Improvements in Sleep and Pruritus With Abrocitinib Versus Dupilumab in Patients With Moderate-to-Severe Atopic Dermatitis: Results From the JADE DARE Study

Zakiya P. Rice, MD, FAAD,[1] Anthony Bewley, FRCP, BA (Hons),[2] Sonja Ständer, MD,[3] Carla Castro, MD,[4] Laurent Misery, MD, PhD,[5] Daniela E. Myers, MPH,[6] Pinaki Biswas, PhD,[6] Bryant Phan, MPH, MS,[6,*] Melissa Watkins, PhD[6]

[1]Dermatology Associates of Georgia, Atlanta, GA, USA; [2]Barts Health NHS Trust, London, United Kingdom; [3]Center for Chronic Pruritus and Department of Dermatology, Münster University Hospital, Münster, Germany; [4]Pediatric Dermatology, Hospital Universitario Austral, Pilar, Argentina; [5]University Hospital of Brest, Brest, France; 6Pfizer Inc., New York, NY, USA
[*]Affiliation at the time of the study

Disclosures: ZPR is an advisory board member for Pfizer Inc., Biotech, Cassiopeia, and Medscape; a consultant for Pfizer Inc., Brickell Biotech, Cassiopeia, Dermira, and Regeneron Pharmaceuticals/Sanofi; has received funding from Anacor Pharmaceuticals, Celgene, Galderma, Regeneron/Sanofi-Genzyme, Merck & Co., and AbbVie; and a speaker for Pfizer Inc., Dermira, the International Hyperhidrosis Society, PRIME, and Regeneron Pharmaceuticals/Sanofi. **AB** has received consultancy and travel grants from AbbVie, Almirall, Eli Lilly, Galderma, Janssen, LEO Pharma, Novartis, Sanofi, and UCB. **SS** is an investigator for Dermasence, Galderma, Kiniksa, Menlo Therapeutics, Novartis, Trevi Therapeutics, Sanofi Genzyme, and Vanda Pharmaceuticals Inc.; a member of scientific advisory boards, consultant and/or speaker for Pfizer Inc., AbbVie, Almirall, Beiersdorf, Bellus Health, Benevolent, Bionorica, Cara Therapeutics, Clexio Biosciences Ltd., Eli Lilly and Company, Escient Pharmaceuticals, Galderma, Grünenthal, Kiniksa Pharmaceuticals, LEO Pharma, Menlo Therapeutics, P.G. Unna Academy, Sanofi Genzyme, Trevi Therapeutics, and Vifor. **CC** has been an investigator for Pfizer Inc., AbbVie, Eli Lilly and Company, Sanofi, La Roche-Posay, Novartis; an advisor for Pfizer Inc., AbbVie, Eli Lilly and Company, Sanofi, CeraVe, Novartis, and Janssen; a speaker for Pfizer Inc., AbbVie, Eli Lilly and Company, Sanofi, Galderma, La Roche-Posay, CeraVe, Eucerin, ISDIN, Novartis, and Janssen; and received grants for investigation from Pfizer Inc. **LM** has been an investigator for AbbVie, Galderma, Kiniksa, Lilly, Menlo Therapeutics, Novartis, Pfizer, Sanofi, and Trevi Therapeutics and a consultant for AbbVie, Beiersdorf, Clexio, Galderma, Lilly, Menlo Therapeutics, Novartis, Sanofi, Sienna Biopharmaceuticals, Trevi Therapeutics, and LEO Pharma. **DEM**, **PB**, and **MW** are employees and stockholders of Pfizer Inc.
BP was an employee and stockholder of Pfizer Inc. at the time of this analysis.



Presented at the American Academy of Dermatology (AAD) Annual Meeting; March 7-11, 2025; Orlando, Florida

Editorial/medical writing support under the guidance of authors was provided by Laura van Laeren, PhD, at ApotheCom, San Francisco, CA, USA, and was funded by Pfizer Inc., New York, NY, USA, in accordance with Good Publication Practice (GPP 2022) guidelines (*Ann Intern Med.* 2022; 10.7326/M22-1460). Pfizer's generative artificial intelligence (AI) assisted technology, MAIA (Medical Artificial Intelligence Assistant), was used in the production of the first draft of this poster. After using this tool/service, the authors reviewed and edited content as needed and take full responsibility for the content of this publication. This study was sponsored by Pfizer Inc.

