Appendix A

Total titles: 12091, after deduplication 7803.

Embase.com (n = 6863, after deduplication n = 6738)

('backache'/exp OR 'spinal pain'/de OR (backache OR ((back OR lowback OR spinal OR discogenic* OR lumb*) NEAR/6 (ache OR pain OR syndrome*)) OR backpain OR lumbalgia OR lumbago OR lumbodynia OR dorsalgia):ab,ti,kw) AND ('placebo'/exp OR 'placebo effect'/exp OR 'sham procedure'/exp OR (placebo* OR mock* OR sham OR fake* OR vehicle* OR dumm* OR (pseudo* NEAR/3 treat*) OR (minimal* NEAR/3 acupunture*)):ab,ti,kw) AND ('Controlled clinical trial'/exp OR 'Crossover procedure'/de OR 'Double-blind procedure'/de OR 'Single-blind procedure'/de OR (random* OR factorial* OR crossover* OR (cross NEXT/1 over*) OR ((doubl* OR singl*) NEXT/1 blind*) OR assign* OR allocat* OR volunteer* OR trial OR groups):ab,ti,kw) NOT ([animals]/lim NOT [humans]/lim)

Medline ovid (n = 2126, after deduplication n = 217)

(exp Back Pain/ OR (backache OR ((back OR lowback OR spinal OR discogenic* OR lumb*) ADJ6 (ache OR pain OR syndrome*)) OR backpain OR lumbalgia OR lumbago OR lumbodynia OR dorsalgia).ab,ti,kf.) AND (Placebos/ OR Placebo Effect/ OR (placebo* OR mock* OR sham OR fake* OR vehicle* OR dumm* OR (pseudo* ADJ3 treat*) OR (minimal* ADJ3 acupunture*)).ab,ti,kf.) AND (Exp Controlled clinical trial/ OR "Double-Blind Method"/ OR "Single-Blind Method"/ OR "Random Allocation"/ OR (random* OR factorial* OR crossover* OR cross over* OR ((doubl* OR singl*) ADJ blind*) OR assign* OR allocat* OR volunteer* OR trial OR groups).ab,ti,kf.) NOT (Animals/ NOT Humans/)

Cochrane CENTRAL (n = 3102, after deduplication n = 848)

((backache OR ((back OR lowback OR spinal OR discogenic* OR lumb*) NEAR/6 (ache OR pain OR syndrome*)) OR backpain OR lumbalgia OR lumbago OR lumbodynia OR dorsalgia):ab,ti) AND ((placebo* OR mock* OR sham OR fake* OR vehicle* OR dumm* OR (pseudo* NEAR/3 treat*) OR (minimal* NEAR/3 acupunture*)):ab,ti)

