Supplemental Content Appendix S1. Search strategies for all databases

1) Ovid-MEDILINE

1  Neck Pain/
2  exp Brachial Plexus Neuropathies/
3  cervical pain.mp.
4  neckache.mp.
5  cervicodynia.mp.
6  cervicalgia.mp.
7  brachialgia.mp.
8  brachial neuritis.mp.
9  brachial neuralgia.mp.
10 neck pain.mp.
11 neck injur*.mp.
12 brachial plexus neuropath*.mp.
13 brachial plexus neuritis.mp.
14 thoracic outlet syndrome/ or cervical rib syndrome/
15 Torticollis/
16 exp brachial plexus neuropathies/ or exp brachial plexus neuritis/
17 cervico brachial neuralgia.ti,ab.
18 cervicobrachial neuralgia.ti,ab.
19 (monoradicul* or monoradicl*).tw.
20 or/1-19
21 neck/
22 neck muscles/
23 exp cervical plexus/
24 exp cervical vertebrae/
25 atlanto-axial joint/
26 atlanto-occipital joint/
27 Cervical Atlas/
28 spinal nerve roots/
29 exp brachial plexus/
30 (odontoid* or cervical or occip* or atlant*).tw.
31 axis/ or odontoid process/
32 Thoracic Vertebrae/
33 cervical vertebrae.mp.
34 cervical plexus.mp.
35 cervical spine.mp.
36 (neck adj3 muscles).mp.
37 (brachial adj3 plexus).mp.
(thoracic adj3 vertebrae).mp.
neck.mp.
(thoracic adj3 spine).mp.
(thoracic adj3 outlet).mp.
trapezius.mp.
or/21-42
exp pain/
exp injuries/
pain.mp.
ache.mp.
sore.mp.
stiff.mp.
discomfort.mp.
injur*.mp.
neuropath*.mp.
or/44-52
43 and 53
Radiculopathy/
exp temporomandibular joint disorders/ or exp temporomandibular joint dysfunction syndrome/
myofascial pain syndromes/
exp "Sprains and Strains"/
exp Spinal Osteophytosis/
exp Neuritis/
Polyradiculopathy/
exp Arthritis/
Fibromyalgia/
spondylitis/ or discitis/
spondylosis/ or spondylolysis/ or spondylolisthesis/
radiculopathy.mp.
radiculitis.mp.
temporomandibular.mp.
myofascial pain syndrome*.mp.
thoracic outlet syndrome*.mp.
spinal osteophytosis.mp.
neuritis.mp.
spondylosis.mp.
spondylitis.mp.
spondylolisthesis.mp.
or/55-75
43 and 76
exp neck/
exp cervical vertebrae/
Thoracic Vertebrae/
neck.mp.
(thoracic adj3 vertebrae).mp.
(thoracic adj3 spine).mp.
cervical spine.mp.
78 or 79 or 80 or 81 or 82 or 83 or 84
Intervertebral Disk/
(disc or discs).mp.
(disk or disks).mp.
86 or 87 or 88
85 and 89
herniat*.mp.
slipped.mp.
prolapse*.mp.
displace*.mp.
degenerat*.mp.
(bulge or bulged or bulging).mp.
or/91-96
90 and 97
intervertebral disk degeneration/ or intervertebral disk displacement/
intervertebral disk displacement.mp.
intervertebral disc displacement.mp.
intervertebral disk degeneration.mp.
or/99-103
85 and 104
20 or 54 or 77 or 98 or 105
(acupuncture or acupuncture or needling or acupressure).tw.
exp Acupuncture Points/
exp Acupuncture Therapy/ or exp Acupuncture/
exp Electroacupuncture/
(electric acupuncture or electroacupuncture or electroacupuncture).tw.
(warm needle or warming acupuncture or warmed electroacupuncture).tw.
warm acupuncture.tw.
fire needle.tw.
fire acupuncture.tw.
exp Catgut/
catgut implantation.tw.
catgut emb*.tw.
thread emb*.tw.
107 or 108 or 109 or 110 or 111 or 112 or 113 or 114 or 115 or 116 or 117 or 118 or 119
106 and 120
randomized controlled trial.pt.
controlled clinical trial.pt.
randomized.ab.
placebo.ab.
randomly.ab.
trial.ab.
groups.ab.
122 or 123 or 124 or 125 or 126 or 127 or 128
exp animals/ not humans.sh.
129 not 130
121 and 131

