

# INPLASY

## Monotherapies for Vitiligo: A Protocol for a Systematic Review and Network Meta-Analysis Study

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### ADMINISTRATIVE INFORMATION

**Support** - No funding will be received for the conduct of this study.

**Review Stage at time of this submission** - Formal screening of search results.

**Conflicts of interest** - None declared.

**INPLASY registration number:** INPLASY2024110065

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

### INTRODUCTION

**Review question / Objective** The proposed study aims to quantitatively determine the relative effects of monotherapies used for treating vitiligo.

**Rationale** Vitiligo is a disorder characterized by depigmentation throughout the skin. This condition results from the loss (or destruction) of melanocytes, the cells that produce the pigment melanin. There is substantial evidence that supports being diagnosed with vitiligo with a likelihood of developing unfavorable psychological conditions including anxiety, depression, and even suicidal ideation. Various medicines have been formulated to treat this disfiguring condition, however evidence on the relative impact thereof is currently scant.

**Condition being studied** Vitiligo.

### METHODS

**Search strategy** Searches will be conducted in PubMed and Scopus.

**Participant or population** Persons diagnosed with vitiligo.

**Intervention** Monotherapy with ultraviolet B, ultraviolet A, calcineurin inhibitors and janus kinase inhibitors.

**Comparator** Comparators may be controls like sham, vehicle, placebo or other interventions (i.e., monotherapy with ultraviolet B, ultraviolet A, calcineurin inhibitors and janus kinase inhibitors).

**Study designs to be included** Randomized trials, prospective and retrospective studies.

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**Eligibility criteria** The proposed study will include studies that are published in English language and have an arm that investigates the effect of monotherapy on persons with vitiligo in terms of mean percent reduction in Vitiligo Area Scoring Index (VASI) after 6 months of therapy.

**Information sources** Searches will be made PubMed and Scopus.

**Main outcome(s)** The proposed study will extract outcome data on the following:

0% to 25% repigmentation at 6 months

25% to 50% repigmentation at 6 months

50% to 75% repigmentation at 6 months

75% to 100% repigmentation at 6 months.

**Quality assessment / Risk of bias analysis**

Evidence quality will be assessed using tools available under the Cochrane Collaboration.

**Strategy of data synthesis** Extracted data will be analyzed using R software.

**Subgroup analysis** The extracted data will determine our conduct of subgroup analysis.

**Sensitivity analysis** The extracted data will determine our conduct of sensitivity analysis.

**Language restriction** English.

**Country(ies) involved** Canada.

**Keywords** Vitiligo; Repigmentation; Phototherapy; Janus Kinase Inhibitor; Relative Effects.

**Contributions of each author**

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