

# INPLASY

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## Comparative Efficacy and Safety Profiles of Non-ablative and Ablative Laser Therapies in the Treatment of Acne Scarring: A Systematic Review and Meta-analysis

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## ADMINISTRATIVE INFORMATION

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**Review Stage at time of this submission** - Completed but not published.

**Conflicts of interest** - None declared.

**INPLASY registration number:** INPLASY202390028

**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 10 September 2023 and was last updated on 10 September 2023.

## INTRODUCTION

**Review question / Objective** P: acne scar;I:non-ablative laser ;C:ablative laser.Comparative Efficacy and Safety Profiles of Non-ablative and Ablative Laser Therapies in the Treatment of Acne Scarring.

**Condition being studied** Acne scarring represents a ubiquitous dermatological challenge with considerable impact on both physical and psychological health. Despite the utilization of various laser therapies—including both ablative and non-ablative modalities—in ameliorating acne scars, a definitive assessment of their relative efficacy and safety remains elusive. This meta-

analysis aims to rigorously evaluate and juxtapose the therapeutic outcomes and safety profiles of non-ablative versus ablative laser treatments for acne scarring.

## METHODS

**Participant or population** Acne scar.

**Intervention** Non-ablative laser.

**Comparator** Ablative laser.

**Study designs to be included** Clinical trials or randomized controlled clinical trial.

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**Eligibility criteria** (1) Study design: clinical trials; (2) Study population: patients presenting with acne scars; (3) Investigated interventions: non-ablative lasers; (4) Comparator: ablative lasers; and (5) Evaluated outcomes: clinical betterment, patient gratification, and the occurrence of adverse events.

**Information sources** PubMed, Embase, and Cochrane Library.

**Main outcome(s)** Clinical improvement.

**Quality assessment / Risk of bias analysis** Cochrane Handbook for Systematic Reviews of Interventions.

**Strategy of data synthesis** Stata 17 (StataCorp, College Station, Texas, USA).

**Subgroup analysis** Age, follow up duration.

**Sensitivity analysis** Stata 17 (StataCorp, College Station, Texas, USA).

**Country(ies) involved** China.

**Keywords** acne scar, laser therapy.

**Contributions of each author**

Author 1 - Ruonan Ke.

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Author 3 - Xuejun Ni.