2) EMBASE

‘Neck Pain’/de
brachial plexus neuropathy'/de
cervical pain'
neckache'
cervicodynia'
cervicalgia'
brachialgia'/de
brachialgia'
brachial neuritis'
brachial neuralgia'
neck pain'
neck injur**'
brachial plexus neuropath**
brachial plexus neuritis'
thoracic outlet syndrome'/de
Torticollis'/de
brachial plexus neuropathies/exp OR 'brachial plexus neuritis'/exp
cervico brachial neuralgia':ab,ti
cervicobrachial neuralgia':ab,ti
monoradicul** or 'monoradicl**'
neck'/de
23 neck muscles'/de
24 cervical plexus'/de
25 cervical spine'/de
26 atlantoaxial joint'/de
27 atlantooccipital joint'/de
28 atlas'/de
29 spinal root'/de
30 brachial plexus'/de
31 odontoid*' or 'cervical' or 'occip*' or 'atlant*'
32 odontoid process'/de
33 cervical vertebra'
34 cervical vertebrae'
35 cervical plexus'
36 cervical spine'
37 neck NEAR/3 muscles
38 brachial NEAR/3 plexus
39 thoracic NEAR/3 vertebrae
40 neck'
41 thoracic NEAR/3 spine
42 thoracic NEAR/3 outlet
trapezius'
44 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34
45 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40 OR #41 OR #42 OR #43
46 pain'/exp
47 injuries'/exp
48 pain'
49 ache'
50 sore'
51 stiff'
52 discomfort'
53 injur*'
54 neuropath*'
55 #45 OR #46 OR #47 OR #48 OR #49 OR #50 OR #51 OR #52 OR #53
56 #44 and #54
57 Radiculopathy'/de
58 temporomandibular joint disorder'/de
59 myofascial pain'/de
60 spondylosis'/de or 'cervical spondylosis'/de
61 Neuritis'/de
62 Arthritis'/exp
Fibromyalgia'/de
spondylitis'/exp
diskitis'/de
spondylololisthesis'/de
radiculopathy'
radiculitis'
temporomandibular'
myofascial pain syndrome''
spinal osteophytosis'
neuritis'
spondylosis'
spondylitis'
spondylolisthesis'
#56 OR #57 OR #58 OR #59 OR #60 OR #61 OR #62 OR #63 OR #64 OR #65 OR #66 OR #67 OR #68 OR #69 OR #70 OR #71 OR #72 OR #73 OR #74
44 and 75
neck'/de
cervical spine'/de
neck'
thoracic NEAR/3 vertebrae
thoracic NEAR/3 spine
cervical spine'
#77 OR #78 OR #79 OR #80 OR #81 OR #82
Intervertebral Disk'/de
disc' or 'discs'
disk' or 'disks'
#84 OR #85 OR #86
#83 AND #87
herniat''
slipped'
prolapse''
displace''
degenerat''
bulge' or 'bulged' or 'bulging'
#89 OR #90 OR #91 OR #92 OR #93 OR #94
#88 and #95
intervertebral disk hernia'/de
intervertebral disk degeneration'/de
intervertebral disk displacement'
intervertebral disc displacement'
intervertebral disk degeneration' 
intervertebral disc degeneration' 
#97 OR #98 OR #99 OR #100 OR #101 OR #102 
#83 and #103 
#21 or #55 or #76 or #96 or #104 
acupuncture'/exp 
acupuncture needle'/exp 
electroacupuncture'/exp 
acupuncture' or 'acupuncture' or 'needling' or 'acupressure' 
electric acupuncture' or 'electroacupuncture' or 'electroacupuncture' 
warm needle' or 'warming acupuncture' or 'warmed acupuncture' 
warm acupuncture' 
fire needle' 
fire acupuncture' 
catgut embedding'/exp OR 'catgut'/exp 
catgut implantation' 
catgut emb*' 
catgut emb*'::ab,ti 
#106 OR #107 OR #108 OR #109 OR #110 OR #111 OR #112 OR #113 OR #114 OR #115 OR #116 OR #117 OR #118 
#105 and #119 
Clinical trial'/de 
Randomized controlled trial'/de 
Randomization'/de 
Single blind procedure'/de 
Double blind procedure'/de 
Crossover procedure'/de 
Placebo'/de 
Randomized controlled trialS' 
Rct' 
Random allocation' 
Randomly allocated' 
Allocated randomly' 
allocated NEAR/2 random 
Single blindS' 
Double blindS' 
((‘treble' or ‘triple') NEAR/2 blindS) 
PlaceboS' 
Prospective study/de 
#121 OR #122 OR #123 OR #124 OR #125 OR #126 OR #127 OR #128 OR #129 OR #130 OR #131 OR 
#132 OR #133 OR #134 OR #135 OR #136 OR #137 OR #138
3) Cochrane