Copies of this poster obtained through this QR code are for your personal use only and may not be reproduced without permission from the authors.
Scan to download a reprint of this poster.
Copyright © 2025. All rights reserved.

Background and Objective

Background

- AD is characterized by intense pruritus, which can lead to significant sleep disturbances and insomnia[1-3]
  - Sleep loss exacerbates daytime fatigue, irritability, and cognitive impairment[2]
  - Persistent itching and sleep disruption negatively impact overall QoL[2]
- Abrocitinib, an oral JAK1-selective inhibitor, and dupilumab, an injectable IL4Rα antagonist, were shown to improve QoL in patients with moderate-to-severe AD in the phase 3 JADE DARE and JADE COMPARE trials[1,4]
  - Improvements in sleep as assessed by SCORAD sleep loss VAS were observed over 16 weeks of treatment with abrocitinib and dupilumab in JADE COMPARE[4]

Objective

- To evaluate the efficacy of abrocitinib 200 mg compared with dupilumab in improving sleep outcomes and reducing pruritus in patients with moderate-to-severe AD in JADE DARE

AD, atopic dermatitis; IL4Rα, interleukin 4 receptor alpha; JAK1, Janus kinase 1; QoL, quality of life; SCORAD sleep loss VAS, SCORing Atopic Dermatitis sleep loss visual analog scale.
ClinicalTrials.gov Identifiers: NCT03720470) (JADE COMPARE); NCT04345367 (JADE DARE).
1. Reich K et al. *Lancet.* 2022;400(10348):273-282. 2. Cameron S et al. *Allergy.* 2024;79:26-36. 3. Silverberg JI et al. *Dermatitis.* 2022;33(6S):S104-S113. 4. Thyssen JP et al. *J Eur Acad Dermatol Venereol.* 2022; 36: 434-443.

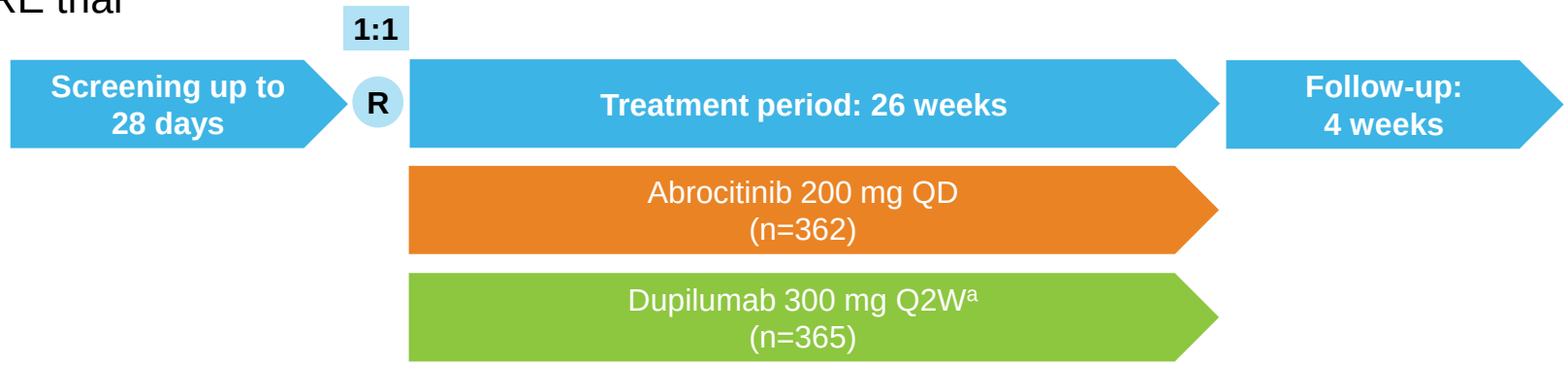
Study Design and Assessments

Study Design

- This post hoc analysis included patients with moderate-to-severe AD who received oral abrocitinib (200 mg once daily) or subcutaneous dupilumab (300 mg Q2W following a 600-mg loading dose) with concomitant topical therapy for 26 weeks in the phase 3 head-to-head JADE DARE trial[1]

