

## INTRODUCTION

The search for minimally invasive procedures in the integumentary system has been increasing. The development of new techniques and technologies allows excellent results to be obtained with minimal morbidity. Therefore, the objective of the study was to carry out a systematic review about the effect of the 1470 nm diode laser on the integumentary system.

## METHODS & MATERIAL

- PROSPERO- International Prospective Register of Systematic Reviews: CRD42023425967;
- Followed the reporting items for systematic reviews and meta-analyses (PRISMA) guidelines;



- Exclusion criteria: studies with vascular, intraoral, body, non-aesthetic applicability, secondary study, association with other treatments, studies that used another wavelength or another semiconductor laser;
- The Strengthening the Reporting of Observational studies in Epidemiology (STROBE) tool was used to assess methodological quality and to analyze Joanna Briggs bias for case series and the Consolidated Standards of Reporting Trials (CONSORT) for randomized clinical trials.
- COMBINATION 1- ("lasers, semiconductor"[MeSH Terms] OR ("lasers"[All Fields] AND "semiconductor"[All Fields]) OR "semiconductor lasers"[All Fields] OR ("lasers"[All Fields] AND "semiconductor"[All Fields]) OR "lasers, semiconductor"[All Fields]) AND ("skin"[MeSH Terms] OR "skin"[All Fields])
- COMBINATION 2- ("adipose tissue"[MeSH Terms] OR "adipose"[All Fields] AND "tissue"[All Fields]) OR "adipose tissue"[All Fields]) AND ("lipectomy"[MeSH Terms] OR "lipectomy"[All Fields] OR "liposuction"[All Fields]) AND photothermolysis[All Fields]
- COMBINATION 3- ("lasers, semiconductor"[MeSH Terms] OR ("lasers"[All Fields] AND "semiconductor"[All Fields]) OR "semiconductor lasers"[All Fields] OR ("lasers"[All Fields] AND "semiconductor"[All Fields]) OR "lasers, semiconductor"[All Fields]) AND ("skin"[MeSH Terms] OR "skin"[All Fields]) AND 1470[All Fields]
- COMBINATION 4- ("lasers, semiconductor"[MeSH Terms] OR ("lasers"[All Fields] AND "semiconductor"[All Fields]) OR "semiconductor lasers"[All Fields] OR ("laser"[All Fields] AND "diode"[All Fields]) OR "laser diode"[All Fields]) AND 1470[All Fields]
- COMBINATION 5- ("lipolysis"[MeSH Terms] OR "lipolysis"[All Fields]) AND ("lasers"[MeSH Terms] OR "lasers"[All Fields] OR "laser"[All Fields]) AND ("face"[MeSH Terms] OR "face"[All Fields])
- COMBINATION 6- ("lasers, semiconductor"[MeSH Terms] OR ("lasers"[All Fields] AND "semiconductor"[All Fields]) OR "semiconductor lasers"[All Fields] OR ("diode"[All Fields] AND "laser"[All Fields]) OR "laser diode"[All Fields]) AND (Fiber[All Fields] AND ("lasers"[MeSH Terms] OR "lasers"[All Fields] OR "laser"[All Fields] )) AND ("face"[MeSH Terms] OR "face"[All Fields]) AND ("esthetics"[MeSH Terms] OR "esthetics"[All Fields] OR "aesthetic"[All Fields])

