

# Which Study Designs and Primary Outcomes Are Reported in the Published Studies of Lung Ultrasound in Emergency Medicine?

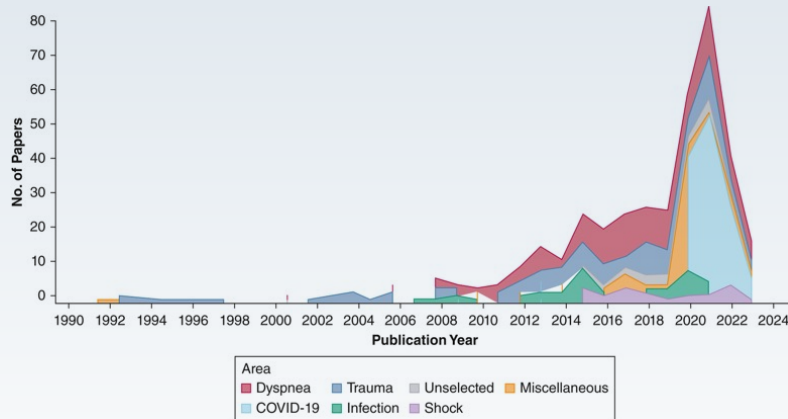
## STUDY DESIGN

Scoping review using a systematic search in PubMed/MEDLINE, Embase, Web of Science, Scopus, and Cochrane Library databases published prior to May 13, 2023

4,076 screened and 406 publications included

- 375 (92%) Observational
- 18 (4%) Randomized
- 13 (3%) Case Series

## RESULTS



No increase in the proportions of randomized controlled trials or the scope of primary outcome measures was observed over time.

## Outcomes Measured in Publications of Lung Ultrasound (LUS)

Patient-related outcomes

Diagnostic and therapeutic results

Diagnostic accuracy – 79%

Diagnostic thinking – 8%

Patient outcomes – 3%

Therapeutic changes – 1%

Observational diagnostic studies have been produced in abundance, leaving a paucity of research exploring clinical utility. Notably, research exploring whether LUS causes changes to clinical decisions is imperative prior to any further research being made into patient benefits.