Efficacy and Safety of Abrocitinib as Monotherapy or in Combination With Topical Therapy: Results From Four Randomized Clinical Trials

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Introduction, Objectives, and Methods

Introduction

- Atopic dermatitis (AD) is a chronic inflammatory skin disease associated with intense pruritus[1]
- Abrocitinib, an oral, once-daily Janus kinase 1 selective inhibitor, was effective and well tolerated as monotherapy (phase 2b, NCT02780167; phase 3: JADE MONO-1, NCT03349060; JADE MONO-2, NCT03575871) and in combination with topical therapy (JADE COMPARE, NCT03720470) in patients with moderate-to-severe AD[1-4]

Objective

- To assess the efficacy and safety of abrocitinib as monotherapy or in combination with background topical therapy across 4 clinical trials in patients with moderate-to-severe AD

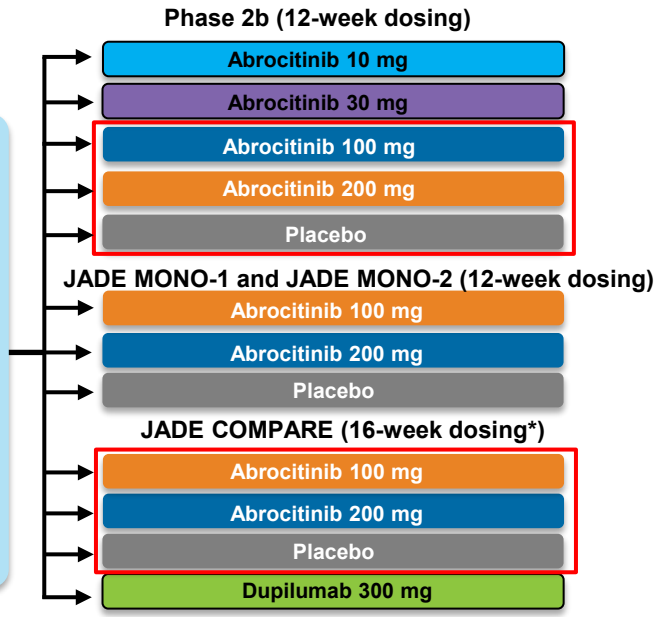
Methods

- Data from the phase 2b, JADE MONO-1, JADE MONO-2, and JADE COMPARE studies were evaluated

Study Design

Eligibility Criteria

- Adult (18-75 years of age, phase 2b, JADE COMPARE) and adolescent/adult patients (≥12 years of age, JADE MONO-1 and MONO-2) with AD for ≥1 year
- Moderate-to-severe AD (defined as %BSA affected ≥10, IGA ≥3, EASI ≥16 [≥12 in phase 2b], and PP-NRS ≥4 [phase 3 studies only]



Efficacy Endpoints

Week 2

- PP-NRS4
- LSM percentage change from baseline in PP-NRS from day 2 to day 15

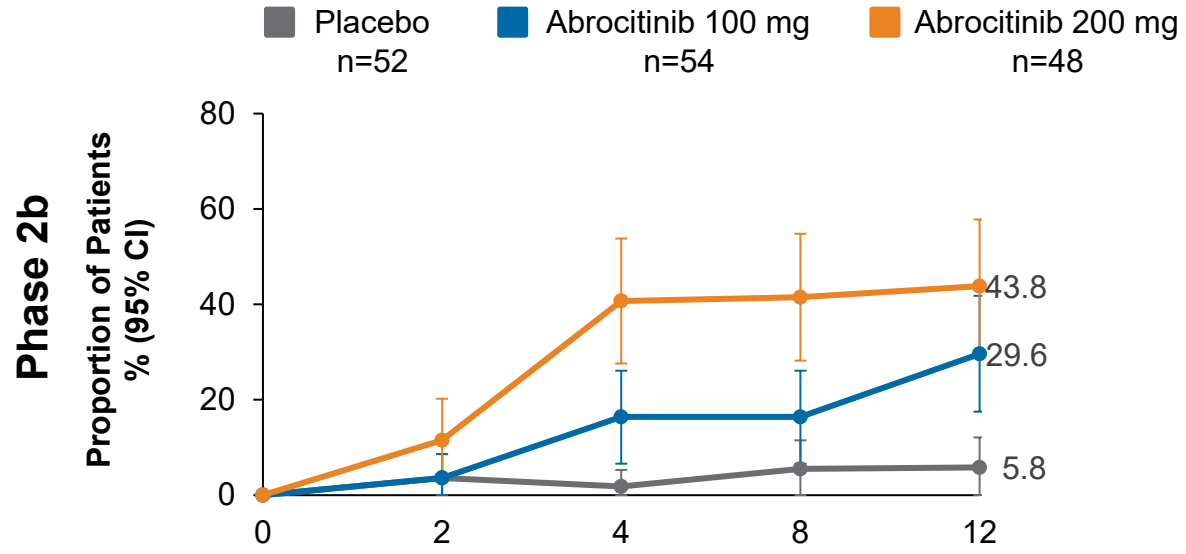
Week 12

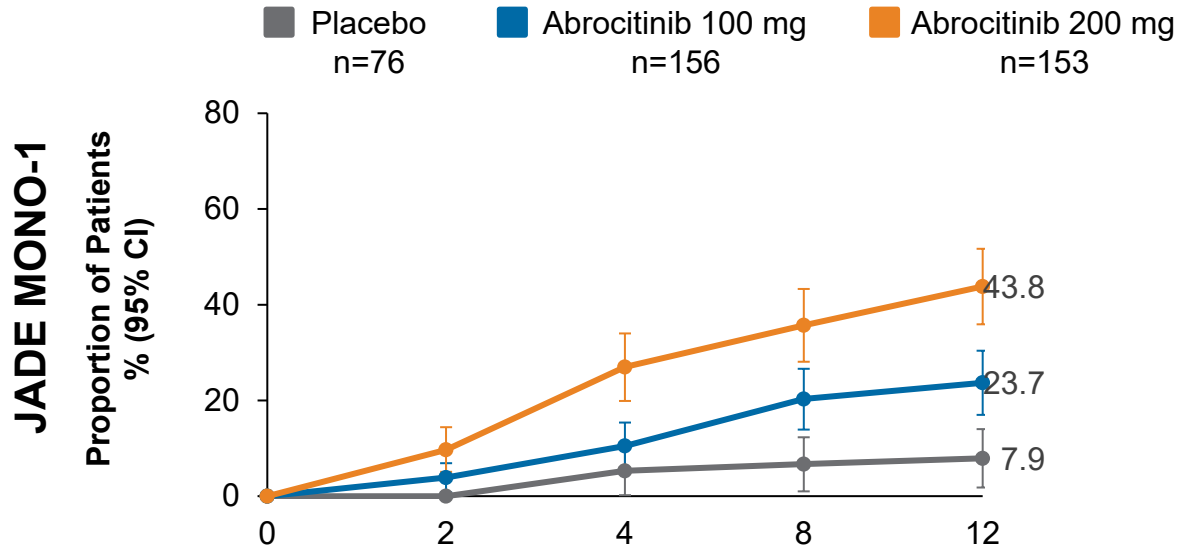
- IGA 0/1
- in of ≥90% from baseline (EASI-90)
- PP-NRS4
- LSM percentage change from baseline in DLQI

