Efficacy of Abrocitinib Rescue Therapy in the Phase 3 Study JADE REGIMEN

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BACKGROUND

- The long-term, relapsing-remitting nature of atopic dermatitis (AD) often requires flexibility in treatment, such as dose reduction and treatment interruption[1]
- The JADE REGIMEN trial (NCT03627767), which included patients with moderate-to-severe AD, was conducted to evaluate maintenance of response to the Janus kinase 1 (JAK) inhibitor abrocitinib with continuous dosing, reduced dose, or withdrawal of abrocitinib[2]
  - Patients who stopped responding (experienced flare) during the maintenance period received rescue treatment

OBJECTIVE

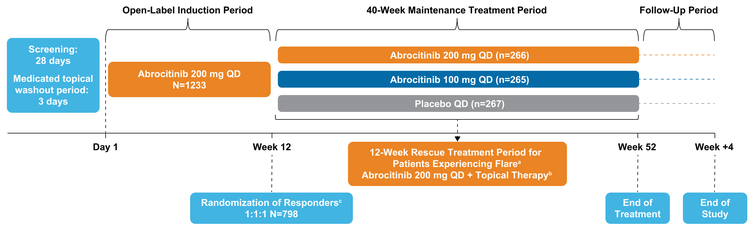
- To evaluate the efficacy and safety of rescue therapy in JADE REGIMEN

METHODS

Patients

- JADE REGIMEN was a multicenter, double-blind, responder-enriched, placebo-controlled, phase 3, randomized-withdrawal study (**Figure 1**)
  - The induction period consisted of 12 weeks of treatment with abrocitinib 200 mg by mouth once daily
  - Patients who responded to induction (achieved Investigator's Global Assessment [IGA] score of 0/1 with ≥2-point reduction from baseline and ≥75% improvement in Eczema Area and Severity Index [EASI] response) were randomly assigned to dose continuation, dose reduction, or withdrawal of abrocitinib for 40 weeks (maintenance period)
  - Patients who experienced flare during the maintenance period (ie, lost ≥50% of week 12 EASI response and had a new IGA score ≥2) received rescue therapy (abrocitinib 200 mg + topical medicated treatment) for 12 weeks

Figure 1. JADE REGIMEN Study Design



QD, once daily.
[a]Flare was defined as ≥50% loss of EASI response at randomization and IGA score ≥2.
[b]Topical therapy was permitted only during the rescue period and included topical corticosteroids, calcineurin inhibitors (tacrolimus or pimecrolimus), and phosphodiesterase 4 inhibitors (crisaborole) when required per local standard of care.
[c]Responder criteria at week 12 are defined as IGA score 0/1 with ≥2-point reduction from baseline and ≥75% improvement from baseline in EASI response.

Patients

- Eligible patients were aged ≥12 years, had moderate-to-severe AD (IGA score ≥3; EASI score ≥16; percentage of body surface area [%BSA] affected ≥10; Peak Pruritus Numerical Rating Scale [PP-NRS; used with permission from Regeneron Pharmaceuticals Inc. and Sanofi score ≥4) for ≥1 year, and had inadequate response or intolerance to topical medication or required systemic therapy to control AD

Analysis

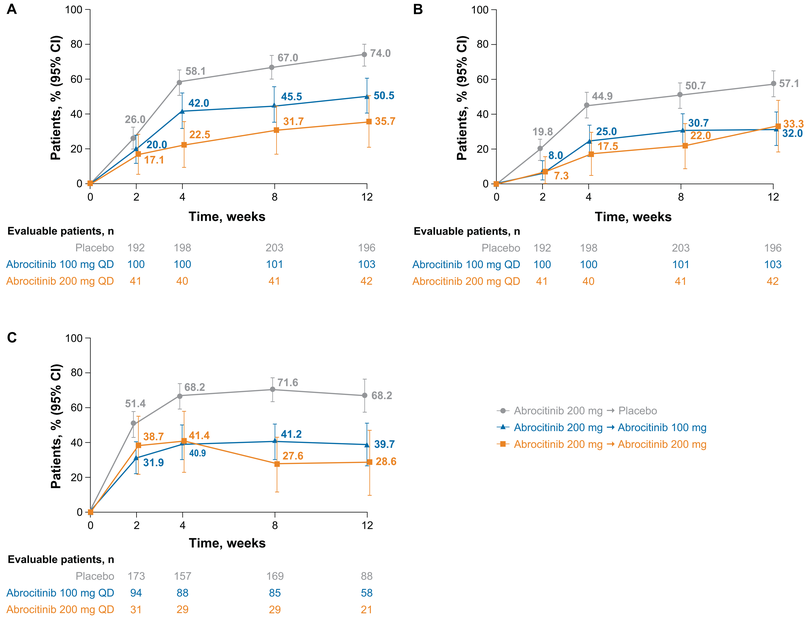
- Recaptured IGA, EASI, and PP-NRS responses, defined as scores not worse than responses at randomization baseline in patients who received rescue therapy, were assessed at all scheduled time points during the rescue period
- Safety was assessed through adverse events (AEs)