1 [mh ^"Neck pain"]
2 [mh "Brachial Plexus Neuropathies"]
3 cervical pain:ti,ab,kw
4 neckache:ti,ab,kw
5 cervicodynia:ti,ab,kw
6 cervicalgia:ti,ab,kw
7 brachialgia:ti,ab,kw
8 brachial neuritis:ti,ab,kw
9 brachial neuralgia:ti,ab,kw
10 neck pain:ti,ab,kw
11 neck injur*:ti,ab,kw
12 brachial plexus neuropath*:ti,ab,kw
13 brachial plexus neuritis:ti,ab,kw
14 [mh ^"thoracic outlet syndrome"]
15 [mh ^"cervical rib syndrome"]
16 [mh ^Torticollis]
17 [mh "brachial plexus neuropathies"]
18 [mh "brachial plexus neuritis"]
19 cervico brachial neuralgia:ti,ab,kw
20 cervicobrachial neuralgia:ti,ab,kw
21 monoradicul* or monoradicl*:ti,ab,kw
22 #1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18 or #19 or #20 or #21
23 [mh ^neck]
24 [mh ^"neck muscles"]
25 [mh "cervical plexus"]
26 [mh "cervical vertebrae"]
27 [mh ^"atlanto-axial joint”]
28 [mh ^"atlanto-occipital joint”]
29 [mh ^"Cervical Atlas”]
30 [mh ^"spinal nerve roots”]
31 [mh "brachial plexus”]
32 odontoid* or cervical or occip* or atlant*:ti,ab,kw
33 [mh ^"odontoid process”]
34 [mh ^"Thoracic Vertebrae”]
35 cervical vertebrae:ti,ab,kw
36 cervical plexus:ti,ab,kw
37 cervical spine:ti,ab,kw
38 neck muscles:ti,ab,kw
39 brachial plexus:ti,ab,kw
40 thoracic vertebrae:ti,ab,kw
41 neck:ti,ab,kw
42 thoracic spine:ti,ab,kw
43 thoracic outlet:ti,ab,kw
44 trapezius:ti,ab,kw
45 #23 or #24 or #25 or #26 or #27 or #28 or #29 or #30 or #31 or #32 or #33 or #34 or #35 or #36 or #37 or #38 or #39 or #40 or #41 or #42 or #43 or #44
46 [mh pain]
47 [mh injuries]
48 pain:ti,ab,kw
49 ache:ti,ab,kw
50 sore:ti,ab,kw
51 stiff:ti,ab,kw
52 discomfort:ti,ab,kw
53 injur*:ti,ab,kw
54 neuropath*:ti,ab,kw
55 #46 or #47 or #48 or #49 or #50 or #51 or #52 or #53 or #54
56 #45 and #55
57 [mh ^Radiculopathy]
58 [mh "temporomandibular joint disorders"]
59 [mh "temporomandibular joint dysfunction syndrome"]
60 [mh "myofascial pain syndromes"]
61 [mh "Sprains and Strains"]
62 [mh "Spinal Osteophytosis"]
63 [mh Neuritis]
64 [mh ^polyradiculopathy]
65 [mh arthritis]
66 [mh ^Fibromyalgia]
67 [mh ^spondylitis]
68 [mh ^discitis]
69 [mh ^spondylodiscitis]
70 [mh ^spondylolisthesis]
71 [mh ^spondylothesis]
72 radiculopathy:ti,ab,kw
73 radiculitis:ti,ab,kw
74 temporomandibular:ti,ab,kw
75 myofascial pain syndrome*:ti,ab,kw
thoracic outlet syndrome*:ti,ab,kw
spinal osteophytosis:ti,ab,kw
neuritis:ti,ab,kw
spondylosis:ti,ab,kw
spondylitis:ti,ab,kw
spondylolisthesis:ti,ab,kw

#57 or #58 or #59 or #60 or #61 or #62 or #63 or #64 or #65 or #66 or #67 or #68 or #69 or #70 or #71 or #72 or #73 or #74 or #75 or #76 or #77 or #78 or #79 or #80 or #81

#45 and #82

[mh neck]
[mh "cervical vertebrae"]
[mh "thoracic vertebrae"]

neck:ti,ab,kw
thoracic vertebrae:ti,ab,kw
thoracic spine:ti,ab,kw
cervical spine:ti,ab,kw

#84 or #85 or #86 or #87 or #88 or #89 or #90

[mh "Intervertebral Disk"]
disc:ti,ab,kw

#92 or #93
#91 and #94

herniat*:ti,ab,kw
slipped:ti,ab,kw
prolapse*:ti,ab,kw
displace*:ti,ab,kw
degenerat*:ti,ab,kw
bulge or bulged or bulging:ti,ab,kw

