatment after enrollment

Details of study design are displayed in Figure 1.

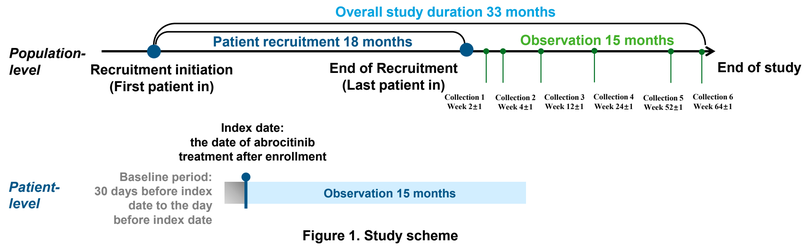

Figure 1. Study scheme

RESULTS

Baseline demographic and clinical characteristics of AD patients

From 18 Oct 2023 to 30 Apr 2024, a total of 314 AD patients was enrolled, with a mean (SD) follow-up duration of 59.1 (40.0) days. The mean (SD) age of all participants was 43.6 (16.1), and 47.5% were female. The average age of symptom onset, AD diagnosis, and initial AD treatment were 39.0, 42.0, and 42.0 years, respectively. 9.3% of patients had a family history of AD. Over 99% patients had a duration of AD less than 5 years. Baseline patient-reported and physician-reported outcomes and other characteristics were displayed in Table 1 and Figure 2(a) - 2(d).

Table 1. Baseline characteristics of AD patients

Characteristics	AD patients (N=314)
Age at index, years	
Mean (SD)	43.6 (16.1)
Sex, n (%)	
Male	165 (52.5%)
Female	149 (47.5%)
Weight, kg	
Mean (SD)	66.2 (13.3)
BMI, kg/m^2	
Mean (SD)	23.9 (3.9)
Smoking status, n (%)	
Never smoked	226 (72.0)
Former smoker	15 (4.8)
Current smoker	73 (23.2)
Alcohol use status, n (%)	
Never used	236 (75.2)
Former user	34 (10.8)
Current user	44 (14.0)
Family history of AD, n (%)	
Yes	29 (9.3%)
No	283 (90.7%)
Primary treatment objective, n (%)	
Skin clearance	157 (57.1%)
Nighttime itch improvement	121 (44.0%)
Flares reduction	88 (32.0%)
Others	59 (21.5%)
Comorbidities alleviation	35 (12.7%)
PP-NRS improvement	21 (7.6 %)

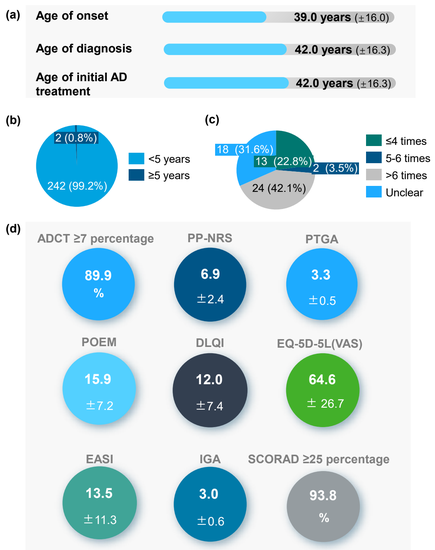

Figure 2. Disease characteristics of AD at baseline. (a) Diagnosis patterns of AD prior to Abrocitinib treatment; (b) Duration of AD; (c) Frequency of AD flares; (d) Baseline patient-reported and physician-reported outcomes (presented with % or mean ± SD)

Abrocitinib utilization

Prior to starting Abrocitinib, 46 out of 101 patients with available treatment records had received systemic treatments. Among the 46 patients, 63.0% had received traditional treatments, 39.1% received biologics, and 2.2% received other JAK 1 inhibitors. 92.9% of patients had an initial Abrocitinib dose of 100mg daily, while the others took 200mg daily. 30.0% of patients underwent Abrocitinib dose adjustment. Among them, 35.5% increased the dose, 8.6% decreased the dose, and 64.5% discontinued Abrocitinib treatment (Patients who experienced multiple dose adjustments could be included in more than one category). (Figure 3)

