



Cost-effectiveness of treatments for non-osteoarthritic knee pain conditions

A systematic review

Abubaker, Tamana Afzali; Fangel, Mia Vicki; Vestergaard, Anne Sig; Rathleff, Michael Skovdal; Ehlers, Lars Holger; Jensen, Martin Bach

Publication date:
2018

Document Version
Publisher's PDF, also known as Version of record

[Link to publication from Aalborg University](#)

Citation for published version (APA):

Abubaker, T. A., Fangel, M. V., Vestergaard, A. S., Rathleff, M. S., Ehlers, L. H., & Jensen, M. B. (2018). *Cost-effectiveness of treatments for non-osteoarthritic knee pain conditions: A systematic review*. Poster presented at Den årlige konference om Sundhed i Muskler og Led, Aalborg, Denmark.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal -

Take down policy

If you believe that this document breaches copyright please contact us at vbn@aub.aau.dk providing details, and we will remove access to the work immediately and investigate your claim.

Cost-effectiveness of treatments for non-osteoarthritic knee pain conditions: A systematic review

AIM

Gather and appraise the cost-effectiveness of treatment approaches for non-osteoarthritic knee pain conditions.

BACKGROUND

Knee pain is common in adolescents and adults and is associated with an increased risk of developing knee osteoarthritis. Due to an increasing number of treatment approaches available and the global economic burden of knee pain, it is important to increase the knowledge of the cost-effectiveness of the different treatment options for knee pain conditions to enable informed resource utilization.

Tamana Afzali^{1*}, Mia Vicki Fangel², Anne Sig Vestergaard³, Michael Skovdal Rathleff¹, Lars Holger Ehlers³, Martin Bach Jensen¹

¹Research Unit for General Practice in Aalborg, Dept. of Clinical Medicine, Aalborg University, Denmark

²Department of Clinical Medicine, Aalborg University, Denmark

³Danish Center for Healthcare Improvements, Dept. of Business and Management, Aalborg University, Denmark

METHODS

A systematic review was conducted according to the PRISMA guidelines and registered on PROSPERO (CRD42016050683). The literature search was done in MEDLINE via PubMed, EMBASE, The Cochrane Library, and the National Health Service Economic Evaluation Database. Study selection was carried out by two independent reviewers and data were extracted using a customized extraction form. Study quality was assessed using the Consensus on Health Economic Criteria list.

RESULTS

Knee pain conditions included:

- Anterior cruciate ligament (ACL) injuries
- Meniscus injuries
- Cartilage defects
- Patellofemoral Pain Syndrome

The surgical management included:

- ACL reconstruction
- Chondrocyte implantation
- Meniscus scaffold procedure
- Meniscal allograft transplantation
- Partial meniscectomy
- Microfracture
- Different types of autografts and allografts

The non-surgical management included:

- Physical therapy
- Rehabilitation
- Exercise
- Counselling
- Bracing
- Advice

Figure 1: PRISMA flow chart.