#96 or #97 or #98 or #99 or #100 or #101
#95 and #102

[mh "intervertebral disk degeneration"]
[mh "intervertebral disk displacement"]

intervertebral disk displacement:ti,ab,kw
intervertebral disc displacement:ti,ab,kw
intervertebral disk degeneration:ti,ab,kw
intervertebral disc degeneration:ti,ab,kw

#104 or #105 or #106 or #107 or #108 or #109
#91 and #110
#111 or #103 or #83 or #56 or #22

MeSH descriptor: [Acupuncture] explode all trees
MeSH descriptor: [Acupuncture Therapy] explode all trees
MeSH descriptor: [Acupuncture Points] explode all trees
MeSH descriptor: [Electroacupuncture] explode all trees
(acupuncture or acu-puncture or needling or acupressure):ti,ab,kw
(electric acupuncture or electro-acupuncture or electroacupuncture):ti,ab,kw
(warm needle or warming acupuncture or warmed acupuncture):ti,ab,kw
(warm acupuncture):ti,ab,kw
(fire needle):ti,ab,kw
(fire acupuncture):ti,ab,kw
MeSH descriptor: [Catgut] explode all trees
catgut emb*:ti,ab,kw
catgut implantation:ti,ab,kw
thread emb*:ti,ab,kw
#113 or #114 or #115 or #116 or #117 or #118 or #119 or #120 or #121 or #122 or #123 or #124 or #125 or #126
#112 and #127

4) CNKI
(SU='頚痛' OR SU='頚肩痛' OR SU='頚椎病' OR SU='頚肩部' OR SU='頚椎間盤突出症' OR SU='頚部' OR SU='神經根型頚椎病') AND (SU='火針' OR SU='電針' OR SU='溫針' OR SU='穴位埋線' OR SU='針') AND (SU='隨機' OR SU='對照')

5) OASIS
경항통 OR 경추 OR 頸 OR 項

6) NDSL
(경항통 OR 경추 OR 頸 OR 項 OR Neck pain) AND (침 OR 화침 OR 온침 OR 전침 OR 혈위)

7) KoreaMed
(((((((("Neck pain"[ALL])) OR ("cervical pain"[ALL])) OR ("Brachial Plexus Neuropathies"[ALL])) OR ("neckache"[ALL])) OR ("thoracic outlet syndrome"[ALL])) OR ("cervicalgia"[ALL])) OR ("brachialgia"[ALL])) OR ("neck injur*"[ALL]))
8) KMBASE

(((ALL=경항통) OR (ALL=경추)) OR (ALL=頸)) OR (ALL=頚) OR (ALL=頚) AND (((((ALL=침) OR (ALL=화침)) OR (ALL=온침)) OR (ALL=전침)) OR (ALL=혈위)))

9) KISS

(경항통 OR 경추 OR 頸 OR 頚 OR Neck pain) AND (침 OR 화침 OR 온침 OR 전침 OR 혈위)
**Supplemental Content Appendix S2. Details of GRADE assessment for all pairwise comparisons within the pain intensity network**

