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Introduction

- Sciatica describes spinally referred pain of neural origin that radiates into the leg.
- Up to 45% of patients have symptoms for over 12 months [1].
- Increases the costs of back pain by 67% [2].
- Personal cost: adverse effects on almost all aspects of life [3].
- In the UK, NICE Guidelines (2016) recommend physiotherapy as a first line treatment.
- Previous systematic reviews:
 - Unclear inclusion criteria for sciatica
 - 10+ years old

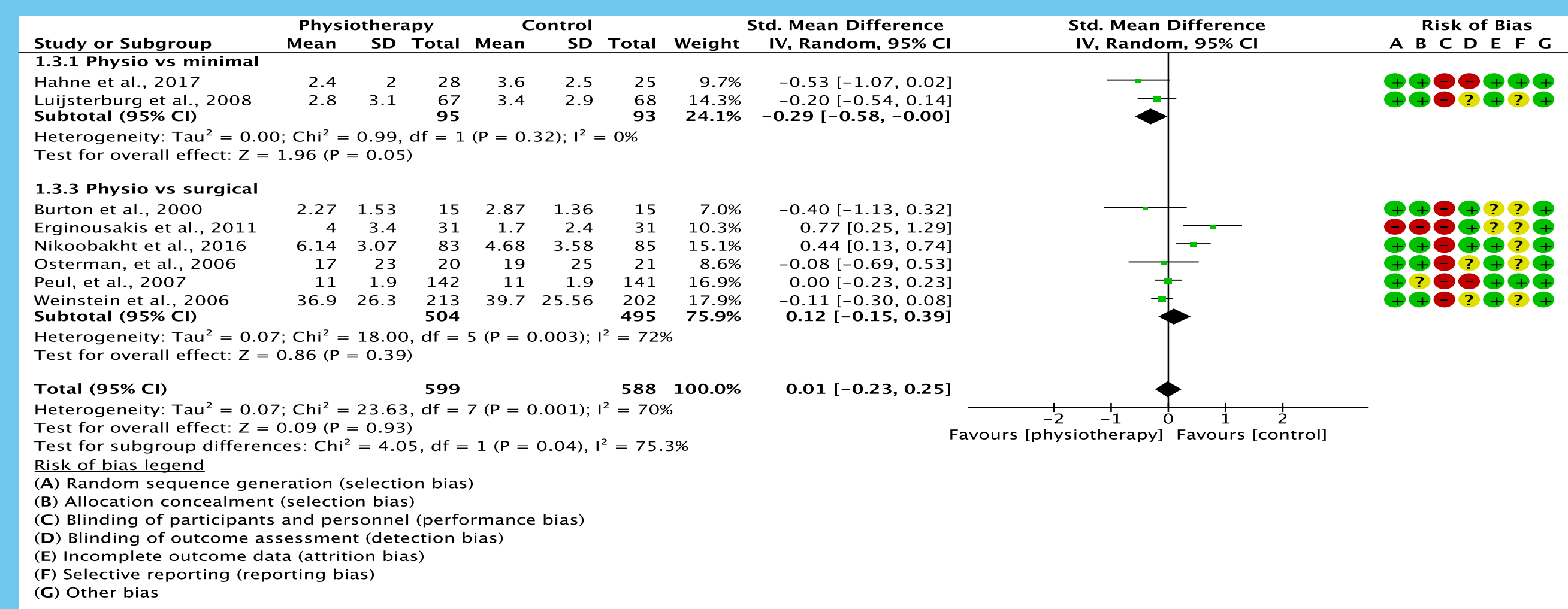
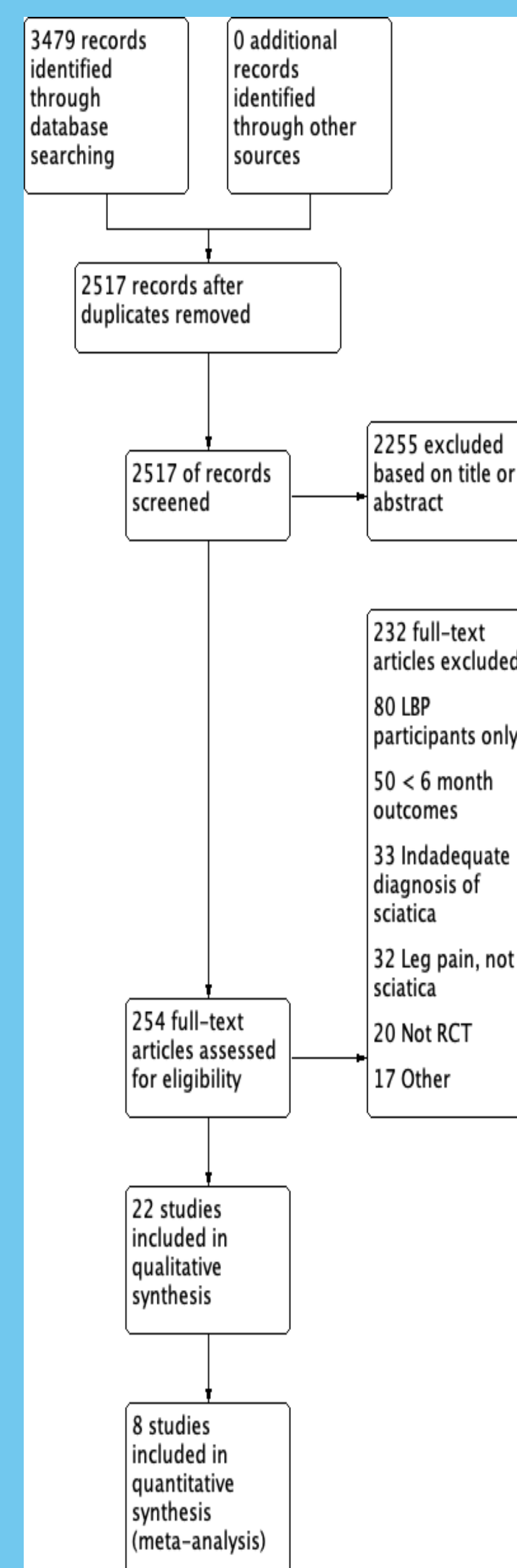
Aim