Eligibility Criteria

- Adult patients (≥18 years) with AD ≥6 months
- Moderate-to-severe AD at baseline (IGA ≥3, EASI ≥16, %BSA affected ≥10, PP-NRS ≥4)



Assessments

- LSM change from baseline in MOS-SS quantity of hours slept and sleep disturbance scores at Weeks 12, 16, and 26 and SCORAD-VAS pruritus and sleep loss scores at Weeks 2, 4, 8, 12, 16, 20, and 26
- LSM percentage change from baseline in SCORAD total score at Weeks 2, 4, 8, 12, 16, 20, and 26

%BSA, percentage of body surface area; AD, atopic dermatitis; EASI, Eczema Area and Severity Index; IGA, Investigator's Global Assessment; LSM, least squares mean; MOS-SS, Medical Outcomes Study-Sleep Scale; PP-NRS, Peak Pruritus Numerical Rating Scale (used with permission from Regeneron Pharmaceuticals, Inc., and Sanofi); Q2W, once every 2 weeks; QD, once daily; R, randomization; SC, subcutaneous. SCORAD, SCORing Atopic Dermatitis; SCORAD-VAS, SCORAD visual analog scale.

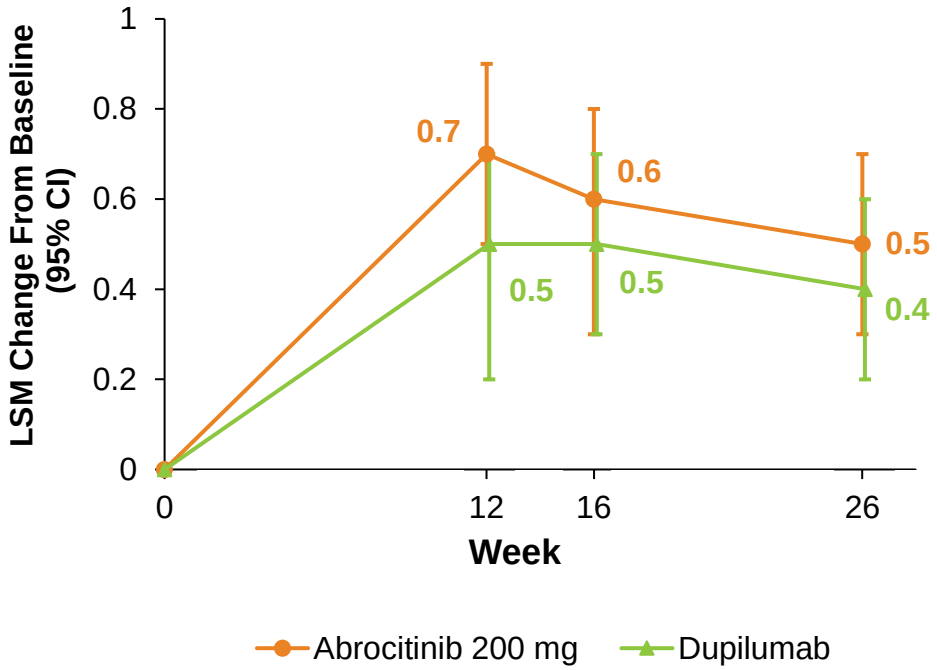
[a]After a 600-mg SC loading dose of dupilumab. The last dose of dupilumab was administered at Week 24.

