

# INPLASY

## Risk of Flare on Drug Therapy in Moderate-to-Severe Atopic Dermatitis: A Network Meta-Analysis

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### ADMINISTRATIVE INFORMATION

**Support** - None.

**Review Stage at time of this submission** - Preliminary searches.

**Conflicts of interest** - None declared.

**INPLASY registration number:** INPLASY202460098

**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 24 June 2024 and was last updated on 08 August 2024.

## INTRODUCTION

**Review question / Objective** In patients with moderate-to-severe atopic dermatitis, which drug therapy is the most effective at reducing the risk of flare after 12 weeks of therapy compared to control?

**Rationale** A primary goal of atopic dermatitis treatment is to prevent and/or reduce the occurrence of flares. It is important to analyze the evidence to understand which therapies are the most effective at doing this.

**Condition being studied** Atopic dermatitis, also known as eczema, is a chronic inflammatory skin condition characterized by dry, itchy, and red skin. It is commonly found in infants and children but can persist into adulthood. The exact cause is unknown, but it is believed to involve a

combination of genetic, environmental, and immunological factors.

## METHODS

**Participant or population** Moderate-to-severe atopic dermatitis patients.

**Intervention** Drug therapy (topicals and systemic agents).

**Comparator** Control (placebo).

**Study designs to be included** Double-blind randomized control trials.

**Eligibility criteria** Studies must have provided a Kaplan-Meier curve or cumulative risk curve.

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Patients must be free of signs and symptoms of atopic dermatitis flare (stabilized), at the time of entering the maintenance therapy phase. Primary treatment must be given in a standardized manner (e.g., at specified time intervals and not as needed).

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**Information sources** Pubmed, CENTRAL, and Embase. Clinicaltrials.gov and WHO ICTRP can be searched for additional information.

**Main outcome(s)** Risk ratio of flare after 12 weeks of therapy.

**Additional outcome(s)** Relative risk reduction.

**Quality assessment / Risk of bias analysis** The Covidence systematic review platform will be used.

**Strategy of data synthesis** IPD will be reconstructed from Kaplan-Meier survival curves of time to flare or cumulative risk curves. IPD will then be analyzed using MetaInsight by doing a bayesian network meta-analysis of dichotomous outcomes.

**Subgroup analysis** None.

**Sensitivity analysis** Deviance, uncertainty, and reliability measures will be provided by MetaInsight and these will be analyzed.

**Language restriction** English.

**Country(ies) involved** United States of America.

**Keywords** atopic dermatitis; flare; relapse.

#### **Contributions of each author**

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