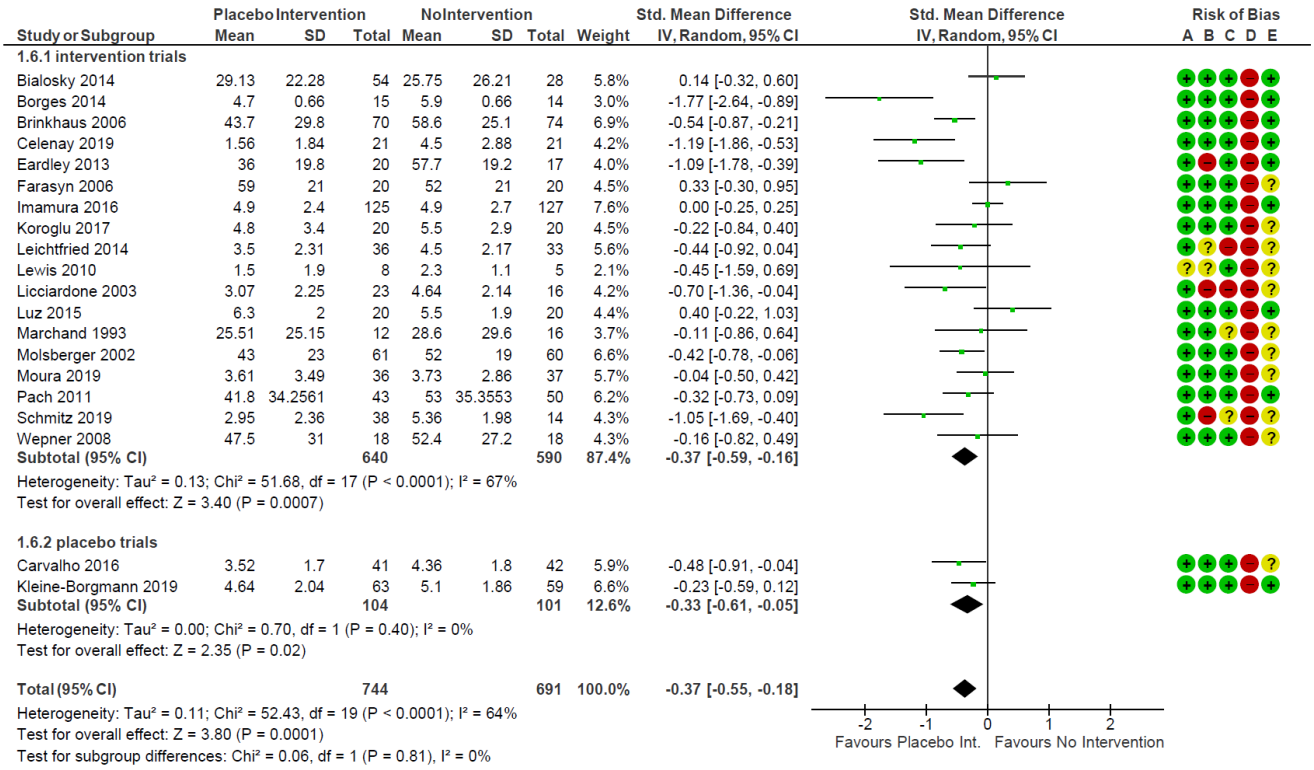
Appendix B

Name, year of publication	
Study design	
Aim of the study	
Patient population	
Baseline Comparability of Groups	Yes/No
Interventions	
Follow-up time	
Primary outcome	
Results for main outcome • **Mean** • **Standard deviation** • **Sample size**	
Secondary outcomes	
Results for secondary outcomes • **Mean** • **Standard deviation** • **Sample size**	
Funding source	

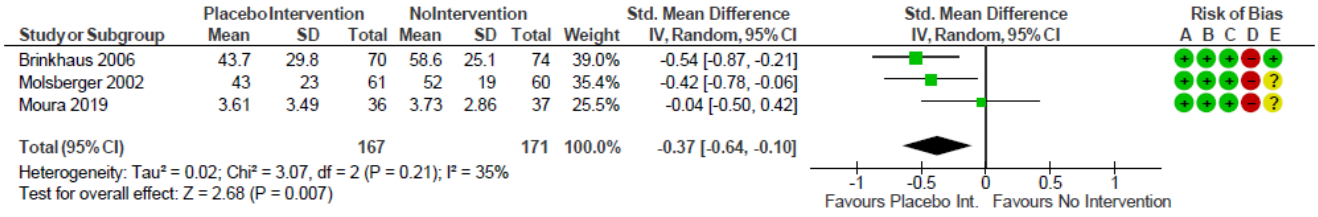
Appendix C

Forest plots of subgroup analysis

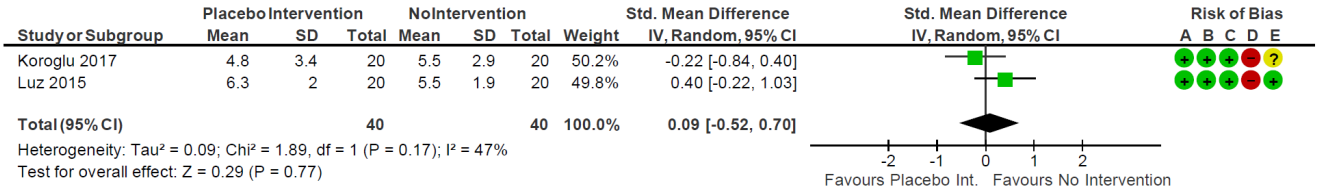
1: intervention studies vs open label placebo studies pain short term follow-up