- To perform a systematic review on the effectiveness of physiotherapy for patients with sciatica.

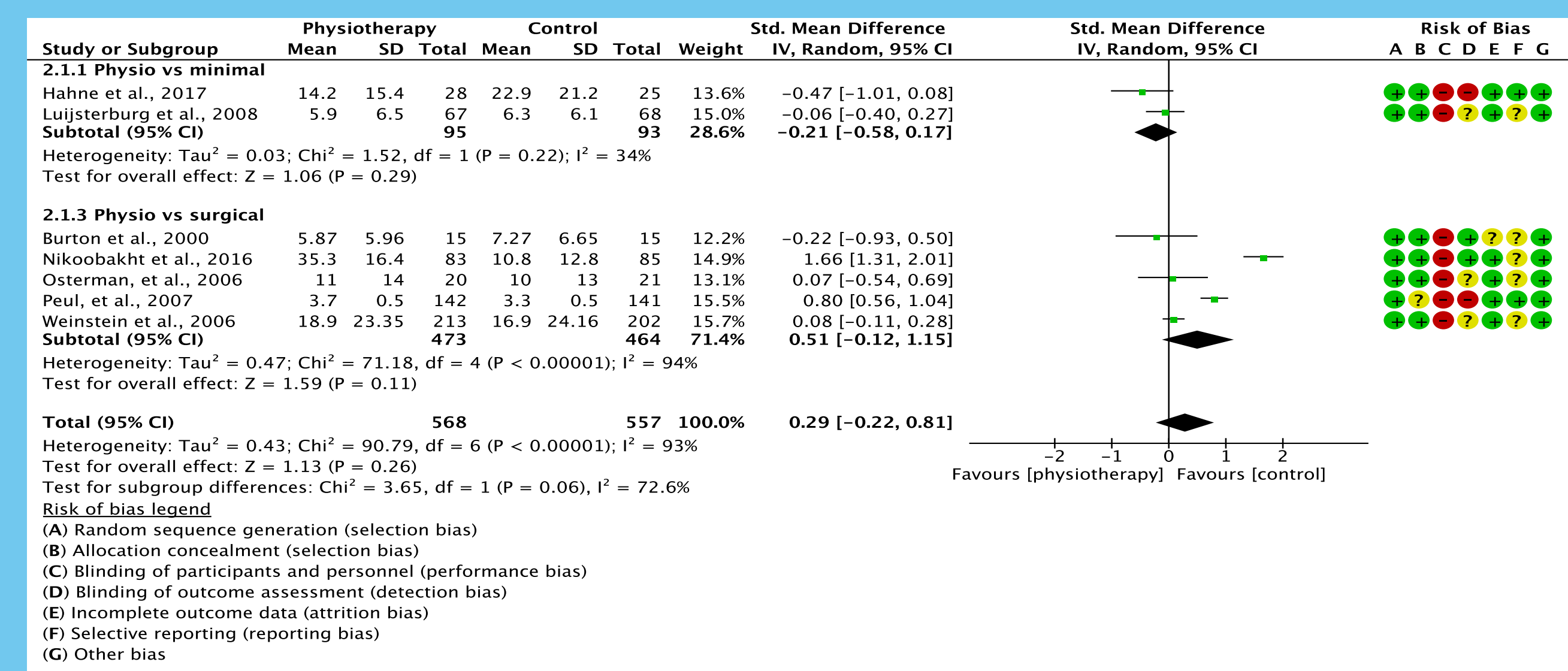
Methods

- CENTRAL, CINAHL, Embase, PEDro, Pubmed and Scopus searched from inception to July 2018
- Inclusion: RCTs comparing physio to control.
- Diagnosis of sciatica required at least one of the following: positive bedside neurological examination; positive neurodynamic test, imaging confirming spinal nerve contact or disc protrusion; neuropathic pain questionnaires; electrodiagnostic testing; quantitative sensory testing.
- Primary outcomes: pain and disability.
- Studies were subgrouped according to intervention type: minimal (GP care or advice), physiotherapy or surgical.