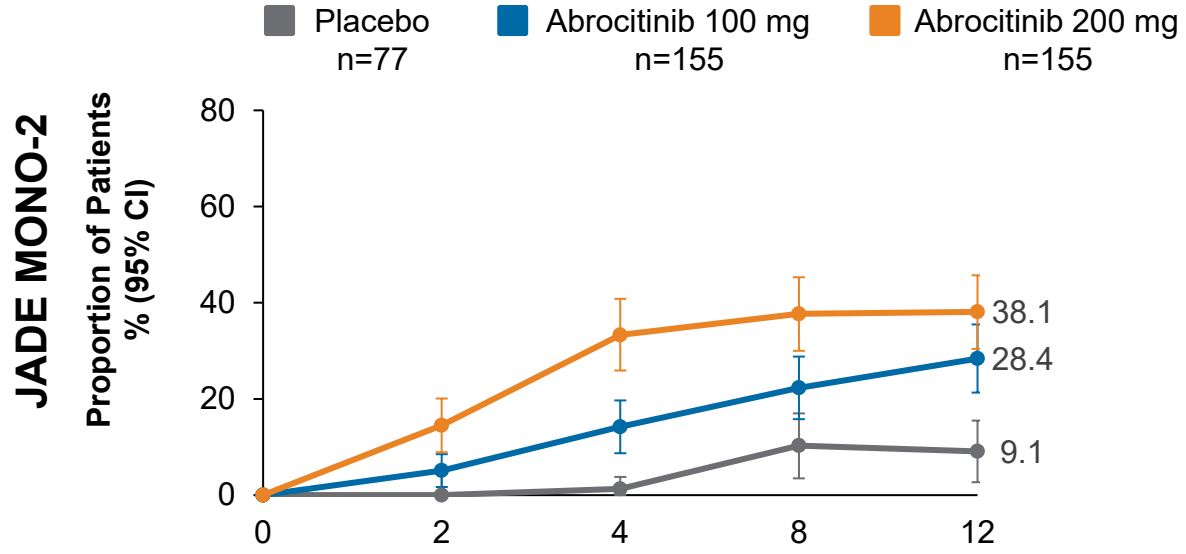
%BSA, percentage of body surface area; DLQI, dermatology life quality index; EASI, Eczema Area and Severity Index; EASI-90, ≥90% improvement from baseline in EASI score; IGA, Investigator's Global Assessment; IGA 0/1, with ≥2-grade improvement; LSM ,least squares mean; PP-NRS, Peak Pruritus Numerical Rating Scale; PP-NRS4, ≥4-point improvement from baseline in Peak Pruritus Numerical Rating Scale score.
The PP-NRS is used with permission of Regeneron Pharmaceuticals, Inc. and SAR&D..

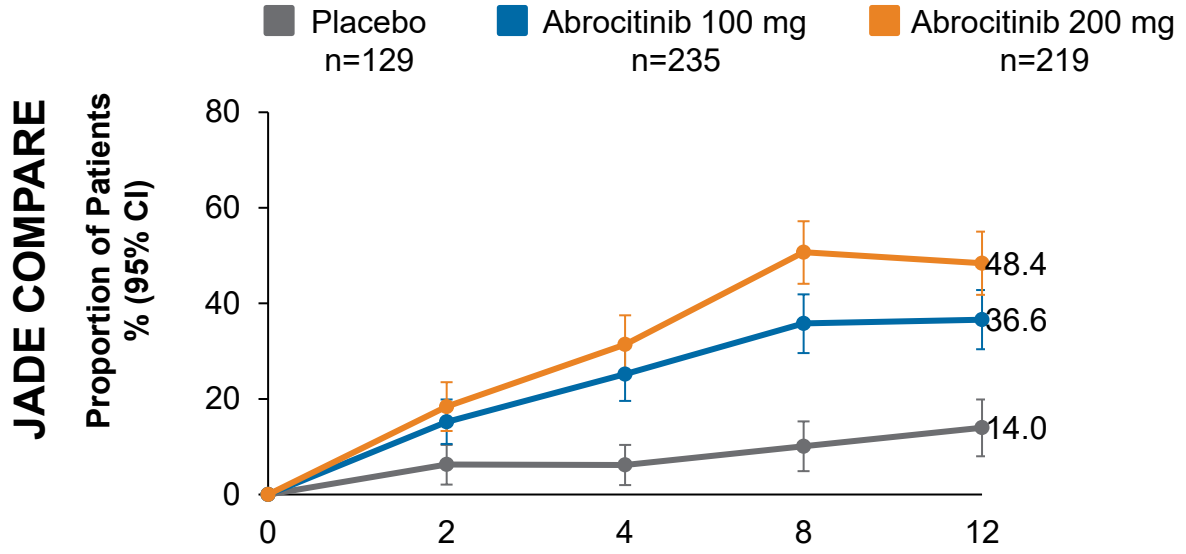
1. Silverberg JI et al. *JAMA Dermatol*. 2020;156:863-873. 2. Gooderham MJ et al. *JAMA Dermatol*. 2019;155:1371-1379. 4. Simpson EL et al. *Lancet*. 2020;396:255-266. 5. Bieber T et al. *N Engl J Med*. 2021;384:1101-1112.