| Comparison | k | Prop | direct SMD [95% CI] | quality of evidence | indirect SMD [95% CI] | quality of evidence | NMA SMD [95% CI] | Quality of evidence | p-value |
|------------|---|------|---------------------|---------------------|----------------------|---------------------|-------------------|---------------------|---------|
| ACE:EA     | 0 | 0    | -                   | -                   | -0.094 [-1.020;0.832] | Very low**†        | -0.094 [-1.020;0.832] | Very low**†        | -       |
| ACE:FA     | 0 | 0    | -                   | -                   | 1.069 [-0.738;2.876]  | Low**              | 1.069 [-0.738;2.876]  | Low**              | -       |
| ACE:MA     | 4 | 1.00 | -0.687 [-1.502;0.128] | Very low**†        | -                    | -                   | -0.687 [-1.502;0.128] | Very low**†        | -       |
| ACE:NT     | 0 | 0    | -                   | -                   | -1.458 [-2.700;-0.215] | Low**              | -1.458 [-2.700;-0.215] | Low**              | -       |
| ACE:SA     | 0 | 0    | -                   | -                   | -1.550 [-2.616;-0.483] | Low**              | -1.550 [-2.616;-0.483] | Low**              | -       |
| ACE:UC     | 0 | 0    | -                   | -                   | -1.268 [-2.305;-0.231] | Low**              | -1.268 [-2.305;-0.231] | Low**              | -       |
| ACE:WA     | 0 | 0    | -                   | -                   | 0.374 [-0.668;1.417]  | Very low**†        | 0.374 [-0.668;1.417]  | Very low**†        | -       |
| ACE:WM     | 0 | 0    | -                   | -                   | -0.627 [-1.723;0.469] | Very low**†        | -0.627 [-1.723;0.469] | Very low**†        | -       |
| EA:FA      | 0 | 0    | -                   | -                   | 1.163 [-0.508;2.835]  | Very low**†        | 1.163 [-0.508;2.835]  | Very low**†        | -       |
| EA:MA      | 12| 0.75 | -0.825 [-1.334;-0.317] | Low**              | 0.095 [-0.781;0.971]  | Very low**†        | -0.593 [-1.033;-0.153] | Low**              | 0.0750  |
| EA:NT      | 2 | 0.63 | -1.008 [-2.207;0.192] | Very low**†        | -1.983 [-3.565;-0.402] | Low**              | -1.364 [-2.319;-0.408] | Low**              | 0.3354  |
| EA:SA      | 1 | 0.22 | -0.091 [-1.732;1.550] | Low‡                | -1.851 [-2.734;0.967] | Moderate†          | -1.456 [-2.234;-0.678] | Moderate†          | 0.0643  |
| EA:UC      | 1 | 0.20 | -0.752 [-2.416;0.911] | Very low**†        | -1.278 [-2.104;-0.452] | Very low**†       | -1.174 [-1.914;-0.434] | Very low**†       | 0.5791  |
| EA:WA      | 3 | 0.49 | 0.614 [-0.348;1.576] | Very low**†        | 0.328 [-0.614;1.271]  | Very low**†        | 0.468 [-0.205;1.141]  | Very low**†        | 0.6773  |
| EA:WM      | 0 | 0    | -                   | -                   | -0.533 [-1.383;0.317] | Very low**†        | -0.533 [-1.383;0.317] | Very low**†        | -       |
| FA:MA      | 1 | 1.00 | -1.756 [-3.369;-0.144] | Low**              | -                    | -                   | -1.756 [-3.369;-0.144] | Low**              | -       |
| FA:NT      | 0 | 0    | -                   | -                   | -2.527 [-4.393;0.662] | Moderate*          | -2.527 [-4.393;0.662] | Moderate*          | -       |
| FA:SA      | 0 | 0    | -                   | -                   | -2.619 [-4.372;0.866] | Low**              | -2.619 [-4.372;0.866] | Low**              | -       |
| FA:UC      | 0 | 0    | -                   | -                   | -2.338 [-4.073;0.602] | Low**              | -2.338 [-4.073;0.602] | Low**              | -       |
| FA:WA      | 0 | 0    | -                   | -                   | -0.695 [-2.434;1.043] | Very low**†        | -0.695 [-2.434;1.043] | Very low**†        | -       |
| FA:WM      | 0 | 0    | -                   | -                   | -1.696 [-3.467;0.075] | Very low**†        | -1.696 [-3.467;0.075] | Very low**†        | -       |
| MA:NT      | 2 | 0.54 | -0.733 [-2.008;0.542] | Low‡                | -0.815 [-2.199;0.570] | Low‡               | -0.771 [-1.708;0.167]  | Low‡               | 0.9325  |
| Group       | k | prop | NMA (SMD) | Direct (SMD) | Indirect (SMD) | p         | Downgrade | Risk of Bias |
|-------------|---|------|-----------|--------------|----------------|-----------|-----------|-------------|
| MA:SA       | 5 | 0.80 | -1.141 [-1.910; -0.372] | 0.259 [-1.285; 1.802] | Very low** | -0.862 [-1.551; -0.174] | Low** | 0.1117      |
| MA:UC       | 6 | 0.83 | -0.594 [-1.298; 0.110] | -0.519 [-2.066; 1.029] | Very low**† | -0.581 [-1.222; 0.060] | Low** | 0.9305      |
| MA:WA       | 4 | 0.63 | 0.956 [0.139; 1.773] | 1.242 [0.172; 2.312] | Low** | 1.061 [0.412; 1.711] | Low** | 0.6773      |
| MA:WM       | 5 | 0.95 | -0.001 [-0.751; 0.749] | 1.292 [-2.076; 4.659] | Very low**† | 0.060 [-0.672; 0.793] | Very low*** | 0.4628      |
| NT:SA       | 1 | 0.42 | 0.450 [-1.207; 2.106] | -0.477 [-1.874; 0.920] | Very low**† | -0.092 [-1.160; 0.976] | Very low*** | 0.4021      |
| NT:UC       | 0 | 0    | -         | -              | -              | -         | -         | -           |
| NT:WA       | 0 | 0    | -         | -              | -              | -         | -         | -           |
| NT:WM       | 0 | 0    | -         | -              | -              | -         | -         | -           |
| SA:UC       | 0 | 0    | -         | -              | -              | -         | -         | -           |
| SA:WA       | 0 | 0    | -         | -              | -              | -         | -         | -           |
| SA:WM       | 0 | 0    | -         | -              | -              | -         | -         | -           |
| UC:WA       | 0 | 0    | -         | -              | -              | -         | -         | -           |
| UC:WM       | 1 | 0.29 | 1.358 [-0.367; 3.083] | 0.355 [-0.737; 1.446] | Very low**† | 0.642 [-0.281; 1.564] | Very low*** | 0.3357      |
| WA:WM       | 0 | 0    | -         | -              | -              | -         | -         | -           |

