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# Monotherapies for hidradenitis suppurativa: protocol for a multiple treatment meta-analysis study

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### **ADMINISTRATIVE INFORMATION**

Support - None.

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

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202540073

**Amendments -** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 21 April 2025 and was last updated on 21 April 2025.

#### INTRODUCTION

Review question / Objective The objective of the proposed work is to conduct a network meta-analysis (NMA) study to determine the relative efficacy of selected monotherapies for hidradenitis suppurativa (HS).

Rationale The literature has expanded with published studies on the efficacy of various monotherapies for hidradenitis suppurativa (HS), a condition also termed 'acne inversa'. Randomized clinical trials (RCTs) have investigated the therapeutic impact of immunomodulatory agents, including antagonists of tumor necrosis factoralpha (TNF-α), interleukin 1 alpha (IL-1α), janus kinase (JAK) and phosphodiesterase 4 (PDE4), to name a few. The aim of the proposed study is to produce quantitative evidence on the therapeutic effect of these recently identified immunomodulatory monotherapies for HS.

Condition being studied Hidradenitis suppurativa.

#### **METHODS**

**Search strategy** Data for the proposed NMA study will be obtained through systematic searches of relevant studies through electronic databases like PubMed and Scopus; ClinicalTrials.gov will also be searched.

**Participant or population** Persons diagnosed with hidradenitis suppurativa.

**Intervention** Immunomodulatory monotherapies for hidradenitis suppurativa.

**Comparator** Placebo, vehicle or immunomodulatory monotherapies for hidradenitis suppurativa.

**Study designs to be included** Randomized controlled trials.

**Eligibility criteria** The proposed NMA study will include data from trials that are (1) randomized, (2) investigated systemically administered

monotherapy with an immunomodulatory agent, (3) published in English, and (4) quantify efficacy 16 weeks from baseline in terms of the Hidradenitis Suppurativa Clinical Response 50 (HiSCR-50), Dermatology Life Quality Index (DLQI) and Numeric Rating Scale 30 (NRS30).

**Information sources** Information sources would include PubMed and Scopus.

Main outcome(s) Hidradenitis Suppurativa Clinical Response 50 (HiSCR-50), Dermatology Life Quality Index (DLQI) and Numeric Rating Scale 30 (NRS30) Treatment-Emergent Adverse Event (TEAE).

Quality assessment / Risk of bias analysis The evidence quality for each included study will be assessed using the Cochrane Collaboration's revised risk of bias (RoB) tool.

**Strategy of data synthesis** The strategy for data syntheses will be consolidated after obtaining data.

Subgroup analysis None.

**Sensitivity analysis** The layout for sensitivity analyses will be determined after obtaining data.

Language restriction English.

Country(ies) involved Canada.

**Keywords** Hidradenitis Suppurativa Clinical Response 50 (HiSCR-50); Dermatology Life Quality Index (DLQI); Acne Inversa.

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

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