Efficacy Results: Proportion of Patients Who Achieved IGA 0/1 Response at Week 12

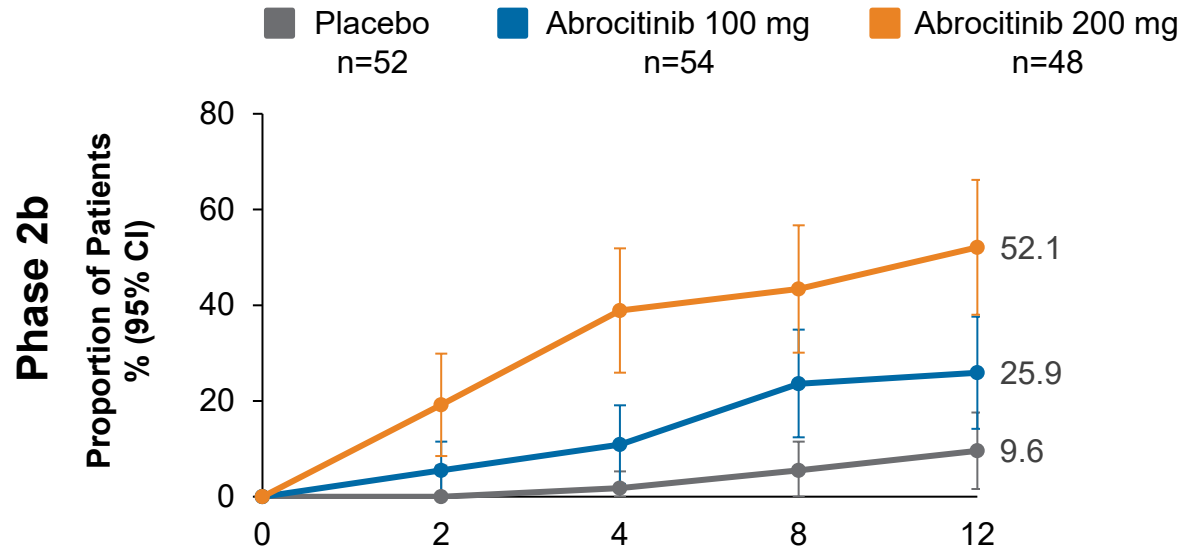


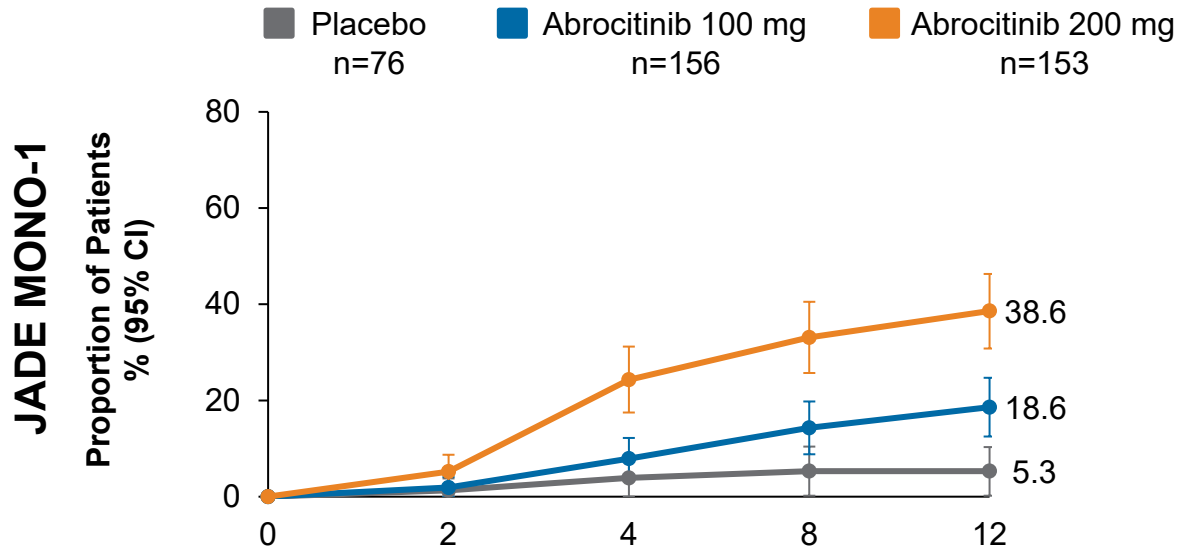


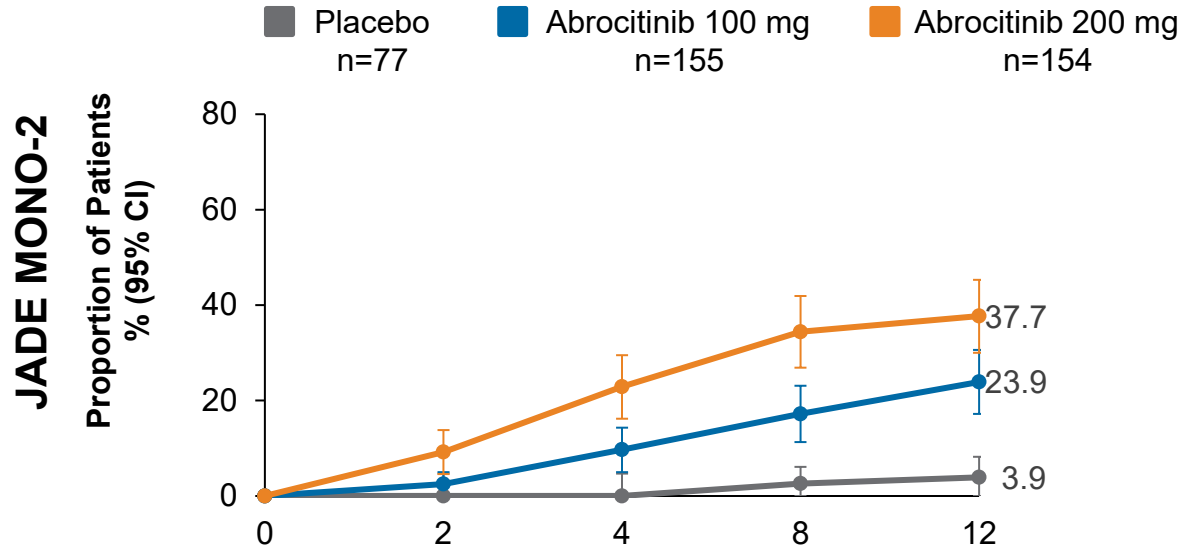


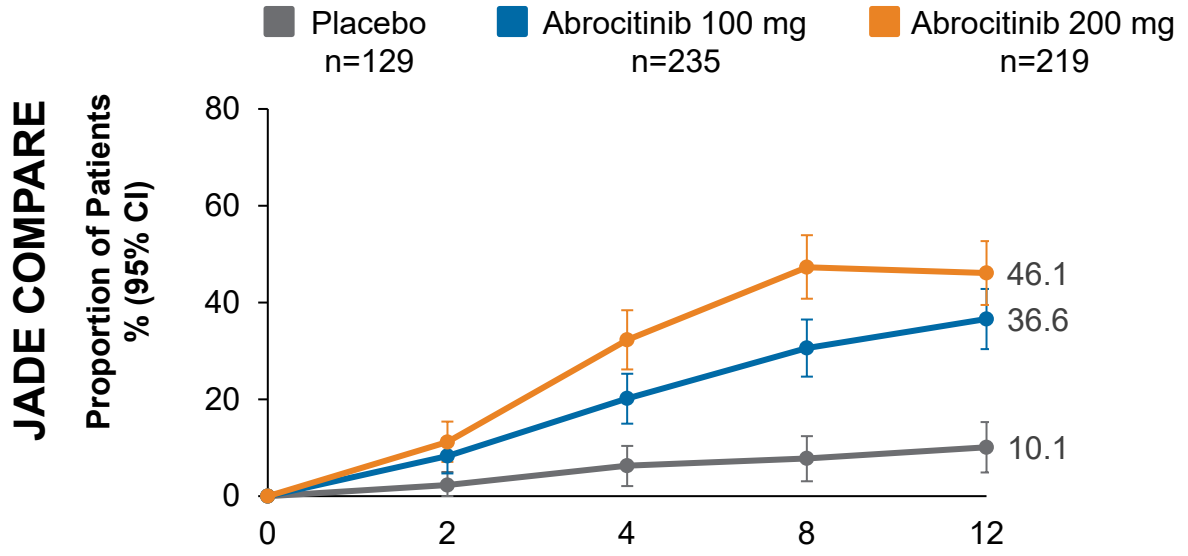


Efficacy Results: Proportion of Patients Achieving EASI-90 Response at Week 12

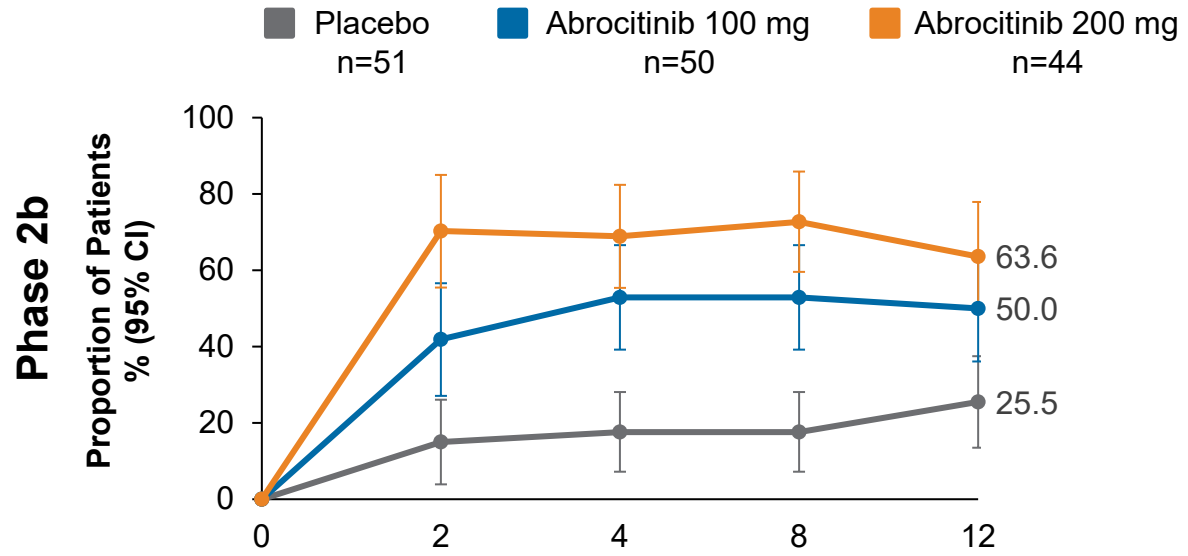


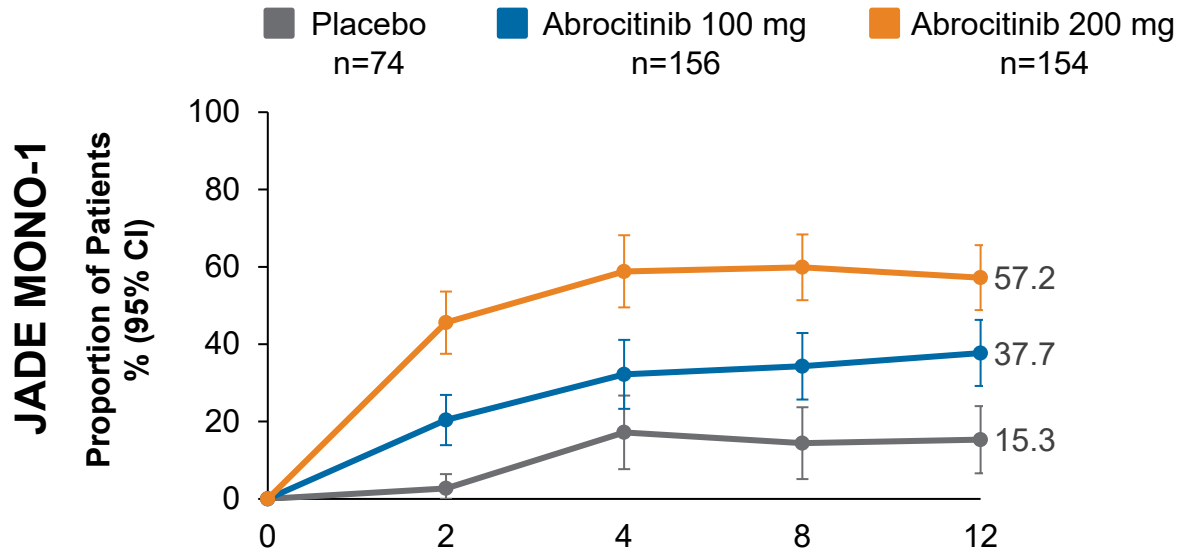


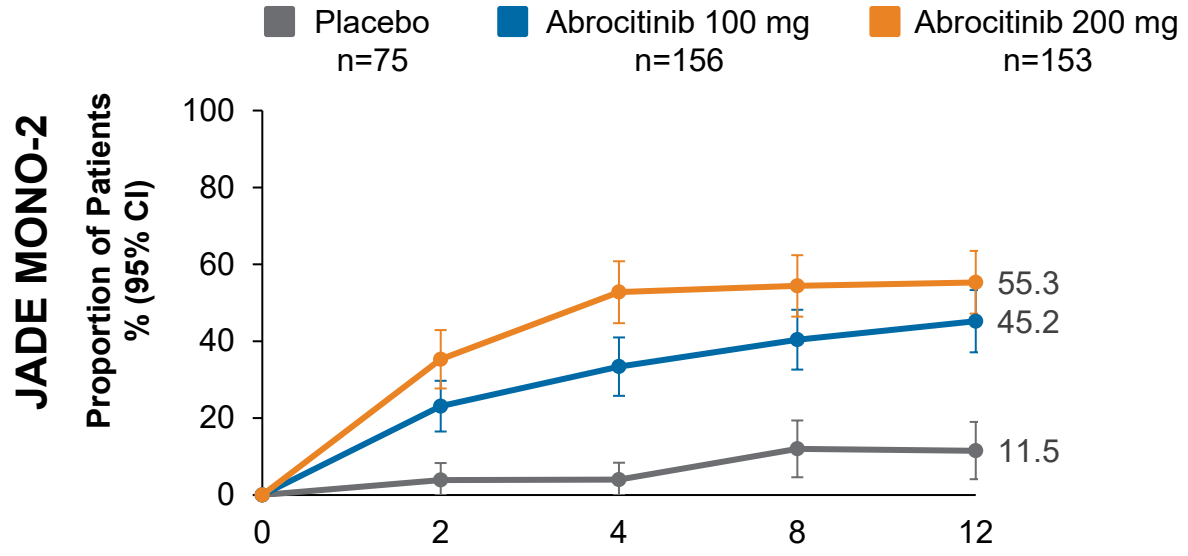


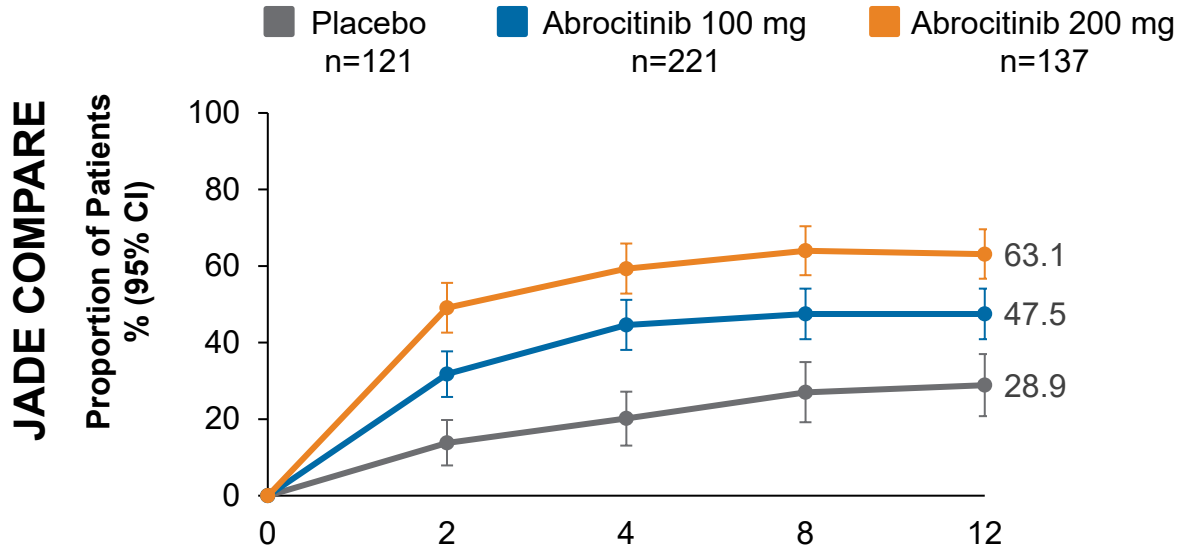


Efficacy Results: Proportion of Patients Achieving PP-NRS4 Response at Week 12