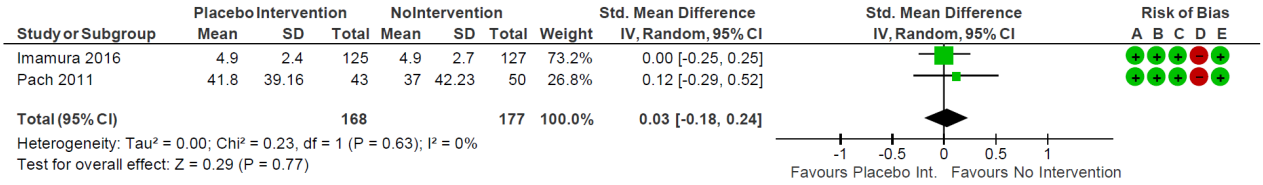
2: forest plot placebo acupuncture vs no treatment on pain short term follow-up



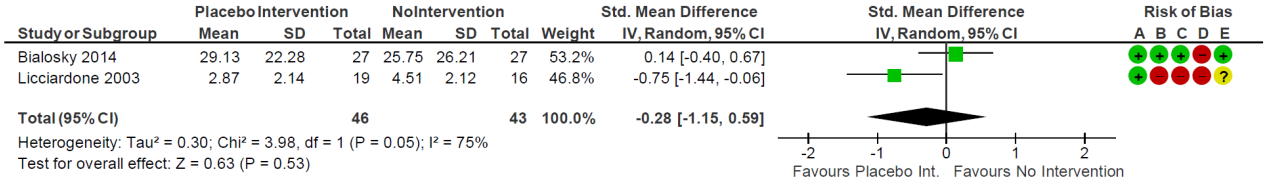
3: forest plot placebo taping vs no treatment on pain short term follow-up



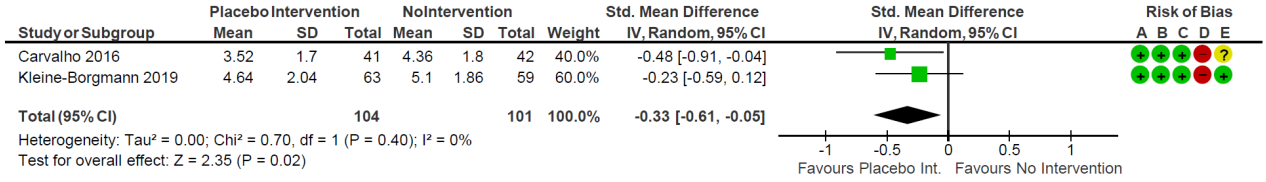
4: forest plot placebo injection vs no treatment on pain short term follow-up



5: forest plot placebo spinal manipulation vs no treatment on pain short term follow-up



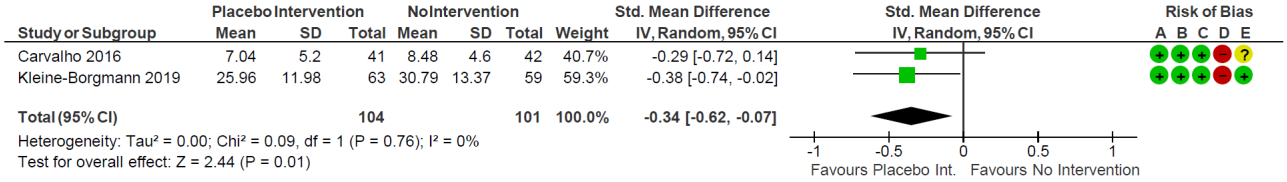
6: forest plot open label placebo pills vs no treatment on pain short term follow-up