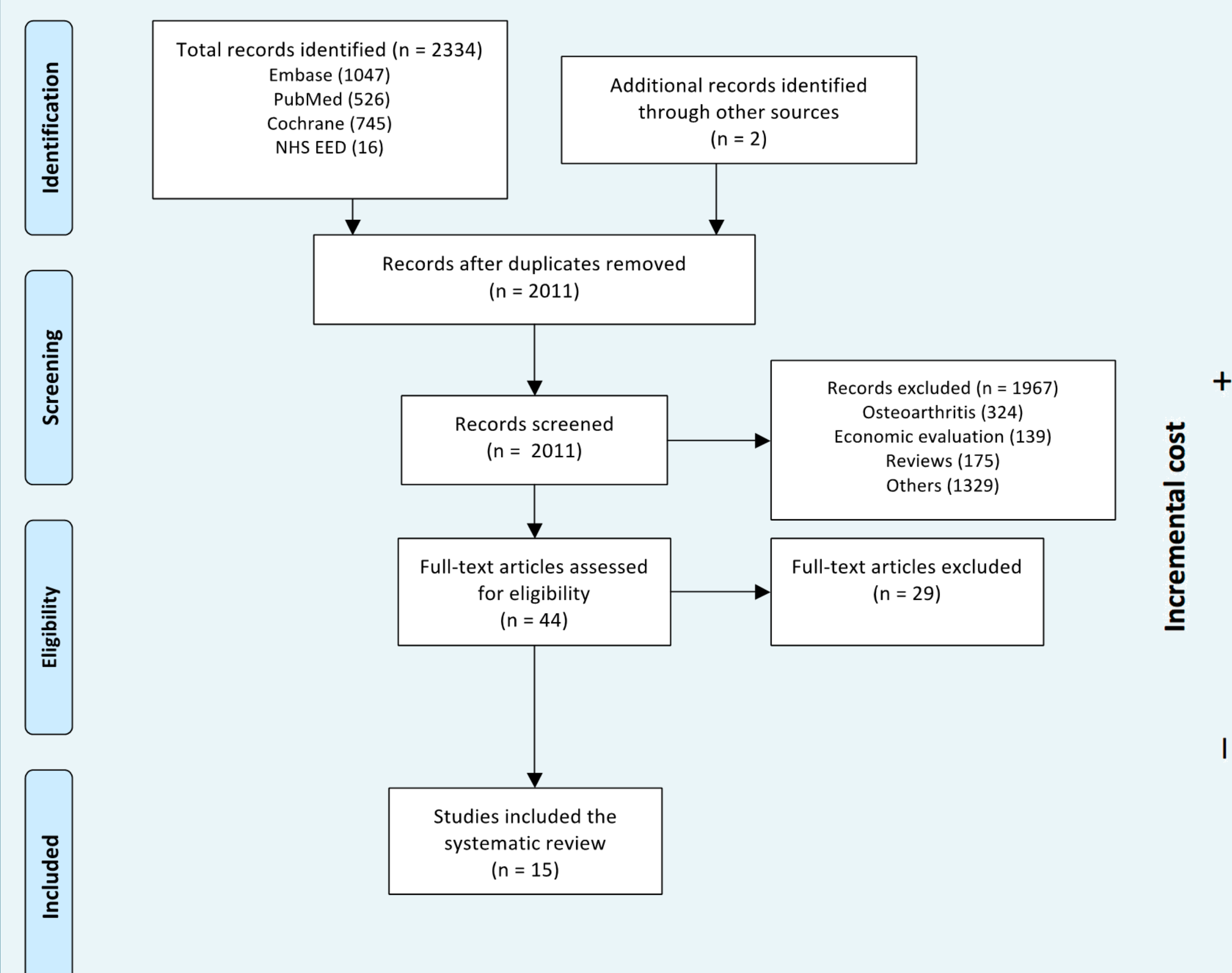
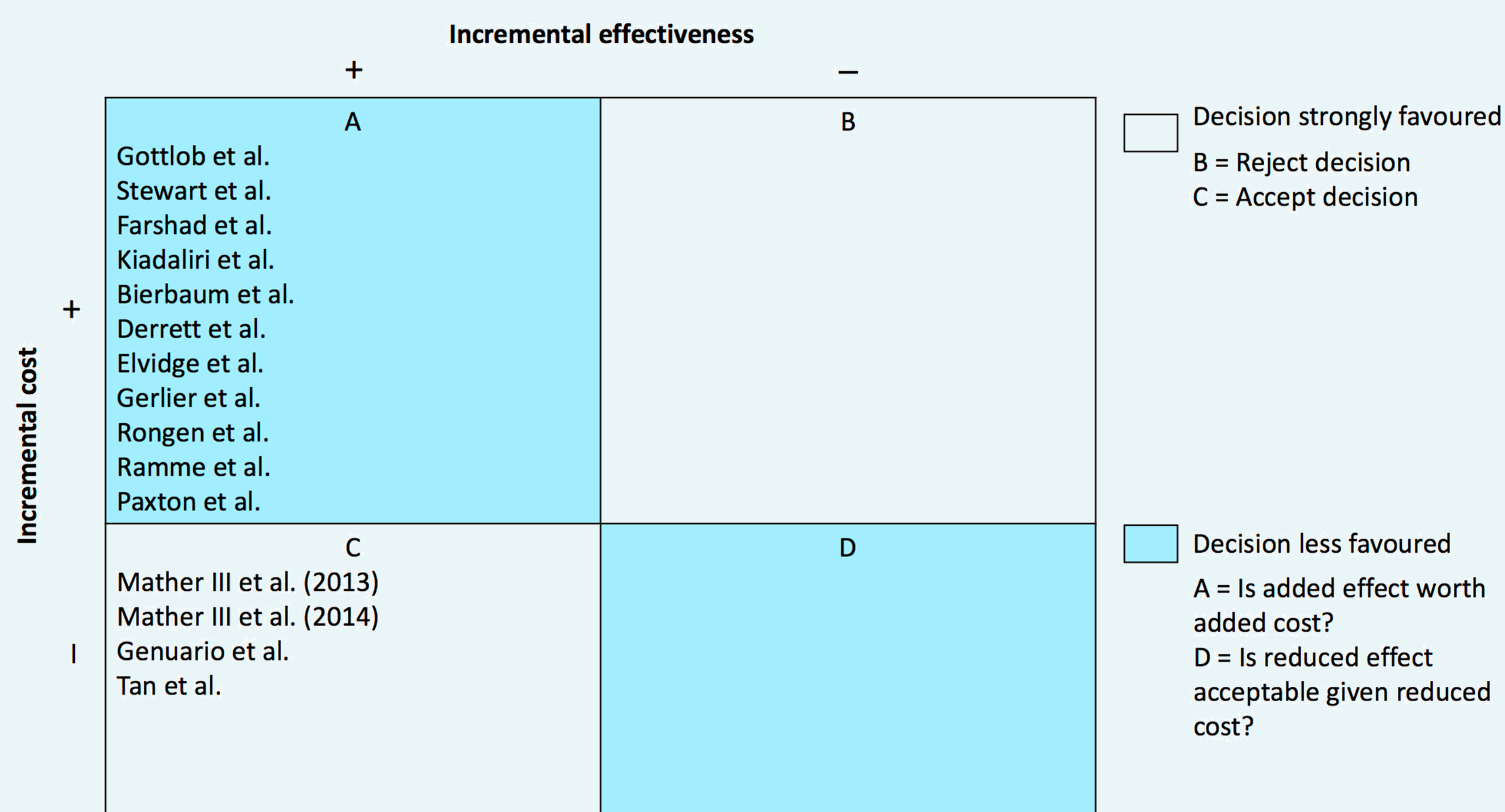


Figure 2: Permutation matrix for possible outcomes of economic evaluations for studies of interventions vs comparator.



CONCLUSIONS

There was insufficient evidence to give a firm overview of cost-effective interventions for non-osteoarthritic knee pain, but surgical treatment of acute ACL injury appeared cost-effective. There is very little data regarding the cost-effectiveness of non-surgical interventions for non-traumatic knee conditions.