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# Frailty and outcomes after stroke: a systematic review and meta-analysis

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# Outline

**01**

Background

**02**

The search

**03**

Results

**04**

Interpretation

# Background

**Frailty**

**+**

**Stroke**

**= ?**

# Search Strategy

**Frailty**

+

**Stroke**

# The Details



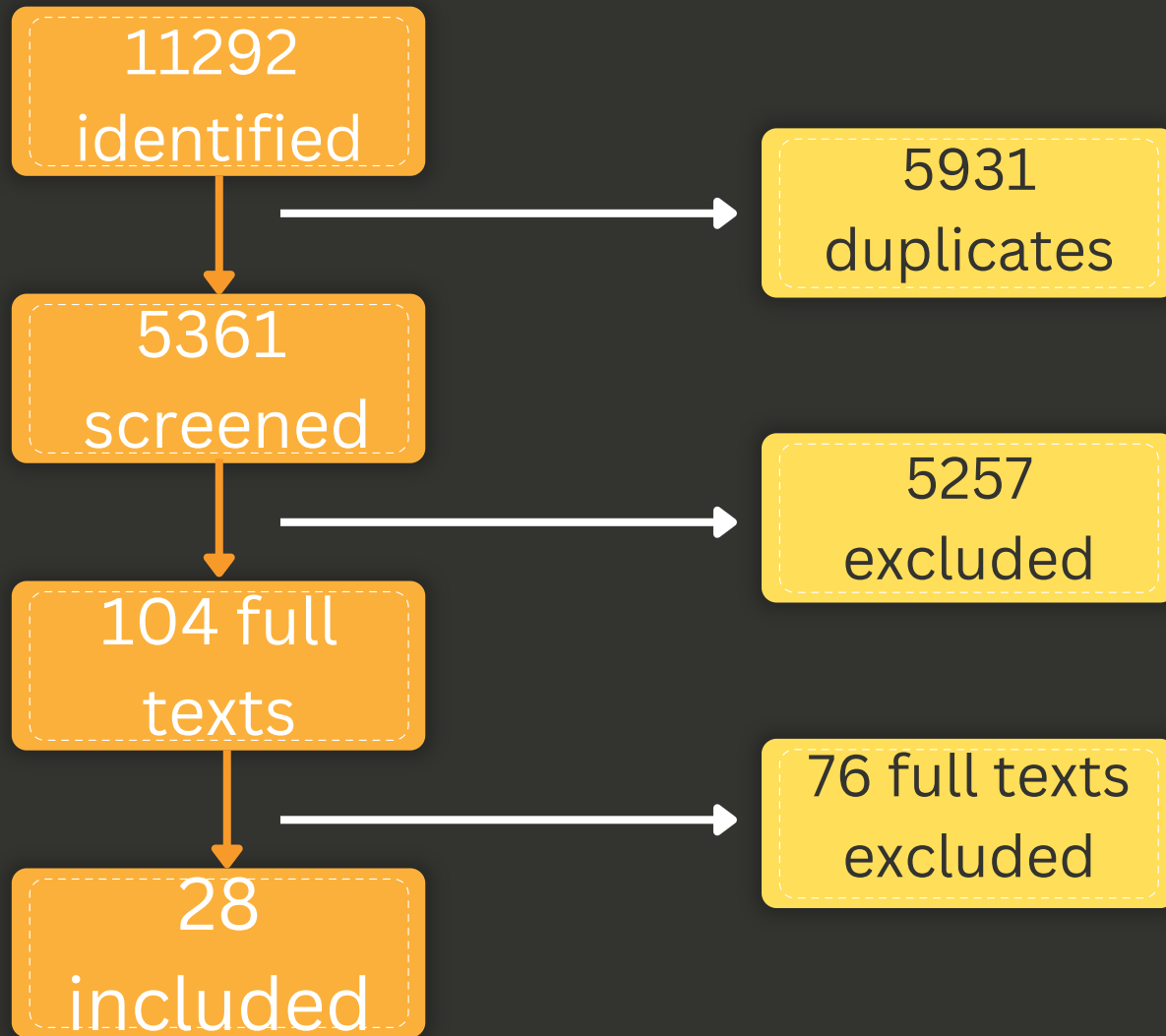
Embase, Cinahl and Medline

National Heart, Lung and Blood institute quality assessment tools

3 reviewers screening abstracts

2 reviewers quality assessing

2 reviewers extracting data



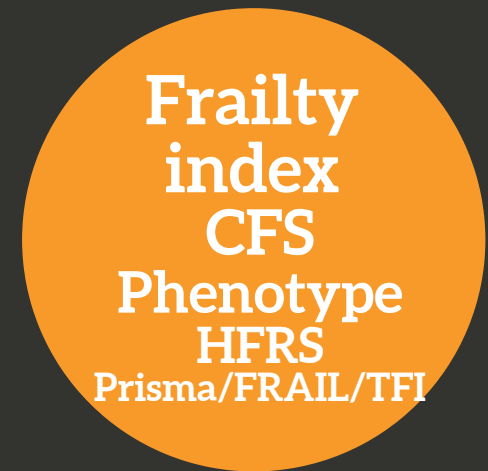
# Results



Geography



Setting



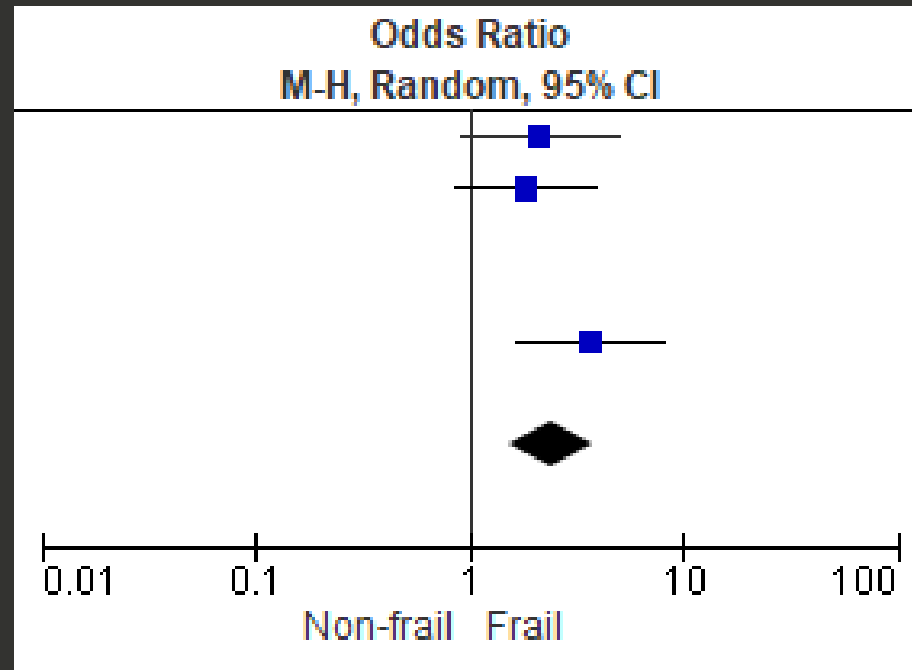