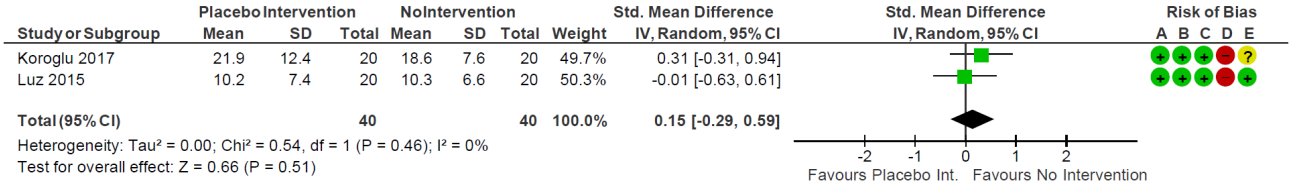
Risk of bias legend
(**A**) Allocation concealment (selection bias)
(**B**) Blinding of participants and personnel (performance bias)
(**C**) Incomplete outcome data (attrition bias)
(**D**) Blinding of outcome assessment (detection bias)
(**E**) Selective reporting (reporting bias)

Subgroup analysis physical functioning short term follow-up

1: forest plot open label placebo pills vs no treatment on physical functioning short term follow-up



2: forest plot placebo taping vs no treatment on physical functioning short term follow-up

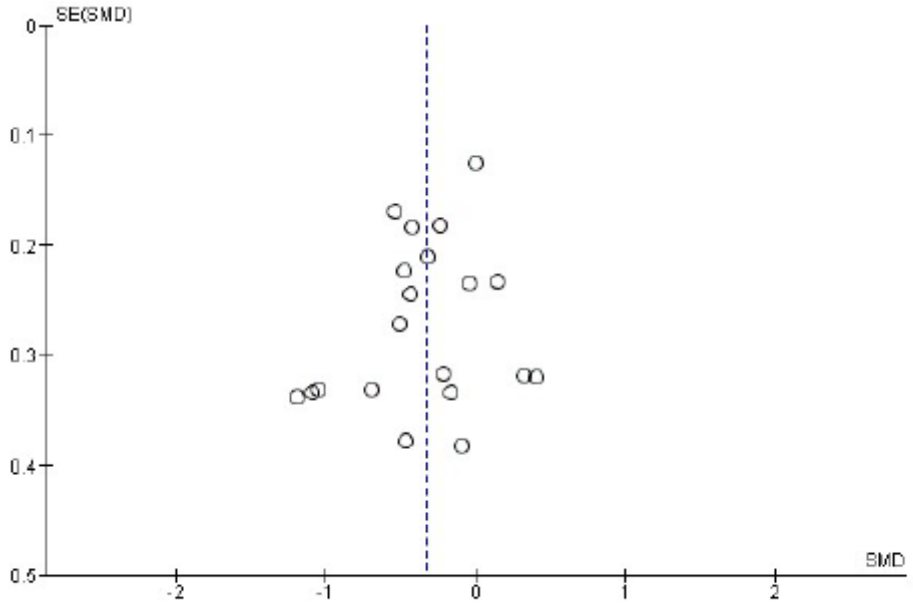


Risk of bias legend

(**A**) Allocation concealment (selection bias)
(**B**) Blinding of participants and personnel (performance bias)
(**C**) Incomplete outcome data (attrition bias)
(**D**) Blinding of outcome assessment (detection bias)
(**E**) Selective reporting (reporting bias)