Results

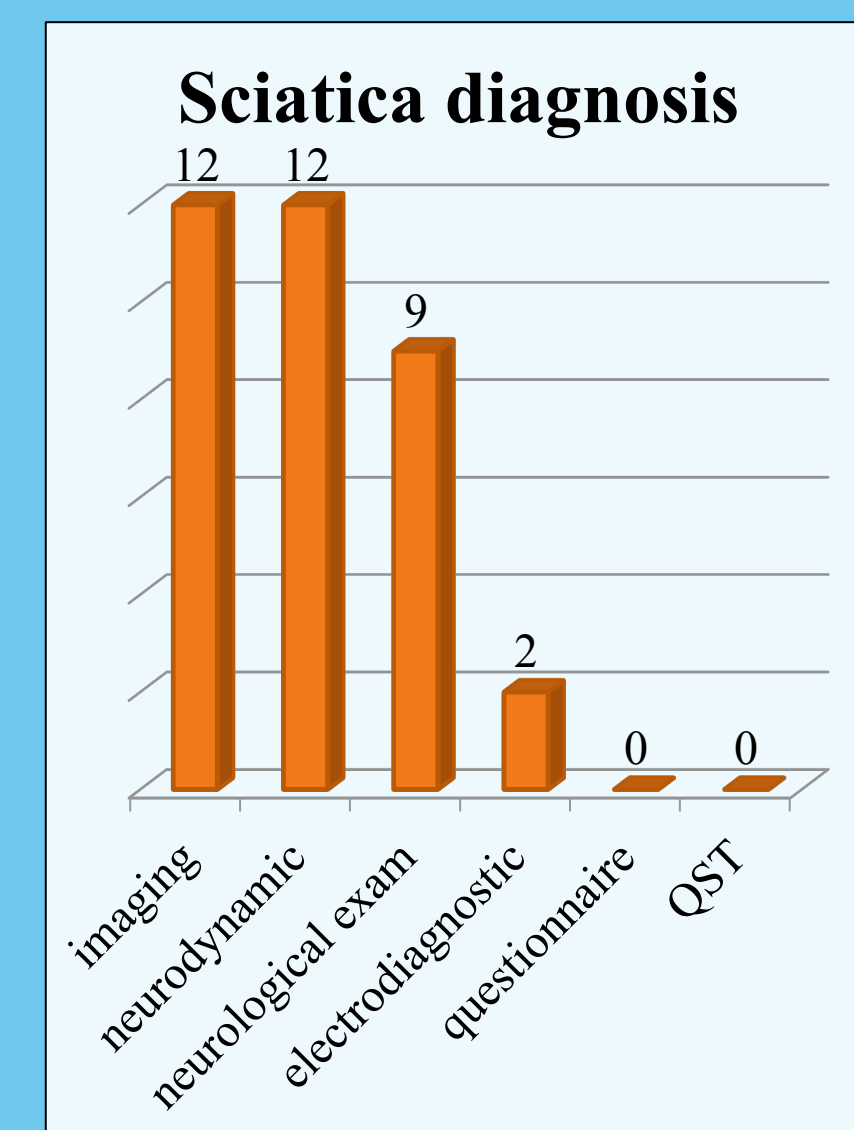


Forest plot 1: Physiotherapy vs control for pain at 1 year



Forest plot 2: Physiotherapy vs control for disability at 1 year

Physio vs physio studies were analysed narratively. The most effective physiotherapy interventions were those including individualised exercise, manual therapy and advice. The most effective components of physiotherapy interventions were often missing in the physio vs surgery trials.



Discussion

19 RCTs and yet there is insufficient evidence to support physiotherapy... Why?

- Physiotherapy may indeed be ineffective. Or interventions used not contemporary.
- Risk of bias affecting outcomes. Not feasible to blind participants.
- Heterogeneity:
 - Participants (duration of symptoms, diagnosis, severity)
 - Interventions (type, duration, setting)
- Lack of clinical detail e.g. leg pain and back pain not differentiated.
- Systematic reviews on pharmacology and epidural injections for sciatica patients are also inconclusive.
- More nuanced diagnosis and subgrouping by pain mechanism could bring some clarity.

Conclusions

- High risk of bias data, small sample sizes
- Heterogeneity prevents sound meta-analysis
- Lack of clinical data, lack of detail:
 - ➔ Unable to make specific diagnosis
 - ➔ Inadequate evidence to make clinical recommendations

Future work

- ◆ We need to diagnose and subgroup sciatica patients in more detail.
- ◆ We need to use good quality, contemporary physiotherapy.
- ◆ We need high quality trials that report the detail: pain distribution, duration of symptoms, change in neurological function.

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