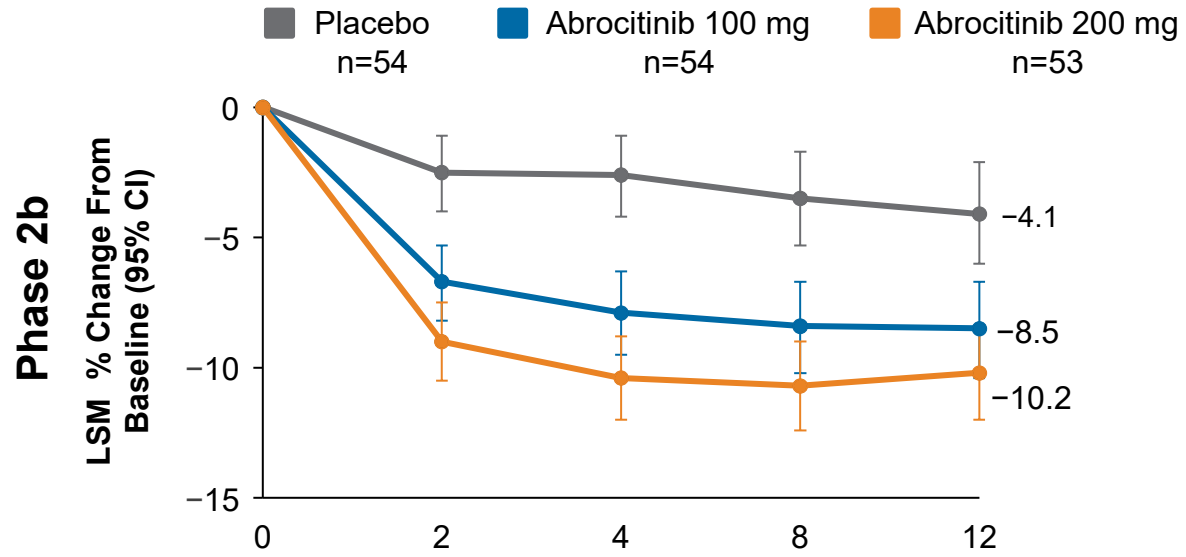


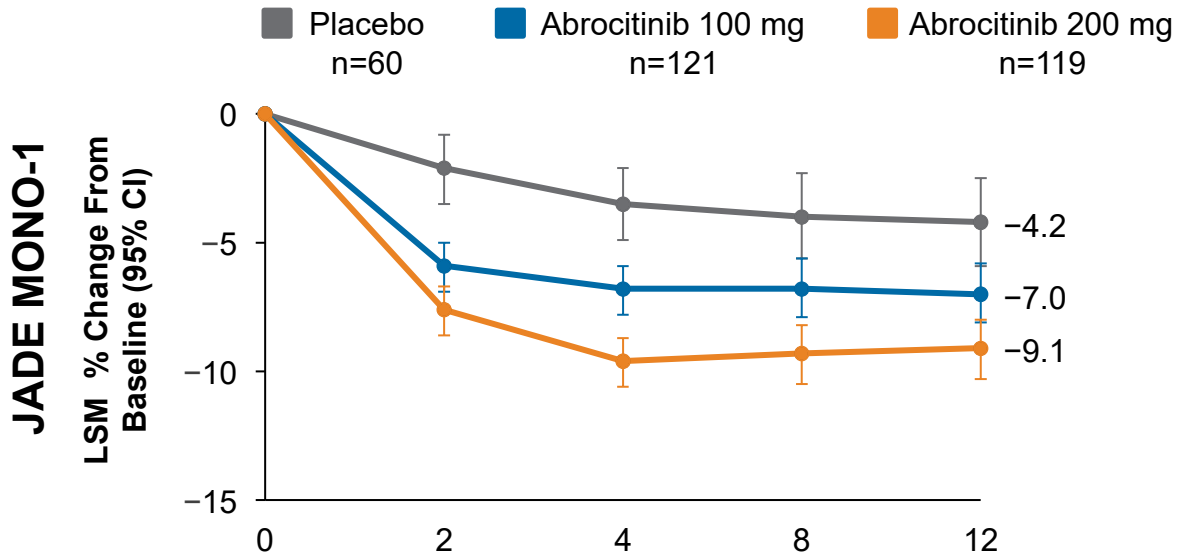


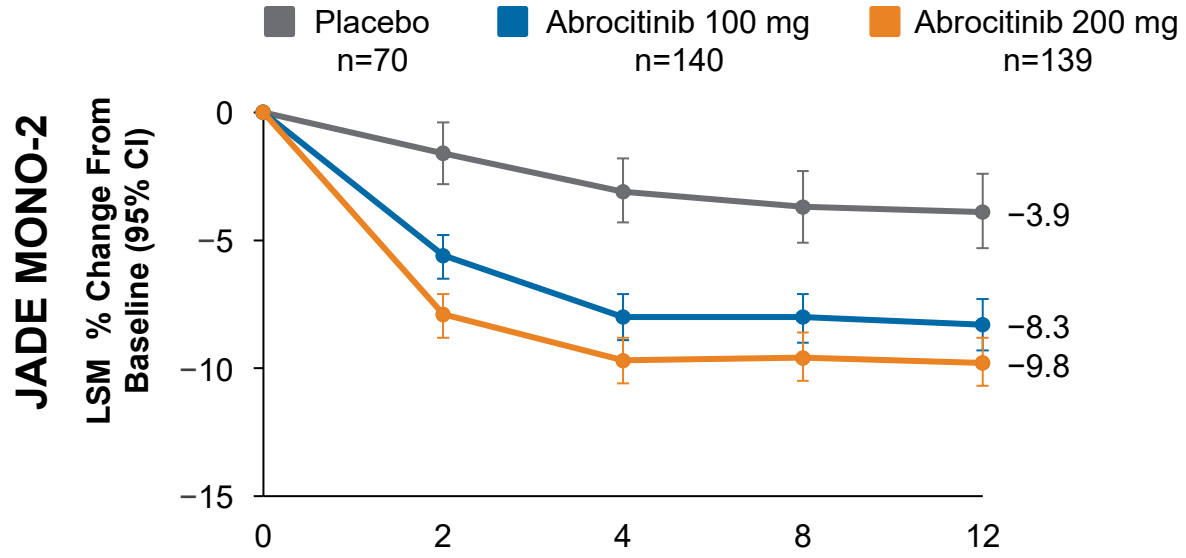


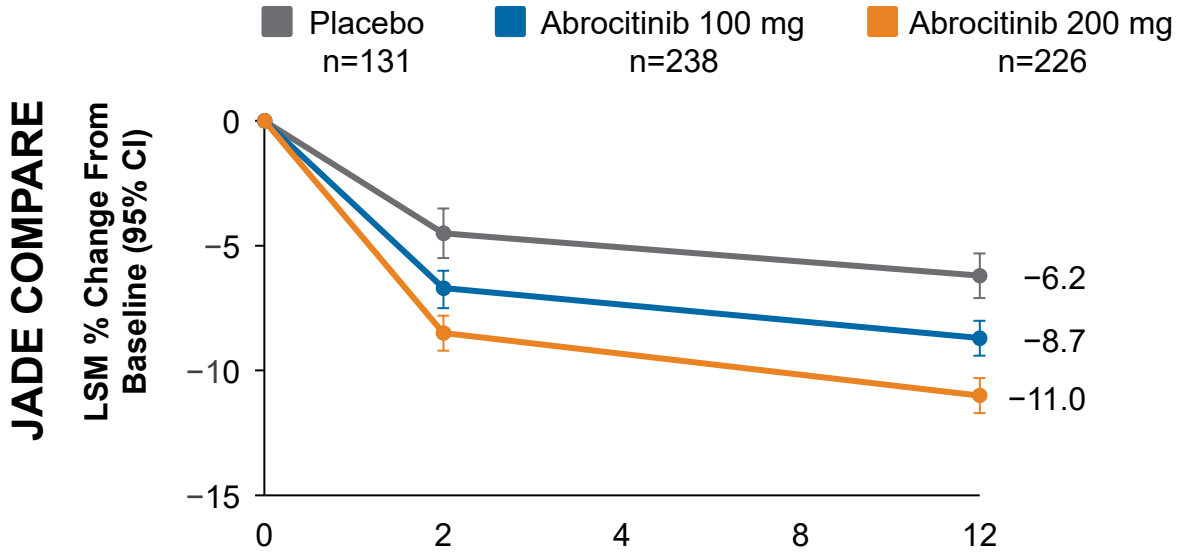


Efficacy Results: LSM Percentage Change From Baseline in DLQI at Week 12

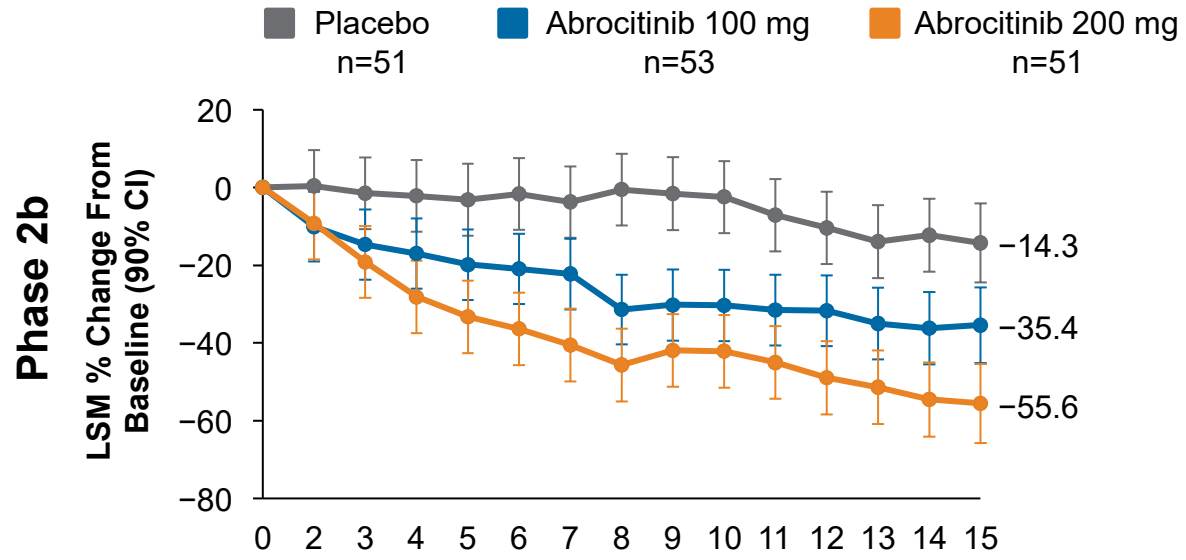


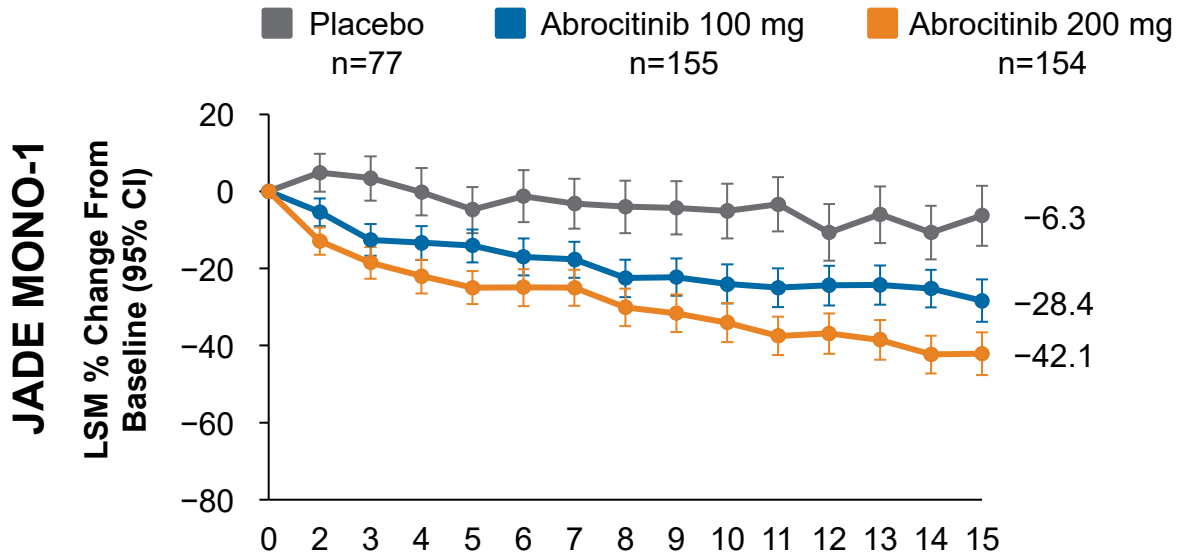


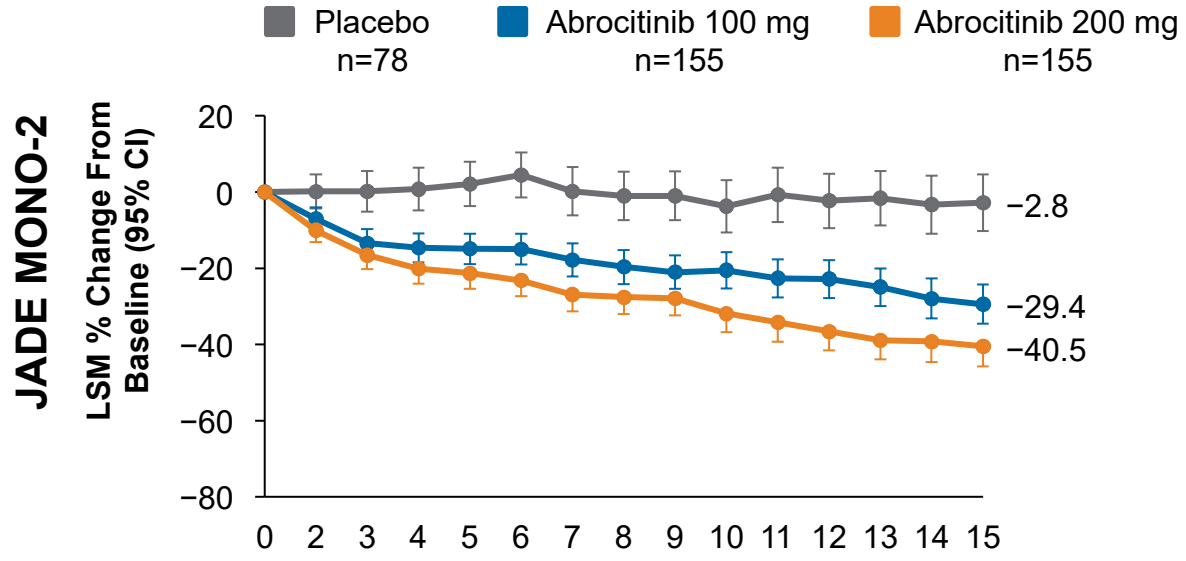


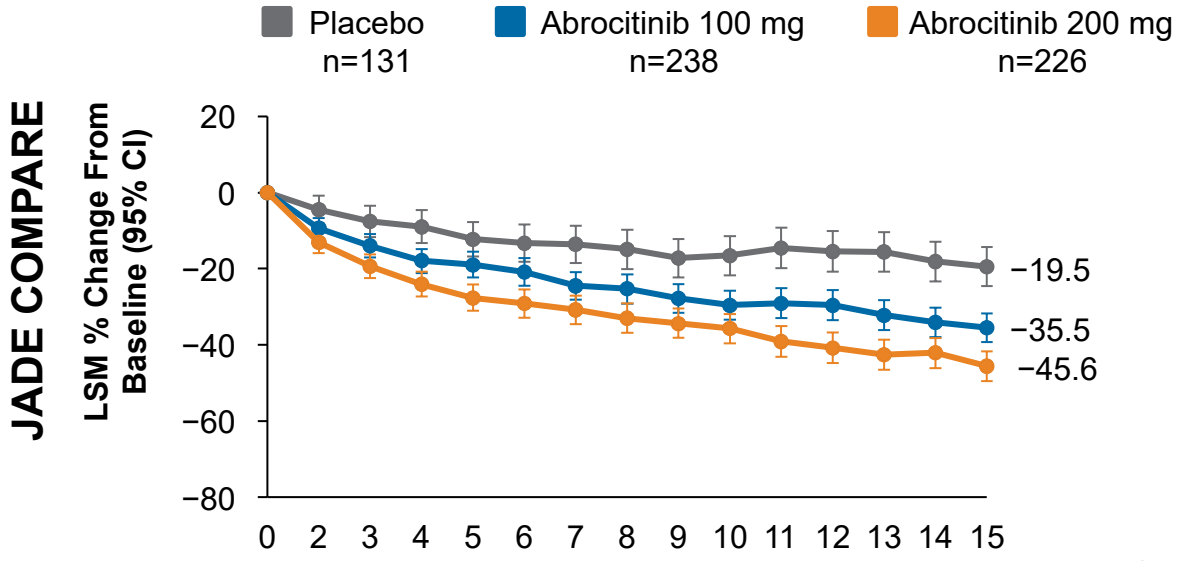


Efficacy Results: LSM Percentage Change From Baseline in PP-NRS From Day 2 - Day 15









Summary of Adverse Events

	Phase 2b			JADE MONO-1			JADE MONO-2			JADE COMPARE		