1. Reich K et al. *Lancet.* 2022;400(10348):273-282.

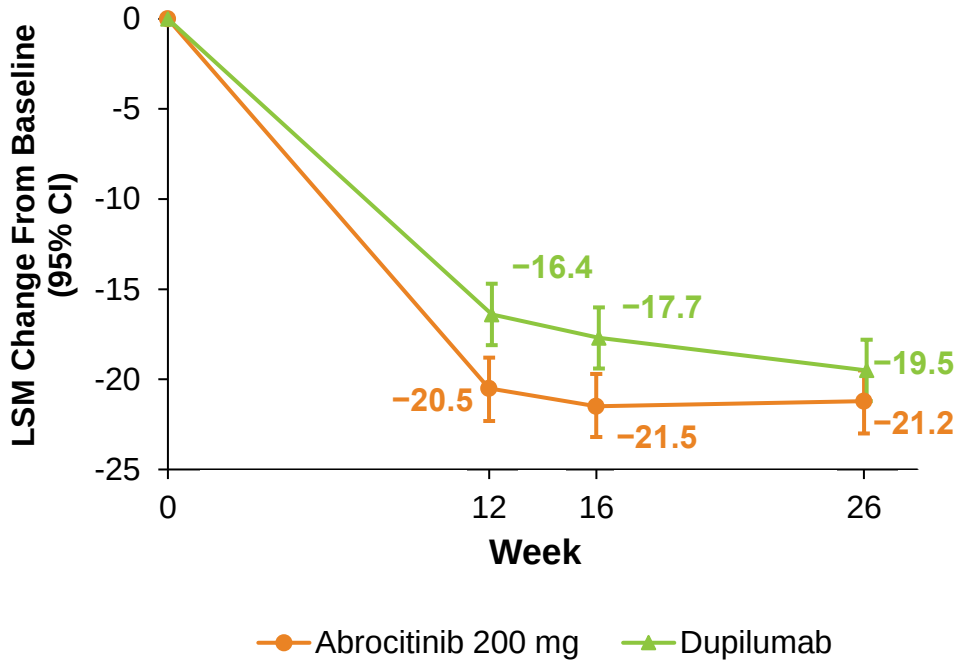
Sleep Improvements With Abrocitinib 200 mg Versus Dupilumab

- Of 727 patients in JADE DARE, 362 and 365 patients were treated with abrocitinib 200 mg and dupilumab, respectively
- From Week 12 through Week 26, improvements in sleep duration as assessed by MOS-SS quantity of hours slept were numerically greater with abrocitinib 200 mg compared with dupilumab
- Similarly, reductions in sleep disturbance as assessed by MOS-SS sleep disturbance score were greater at Week 12 and Week 16 and numerically greater at Week 26 with abrocitinib 200 mg compared with dupilumab

MOS-SS Quantity of Hours Slept



MOS-SS Sleep Disturbance

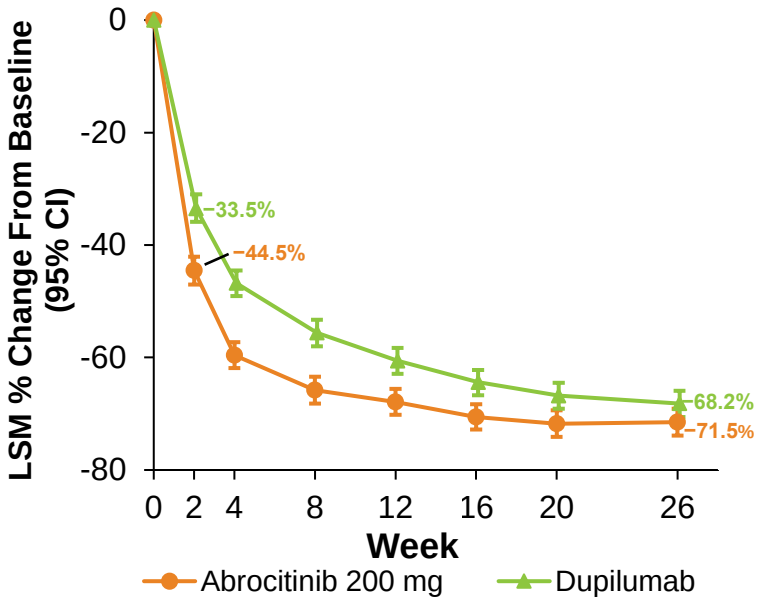


LSM, least squares mean; MOS-SS, Medical Outcomes Study-Sleep Scale.