## RESULTS

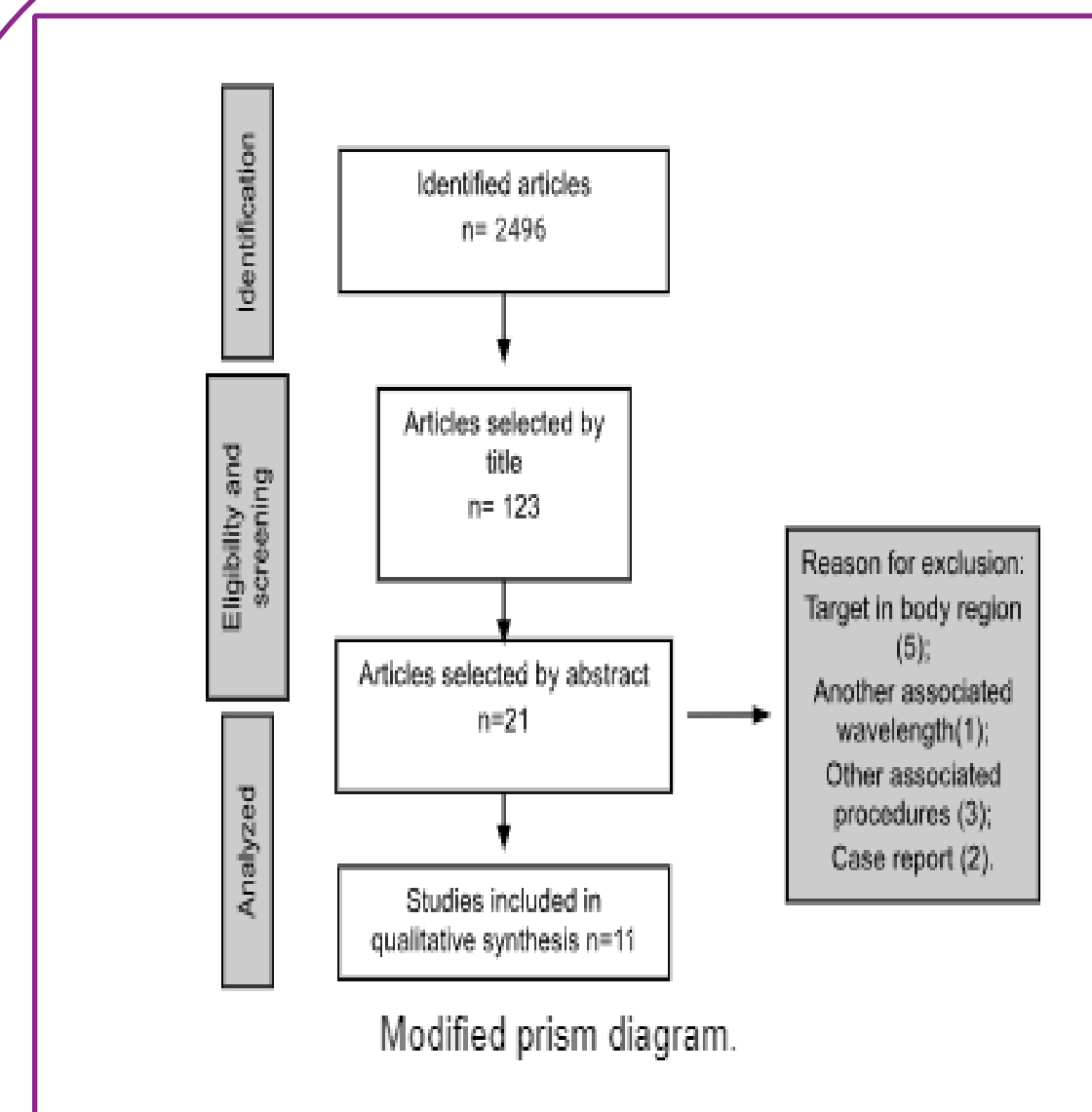


Table- Data extraction, according to author/country/year; design/sample/characteristics of the participants; equipment used / power / energy density; treatment region; methodology of analysis of the results and the main results.



- Indications were reduction of adipose tissue, improvement of flaccidity and acne scarring;
- The time taken to evaluate the results ranged from 3 to 12 months, although the first results can already be seen in the same week as the procedure.

### Acne Scars



Nilforoushzhadeh *et al.*, 2020.

### Eyelids and Infraorbital Bags



Nilforoushzhadeh *et al.*, 2022.

### Lower Third Sagging



Nilforoushzhadeh *et al.*, 2021.

### Submental Fat



Nilforoushzhadeh *et al.*, 2022.

### Eyelid Sagging



Sadoughifar *et al.*, 2022.

### Frontal Lines and Glabella



Markabayeva *et al.*, 2022.

## CONCLUSION

The impact of the 1470nm diode laser on the integumentary tissue was the reduction of adipose tissue, improvement of flaccidity and acne scarring. However, there was great methodological heterogeneity among the studies. More randomized clinical trials on this topic are suggested for better standardization of protocols.

## REFERENCES presentation