	Placebo n=56	Abrocitinib 100 mg n=56	Abrocitinib 200 mg n=55	Placebo n=77	Abrocitinib 100 mg n=156	Abrocitinib 200 mg n=154	Placebo n=78	Abrocitinib 100 mg n=158	Abrocitinib 200 mg n=155	Placebo n=131	Abrocitinib 100 mg n=226	Abrocitinib 200 mg n=238
≥1 AE, n (%)	32 (57.1)	43 (76.8)	41 (74.5)	44 (57.1)	108 (69.2)	120 (77.9)	42 (53.8)	99 (62.7)	102 (65.8)	70 (53.4)	121 (50.8)	140 (61.9)
Serious AE, n (%)	2 (3.6)	3 (5.4)	2 (3.6)	3 (3.9)	5 (3.21)	5 (3.2)	1 (1.3)	5 (3.2)	2 (1.3)	5 (3.8)	6 (2.5)	2 (0.9)
Severe AE, n (%)	3 (5.4)	9 (16.1)	4 (7.3)	9 (11.7)	8 (5.1)	5 (3.2)	5 (6.4)	7 (4.4)	6 (3.9)	3 (2.3)	5 (2.1)	4 (1.8)
AE leading to study discontinuation, n (%)	9 (16.1)	12 (21.4)	8 (14.5)	7 (9.1)	9 (5.8)	9 (5.8)	10 (12.8)	6 (3.8)	5 (3.2)	5 (3.8)	6 (2.5)	10 (4.4)
Common AEs or AEs of interest												
Nausea, n (%)	1 (1.8)	1 (1.8)	8 (14.5)	2 (2.6)	14 (9.0)	31 (20.1)	2 (2.6)	12 (7.6)	22 (14.2)	2 (1.5)	10 (4.2)	25 (11.1)
Nasopharyngitis, n (%)	0	0	0	8 (10.4)	23 (14.7)	18 (11.7)	5 (6.4)	20 (12.7)	12 (7.7)	9 (6.9)	22 (9.2)	15 (6.6)
Acne, n (%)	0	0	1 (1.8)	0	1 (0.6)	4 (2.6)	0	2 (1.3)	9 (5.8)	0	7 (2.9)	15 (6.6)