RESULTS

Efficacy

- In the abrocitinib 200-mg, abrocitinib 100-mg, and placebo arms, 43 (16.2%), 104 (39.2%), and 204 (76.4%) patients, respectively, entered the rescue period after experiencing protocol-defined flare
- By week 12 of the rescue period, 74%, 57%, and 68% patients who had been randomly assigned to undergo withdrawal of abrocitinib (ie, placebo) were able to recapture their IGA, EASI, and PP-NRS responses, respectively (**Figures 2A-C**)
- Among patients who were randomly assigned to receive abrocitinib 200 mg, recapture rates were 36% (IGA), 33% (EASI), and 29% (PP-NRS); the corresponding rates among those who had received abrocitinib 100 mg were 51%, 32%, and 40%, respectively (**Figures 2A-C**)

Figure 2. Proportions of Patients Who Recaptured (A) IGA, (B) EASI, and (C) PP-NRS Responses[a] With Rescue Therapy After Experiencing Protocol-Defined Flare[b]



EASI, Eczema Area and Severity Index; IGA, Investigator's Global Assessment; PP-NRS, Peak Pruritus Numerical Rating Scale; QD, once daily.
[a]Recapture of response was defined as a score not worse than the score at randomization baseline.
[b]Flare was defined as ≥50% loss of week 12 EASI response and IGA score ≥2.

Safety

- AEs were experienced by a greater proportion of patients who entered the rescue period from the abrocitinib 200-mg treatment arm (55.8%) than from the placebo arm (33.8%) or the abrocitinib 100-mg arm (30.8%) (**Table 1**)
  - Most AEs in the rescue period were mild or moderate across treatment arms

Table 1. Summary of Adverse Events During the Rescue Period of JADE REGIMEN

	Abrocitinib 200 mg → Placebo n=204	Abrocitinib 200 mg → Abrocitinib 100 mg n=104	Abrocitinib 200 mg → Abrocitinib 200 mg n=43
Any AE, n (%)	69 (33.8)	32 (30.8)	24 (55.8)
Severe AE, n (%)	4 (2.0)	2 (1.9)	2 (4.7)
Discontinuation because of AE, n (%)	2 (1.0)	3 (2.9)	2 (4.7)
Most frequently reported TEAE of any cause (>5% in any treatment group), n (%)			
Nasopharyngitis	8 (3.9)	6 (5.8)	3 (7.0)
Upper respiratory tract infection	17 (8.3)	2 (1.9)	2 (4.7)
Dermatitis atopic	7 (3.4)	4 (3.8)	3 (7.0)
TEAEs of special interest			
Herpes zoster	2 (1.0)	4 (3.8)	2 (4.7)
Thrombocytopenia	0	0	0

AE, adverse event; TEAE, treatment-emergent adverse event.

CONCLUSION

- Rescue therapy with abrocitinib 200 mg + topical medicated therapy recaptured response in a large proportion of patients who experienced flare during the maintenance period of JADE REGIMEN and was associated with an acceptable safety profile

REFERENCES

1. Boguniewicz M et al. *Ann Allergy Asthma Immunol.* 2018;120:10-22.
2. Blauvelt A et al. *J Am Acad Dermatol.* 2022;86:104-112.

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DISCLOSURES

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