Reasons for downgrading: †Imprecision (1 downgrade), ‡Severe imprecision (2 downgrades), *risk of bias (1 downgrade), **Severe risk of bias (2 downgrades). The p-value indicated that the findings between direct and indirect comparisons was not statistically significant and therefore no comparisons have been downgraded based on inconsistency. k: Number of studies providing direct evidence; prop: proportion of direct evidence; NMA (SMD): estimated treatment effect (SMD) in network meta-analysis; direct (SMD): estimated treatment effect (SMD) derived from direct evidence; indirect (SMD): estimated treatment effect (SMD) derived from indirect evidence; p: p-value of test for disagreement (difference between direct and indirect evidence).

ACE: acupoint catgut embedding; EA: electroacupuncture; FA: fire acupuncture; MA: manual acupuncture; NT: no treatment SA: sham acupuncture; UC: usual care; WA: warm acupuncture; WM: western medicine
Supplemental Content Appendix S3. Details of GRADE assessment for all pairwise comparisons within the pain-related disability network

| Comparison | k | Prop | direct SMD [95% CI] | Quality of evidence | indirect SMD [95% CI] | Quality of evidence | NMA SMD [95% CI] | Quality of evidence | p-value |
|------------|---|------|---------------------|---------------------|------------------------|---------------------|--------------------|---------------------|---------|
| ACE:EA     | 0 | 0    | -                   | -                   | 0.751 [-0.546;2.049]   | Very low**†         | 0.751 [-0.546;2.049] | Very low**†         | -       |
| ACE:FA     | 0 | 0    | -                   | -                   | 1.353 [-0.721;3.427]   | Very low**†         | 1.353 [-0.721;3.427] | Very low**†         | -       |
| ACE:MA     | 2 | 1.00 | -0.330 [-1.436;0.777] | Very low**†         | -                      | -                   | -0.330 [-1.436;0.777] | Very low**†         | -       |
| ACE:NT     | 0 | 0    | -                   | -                   | -0.163 [-2.120;1.793]  | Very low**†         | -0.163 [-2.120;1.793] | Very low**†         | -       |
| ACE:SA     | 0 | 0    | -                   | -                   | 0.005 [-1.450;1.460]   | Low†                | 0.005 [-1.450;1.460] | Low†                | -       |
| ACE:UC     | 0 | 0    | -                   | -                   | -0.744 [-2.126;0.638]  | Very low**†         | -0.744 [-2.126;0.638] | Very low**†         | -       |
| ACE:WA     | 0 | 0    | -                   | -                   | 0.592 [-0.871;2.055]   | Very low**†         | 0.592 [-0.871;2.055] | Very low**†         | -       |
| ACE:WM     | 0 | 0    | -                   | -                   | 0.209 [-1.414;1.833]   | Very low**†         | 0.209 [-1.414;1.833] | Very low**†         | -       |
| EA:FA      | 1 | 1.00 | 0.602 [-1.016;2.220] | Very low**†         | -                      | -                   | 0.602 [-1.016;2.220] | Very low**†         | -       |
| EA:MA      | 5 | 0.74 | -1.475 [-2.260;-0.691] | Low**               | 0.071 [-1.269;1.411]   | Low†                | -1.081 [-1.758;0.404] | Moderate*            | 0.0510  |
| EA:NT      | 1 | 0.80 | -0.952 [-2.634;0.731] | Very low**†         | -0.764 [-4.137;2.608]  | Very low**†         | -0.914 [-2.420;0.591] | Very low**†         | 0.9224  |
| EA:SA      | 3 | 0.77 | -0.353 [-1.286;0.579] | Low†                | -2.096 [-3.824;-0.367] | Moderate*           | -0.746 [-1.567;0.075] | Low†                | 0.0821  |
| EA:UC      | 0 | 0    | -                   | -                   | -1.495 [-2.564;-0.426] | Low**               | -1.495 [-2.564;-0.426] | Low**               | -       |
| EA:WA      | 1 | 0.41 | 0.336 [-1.280;1.951] | Very low**†         | -0.503 [-1.849;0.843]  | Very low**†         | -0.159 [-1.193;0.875] | Very low**†         | 0.4345  |