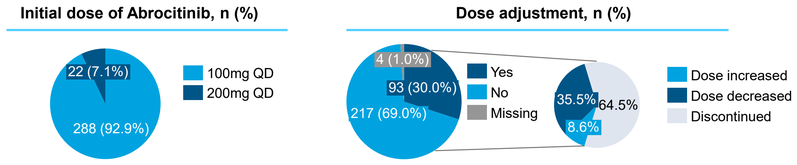

Figure 3. Treatment patterns of Abrocitinib in AD patients

Effectiveness of Abrocitinib

In the interim analysis, 20.5% (49/239), 27.0% (54/200), and 36.1% (26/72) of patients achieved IGA success at weeks 2, 4, and 12, respectively. At week 12, 61.6% (45/73) of patients achieved an EASI-75 response rate, compared to 25.8% (63/244) at week 2 and 43.1% (87/202) at week 4. The proportions of patients who achieved PP-NRS 0/1 were 26.8% (66/246), 36.5% (74/203) and 29.2% (21/72) at week 2, 4, 12, respectively. The proportions of patients who achieved PP-NRS4 at week 12 was 58.2% (39/67). Changes in IGA, EASI, PP-NRS, and other outcomes from baseline during the follow-up were presented in Figure 4.

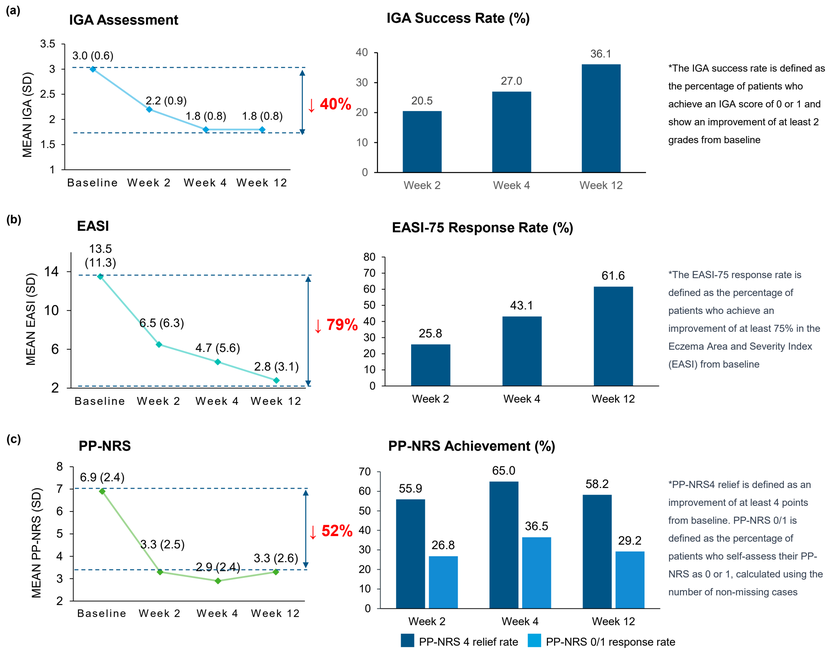

Figure 4. AD clinical outcomes in patients receiving Abrocitinib at baseline and during follow-up. (a) IGA outcomes and IGA success rate; (b) EASI outcomes and EASI-75 response rate; (c) PP-NRS outcomes and PP-NRS achievement

CONCLUSIONS

The interim analysis described the treatment patterns of Abrocitinib in AD patients in China. It also demonstrated the effectiveness of Abrocitinib in improving AD clinical outcomes in AD patients. The upcoming full study will delve deeper into the clinical pathway and long-term effectiveness of Abrocitinib.

Abbreviations: AD, atopic dermatitis. SD, standard deviation. QD, once daily. PDC, proportion of days covered. ADCT, Atopic Dermatitis Control Tool. POEM, Patient-Oriented Eczema Measure. PP-NRS, Peak Pruritus Numerical Rating Scale. PTGA, Patient Global Assessment. DLQI, Dermatology Life Quality Index. EQ-5D-5L, EuroQol 5-Dimension 5-Level questionnaire. IGA, Investigator's Global Assessment. EASI, Eczema Area and Severity Index. SCORAD, Scoring Atopic Dermatitis.

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