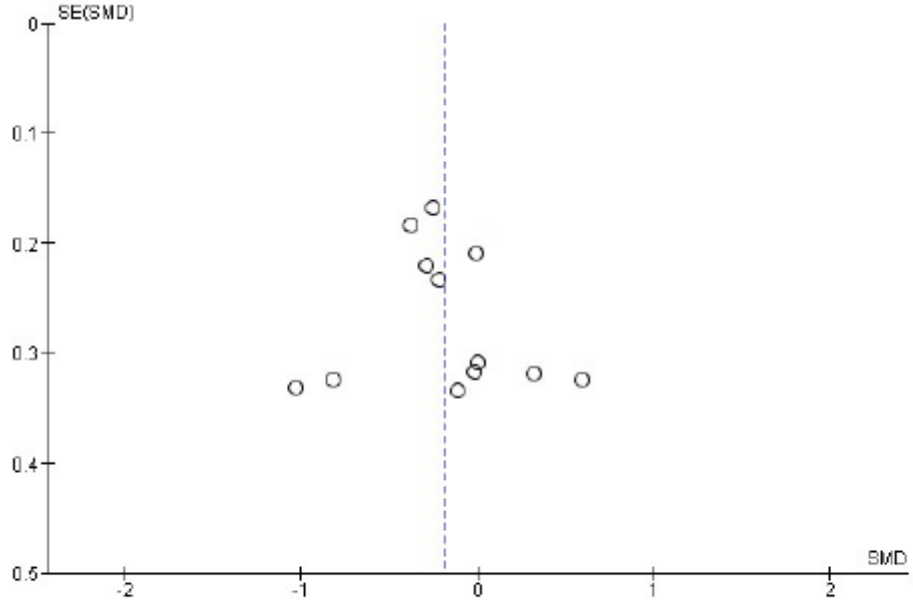
Appendix D: Funnel plots.

1: Funnel plot for placebo vs no treatment pain reduction in short term follow-up



Funnel plot of comparison: 1 placebo vs. control intervention, outcome: 1.1 Pain intensity, short term follow-up.

2: funnel plot for placebo vs no treatment physical functioning in short term follow-up



Funnel plot of comparison: 1 placebo vs. control intervention, outcome: 1.3 Physical Functioning, short term follow-up.

Appendix E:

Grade approach for the primary outcomes

Placebo treatment compared to no treatment control for non specific lower back pain

Bibliography:

Certainty assessment							Summary of findings				
Participants (studies) Follow up	Risk of bias	Inconsistency	Indirectness	Imprecision	Publication bias	Overall certainty of evidence	Study event rates (%)		Relative effect (95% CI)	Anticipated absolute effects	
							With no treatment control	With placebo treatment		Risk with no treatment control	Risk difference with placebo treatment
Pain intensity (follow up: range 1 days to 3 months; assessed with: visual analog scale ; Scale from: 0 to 100)											
1443 (19 RCTs)	not serious [a]	serious [b]	not serious	not serious	none	⨁⨁⨁◯ MODERATE	698	745	-	-	SMD **0.37 SD lower** (0.55 lower to 0.18 lower)
Physical functioning (follow up: range 1 days to 3 months; assessed with: Oswestry disability index; Scale from: 0 to 100)											
815 (12 RCTs)	not serious [a]	serious [b]	not serious	not serious	none	⨁⨁⨁◯ MODERATE	386	429	-	-	SMD **0.19 SD lower** (0.39 lower to 0.01 higher)
Pain intensity (follow up: range 3 months to 6 months; assessed with: visual analog scale; Scale from: 0 to 100)											

Placebo treatment compared to no treatment control for non specific lower back pain

Bibliography:

Certainty assessment							Summary of findings				
154 (3 RCTs)	not serious [a]	not serious	not serious	serious [c]	none	⨁⨁⨁◯ MODERATE	80	74	-	-	SMD **0.26 lower** (0.58 lower to 0.06 higher)

ST SF-36 PCS (follow up: range 1 days to 3 months; assessed with: Short-Form 36 physical component summary score; Scale from: 0 to 100)

267 (3 RCTs)	not serious [a]	not serious	not serious	not serious	none	⨁⨁⨁⨁ HIGH	139	128	-	The mean ST SF-36 PCS was **0**	MD **2.55 lower** (4.63 lower to 0.47 lower)

ST SF-36 MCS (follow up: range 1 days to 3 months; assessed with: Sort-Form 36 mental component summary score; Scale from: 0 to 100)

267 (3 RCTs)	not serious [a]	not serious	not serious	not serious	none	⨁⨁⨁⨁ HIGH	139	128	-	The mean ST SF-36 MCS was **0**	MD **0.31 lower** (2.66 lower to 2.05 higher)

CI: Confidence interval; **SMD:** Standardised mean difference; **MD:** Mean difference

Explanations

a. High risk of bias in measurement of the outcome

b. I^2 is between 40 and 75%

c. The sample size for the specific outcome is less than 100.