| EA:WM      | 0 | 0    | -                   | -                   | -0.542 [-1.909;0.825]  | Very low**†         | -0.542 [-1.909;0.825] | Very low**†         | -       |
| FA:MA      | 0 | 0    | -                   | -                   | -1.682 [-3.436;0.071]  | Very low**†         | -1.682 [-3.436;0.071] | Very low**†         | -       |
| FA:NT      | 0 | 0    | -                   | -                   | -1.516 [-3.726;0.694]  | Very low**†         | -1.516 [-3.726;0.694] | Very low**†         | -       |
| FA:SA      | 0 | 0    | -                   | -                   | -1.348 [-3.162;0.466]  | Very low**†         | -1.348 [-3.162;0.466] | Very low**†         | -       |
| FA:UC      | 0 | 0    | -                   | -                   | -2.097 [-4.036;-0.157] | Low**               | -2.097 [-4.036;-0.157] | Low**               | -       |
| Comparison | k | prop | SMD | SMD | p-value | Grade | k | prop | SMD | SMD | p-value | Grade |
|------------|---|------|-----|-----|---------|-------|---|------|-----|-----|---------|-------|
| FA:WA      | 0 | 0    | -   | -   | -0.761 [-2.681;1.159] | Very low**† | -0.761 [-2.681;1.159] | Very low**† |
| FA:WM      | 0 | 0    | -   | -   | -1.144 [-3.262;0.974] | Very low**† | -1.144 [-3.262;0.974] | Very low**† |
| MA:NT      | 0 | 0    | -   | -   | 0.166 [-1.447;1.780] | Very low**† | 0.166 [-1.447;1.780] | Very low**† |
| MA:SA      | 1 | 0.36 | -0.775 [-2.342;0.792] | Moderate† | 0.967 [-0.217;2.151] | Low*† | 0.334 [-0.610;1.279] | Low*† |
| MA:UC      | 4 | 1.00 | -0.414 [-1.242;0.413] | Very low**† | - | - | -0.414 [-1.242;0.413] | Very low**† |
| MA:WA      | 2 | 0.71 | 0.676 [-0.461;1.813] | Very low**† | 1.515 [-0.254;3.284] | Very low**† | 0.922 [-0.035;1.878] | Very low**† |
| MA:WM      | 2 | 1.00 | 0.539 [-0.649;1.726] | Very low**† | - | - | 0.539 [-0.649;1.726] | Very low**† |
| NT:SA      | 1 | 0.81 | 0.132 [-1.531;1.796] | Very low**† | 0.324 [-3.156;3.804] | Very low**† | 0.168 [-1.332;1.669] | Very low**† |
| NT:UC      | 0 | 0    | -   | -   | -0.580 [-2.394;1.233] | Very low**† | -0.580 [-2.394;1.233] | Very low**† |
| NT:WA      | 0 | 0    | -   | -   | 0.755 [-1.049;2.559] | Very low**† | 0.755 [-1.049;2.559] | Very low**† |
| NT:WM      | 0 | 0    | -   | -   | 0.373 [-1.631;2.376] | Very low**† | 0.373 [-1.631;2.376] | Very low**† |
| SA:UC      | 0 | 0    | -   | -   | -0.749 [-2.005;0.507] | Low*† | -0.749 [-2.005;0.507] | Low*† |
| SA:WA      | 0 | 0    | -   | -   | 0.587 [-2.005;0.507] | Low*† | 0.587 [-2.005;0.507] | Low*† |
| SA:WM      | 0 | 0    | -   | -   | 0.205 [-1.313;1.722] | Moderate† | 0.205 [-1.313;1.722] | Moderate† |
| UC:WA      | 0 | 0    | -   | -   | 1.336 [0.071;2.601] | Low** | 1.336 [0.071;2.601] | Low** |
| UC:WM      | 0 | 0    | -   | -   | 0.953 [-0.494;2.401] | Low*† | 0.953 [-0.494;2.401] | Low*† |
| WA:WM      | 0 | 0    | -   | -   | -0.383 [-1.907;1.142] | Very low**† | -0.383 [-1.907;1.142] | Very low**† |

Reasons for downgrading: †Imprecision (1 downgrade), ‡Severe imprecision (2 downgrades), *risk of bias (1 downgrade), **Severe risk of bias (2 downgrades). The p-value indicated that the findings between direct and indirect comparisons was not statistically significant and therefore no comparisons have been downgraded based on inconsistency. k: Number of studies providing direct evidence; prop: proportion of direct evidence; NMA (SMD): estimated treatment effect (SMD) in network meta-analysis; direct (SMD): estimated treatment effect (SMD) derived from direct evidence; indirect (SMD): estimated treatment effect (SMD) derived from indirect evidence; p: p-value of test for disagreement (difference between direct and indirect evidence).