Frailty  
assessment

# Results





# In-hospital Mortality



**OR 2.43 (1.54-3.84)**

# Frailty Associations

## Meta-analysis limited by heterogeneity

Increased 28 day mortality

Increased 90 day mortality

Increased 12 month mortality

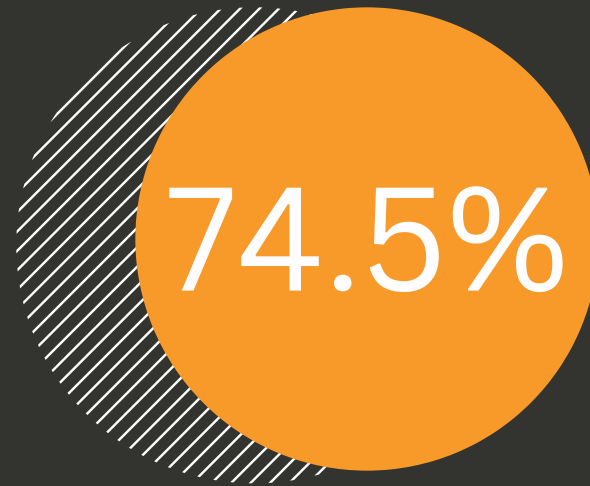
Increased NIHSS on admission and at 24 hours

Increased mRS on discharge

Worse cognition

Reduced chance of being discharged home

# Quality Assessment



Average quality assessment score

Weaknesses = sample size, blinding and repeat exposure assessment

# Summary

FRAILTY IN STROKE IS COMMON

FRAILTY NEGATIVELY AFFECTS OUTCOMES AFTER  
STROKE

VARIETY IN ASSESSMENT METHODS LIMITS ABILITY  
TO META-ANALYSE DATA

DO WE NEED A RESEARCH STANDARD?