

# INPLASY

## The utility of baricitinib for refractory dermatologic conditions: A Systematic Review

INPLASY202450076

doi: 10.37766/inplasy2024.5.0076

Received: 15 May 2024

Published: 15 May 2024

### Corresponding author:

Eric Nemece

nemece@sacredheart.edu

### Author Affiliation:

Sacred Heart University.

Nemece, EC; Lipponen, ME; Lai, LM.

### ADMINISTRATIVE INFORMATION

**Support** - N/A.

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

**Conflicts of interest** - None declared.

**INPLASY registration number:** INPLASY202450076

**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 15 May 2024 and was last updated on 15 May 2024.

### INTRODUCTION

**Review question / Objective** In patients with select refractory dermatologic disease states, does baricitinib improve clinical symptoms?

**Condition being studied** Refractory states of alopecia areata, atopic dermatitis, dermatomyositis, livedoid vasculopathy, cutaneous systemic lupus erythematosus, and granuloma annulare.

### METHODS

**Search strategy** A university health sciences librarian assisted with the development of the following search string: (“Baricitinib” or “Olumiant” or “Janus Kinase Inhibitor”) AND (“Dermat\*” or “other skin conditions” or “skin diseases”) AND (“Refractory”).

**Participant or population** Patients of any age or sex with select refractory dermatologic conditions.

**Intervention** Baricitinib.

**Comparator** Standard of care.

**Study designs to be included** Cohort studies and Case reports.

**Eligibility criteria** The inclusion criteria were: All sexes of any age with moderate to severe atopic dermatitis of any dermatological location, moderate to severe alopecia areata, dermatomyositis, cutaneous systemic lupus erythematosus, livedoid vasculopathy, granuloma annulare and refractory disease meaning no other medication or intervention has been deemed successful for symptomatic treatment. Lastly, baricitinib (Olumiant®), must be the primary intervention.

**Information sources** EBSCOHost was used to concurrently search MEDLINE with full text, Trip database, CINAHL ultimate, CINAHL with full text, Cochrane Central Register of Controlled Trials,

---

Cochrane Clinical Answers, Cochrane Database of Systematic Reviews, and Nursing & Allied Health Premium; PubMed was also searched. Using the same keywords in the following databases, an additional search of the grey literature was performed: Cochrane Library, AHRQ, and ClinicalTrials.gov.

**Main outcome(s)** Symptomatic dermatologic improvement was quantified using validated rating scales, such as the Eczema Area and Severity Index (EASI) and the Patient Global Assessment tool (PGA); no restrictions were placed on the outcome evaluation.

**Data management** Covidence.org was used to screen titles and abstracts.

**Quality assessment / Risk of bias analysis** Center of Evidence-Based Management Critical Appraisal of a Case Study tool was used to assess included studies.

**Strategy of data synthesis** Data were qualitatively synthesized related to each included disease state.

**Subgroup analysis** Data were grouped by disease state; there were no additional subgroup analyses.

**Sensitivity analysis** N/A.

**Language restriction** English.

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

**Keywords** Humans; Dermatitis, Atopic; baricitinib; Alopecia Areata; Dermatomyositis; Granuloma Annulare; Livedoid Vasculopathy.

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

Author 1 - Eric Nemec.

Email: nemece@sacredheart.edu

Author 2 - Megan Lipponen.

Email: lipponenm@mail.sacredheart.edu

Author 3 - Lacey Lai.

Email: lail2@mail.sacredheart.edu