Herpes zoster, n (%)	0	0	0	0	1 (0.6)	1 (0.6)	0	0	2 (1.3)	0	1 (0.4)	4 (1.8)

AE, adverse event

Summary

- **12-Week Treatment With Abrocitinib Was Efficacious in Improving the Signs and Symptoms of AD**
  - Greater proportions of patients achieved IGA 0/1, EASI-90, PP-NRS4 and DLQI responses at week 12 with either dose of abrocitinib compared to placebo
  - Efficacy was dose-dependent, with greater proportions of patients achieving week 12 outcomes with abrocitinib 200 mg
- **Abrocitinib Rapidly Reduced Pruritus in Patients With Moderate-to-Severe AD**
  - A significant reduction in itch as measured by PP-NRS occurred as early as day 2 of treatment with abrocitinib 200 mg or 100 mg compared to placebo
- **Abrocitinib Was Well Tolerated Across the 4 Trials**
  - AEs with abrocitinib were mostly mild or moderate and occurred in a dose-dependent manner
  - The most common AE associated with abrocitinib was nausea

Abrocitinib Was Safe and Effective in Treating Moderate-to-Severe AD Across the Phase 2b, JADE MONO-1, JADE MONO-2, and JADE COMPARE Clinical Trials

The authors thank the patients and the investigators of the Phase 2b, JADE MONO-1, JADE MONO-2, and JADE COMPARE studies