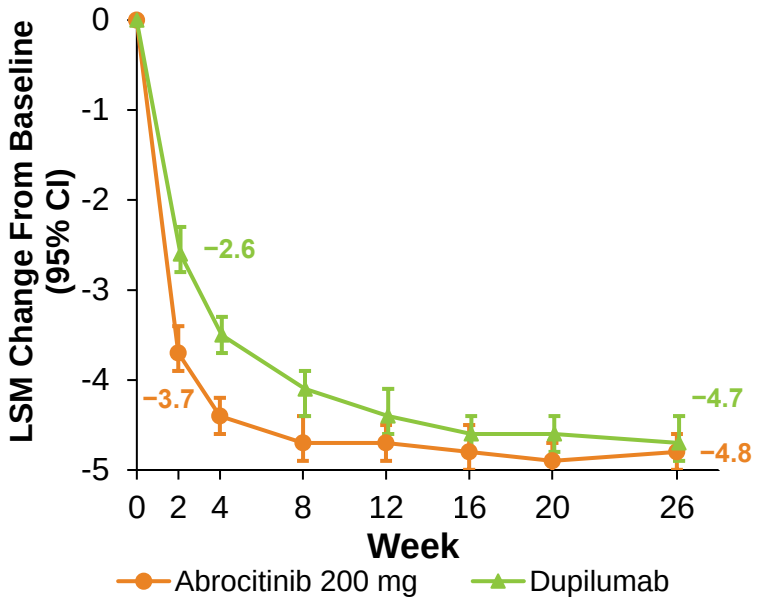
Changes in Sleep Loss and Pruritus Over Time

- Improvements were greater for abrocitinib 200 mg than for dupilumab from Week 2 to Week 16 for SCORAD total score, from Week 2 and Week 4 for SCORAD-VAS sleep loss score, and from Week 2 to Week 12 for SCORAD-VAS pruritus score
  - Improvements were numerically greater for abrocitinib 200 mg than for dupilumab at all other timepoints for all endpoints
  - Improvements were more rapid with abrocitinib 200 mg versus dupilumab

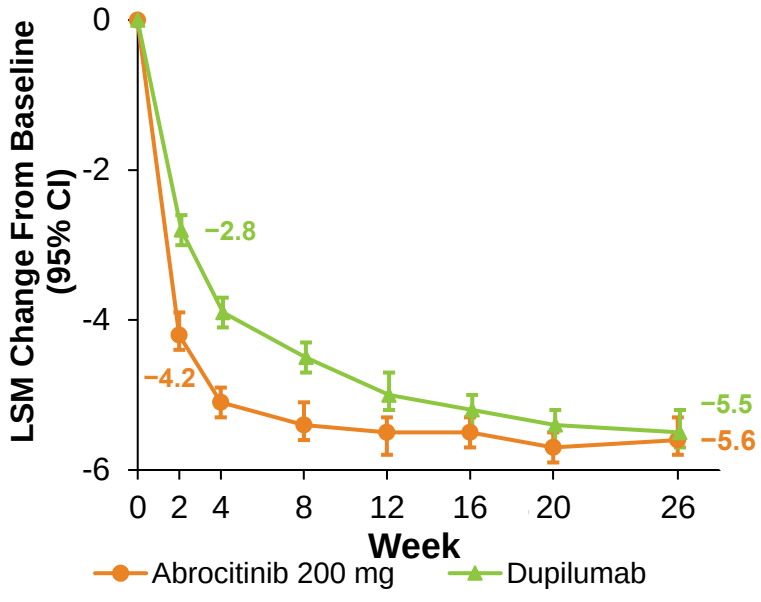
SCORAD Total Score



SCORAD-VAS Sleep Loss



SCORAD-VAS Pruritus



Conclusion

- Improvements in both sleep and pruritus outcomes were more rapid and were generally greater with abrocitinib 200 mg compared to dupilumab in patients with moderate-to-severe AD

AD, atopic dermatitis; LSM, least squares mean; SCORAD, SCORing Atopic Dermatitis; SCORAD-VAS, SCORAD visual analog scale.