ACE: acupoint catgut embedding; EA: electroacupuncture; FA: fire acupuncture; MA: manual acupuncture; NT: no treatment SA: sham acupuncture; UC: usual care; WA: warm acupuncture; WM: western medicine
### Supplemental Content Appendix S4. Details of GRADE assessment for all pairwise comparisons within the efficacy rate

| Comparison | k | Prop | direct RR [95% CI] | Quality of evidence | indirect RR [95% CI] | Quality of evidence | NMA RR [95% CI] | Quality of evidence | p-value |
|------------|---|------|---------------------|---------------------|----------------------|---------------------|------------------|---------------------|---------|
| ACE:EA     | 1 | 0.12 | 1.120 [0.912;1.375] | Very low**†         | 1.007 [0.935;1.084] | Very low**†         | 1.019 [0.951;1.093] | Very low**†         | 0.3372 |
| ACE:FA     | 0 | 0    | -                   | -                   | 0.864 [0.764;0.977]  | Low**               | 0.864 [0.764;0.977] | Low**               | -       |
| ACE:MA     | 7 | 0.92 | 1.115 [1.049;1.184] | Low**               | 1.241 [1.006;1.529] | Low**               | 1.124 [1.061;1.191] | Low**               | 0.3372 |
| ACE:SA     | 0 | 0    | -                   | -                   | 1.487 [0.805;2.747]  | Very low**†         | 1.487 [0.805;2.747] | Very low**†         | -       |
| ACE:UC     | 0 | 0    | -                   | -                   | 1.233 [1.042;1.459] | Low**               | 1.233 [1.042;1.459] | Low**               | -       |
| ACE:WA     | 0 | 0    | -                   | -                   | 0.972 [0.889;1.063]  | Very low**†         | 0.972 [0.889;1.063] | Very low**†         | -       |
| ACE:WM     | 0 | 0    | -                   | -                   | 1.180 [1.080;1.290] | Low**               | 1.180 [1.080;1.290] | Low**               | -       |
| EA:FA      | 1 | 0.24 | 0.821 [0.649;1.039]  | Very low**†         | 0.857 [0.750;0.978]  | Low**               | 0.848 [0.755;0.952] | Low**               | 0.7608 |
| EA:MA      | 15| 0.77 | 1.120 [1.067;1.175]  | Low**               | 1.050 [0.962;1.145] | Very low**†         | 1.103 [1.058;1.150] | Low**               | 0.1992 |
| EA:SA      | 1 | 1.00 | 1.459 [0.792;2.688]  | Very low***‡        | -                    | -                   | 1.459 [0.792;2.688] | Very low**†         | -       |
| EA:UC      | 1 | 0.42 | 1.174 [0.918;1.501]  | Very low***‡        | 1.237 [1.003;1.524] | Low**               | 1.210 [1.032;1.419] | Low**               | 0.7525 |
| EA:WA      | 2 | 0.24 | 0.872 [0.748;1.017]  | Very low***‡        | 0.982 [0.900;1.071]  | Very low**†         | 0.954 [0.885;1.029] | Very low**†         | 0.1878 |
| EA:WM      | 2 | 0.43 | 1.165 [1.045;1.299]  | Low**               | 1.153 [1.049;1.267] | Low**               | 1.158 [1.078;1.244] | Low**               | 0.8849 |
| FA:MA      | 2 | 0.78 | 1.289 [1.137;1.462]  | Low**               | 1.344 [1.058;1.707] | Low**               | 1.301 [1.164;1.454] | Low**               | 0.7608 |
| FA:SA      | 0 | 0    | -                   | -                   | 1.721 [0.924;3.204]  | Very low**†         | 1.721 [0.924;3.204] | Very low**†         | -       |
| FA:UC      | 0 | 0    | -                   | -                   | 1.427 [1.177;1.730]  | Low**               | 1.427 [1.177;1.730] | Low**               | -       |
| FA:WA      | 0 | 0    | -                   | -                   | 1.125 [0.988;1.281]  | Very low**†         | 1.125 [0.988;1.281] | Very low**†         | -       |
| FA:WM      | 0 | 0    | -                   | -                   | 1.366 [1.200;1.554]  | Low**               | 1.366 [1.200;1.554] | Low**               | -       |
| MA:SA      | 0 | 0    | -                   | -                   | 1.323 [0.717;2.440]  | Very low**†         | 1.323 [0.717;2.440] | Very low**†         | -       |
| MA:UC      | 1 | 0.60 | 1.120 [0.912;1.375]  | Very low***‡        | 1.063 [0.829;1.365]  | Very low**†         | 1.097 [0.936;1.285] | Very low**†         | 0.7525 |
| MA:WA      | 5 | 0.82 | 0.884 [0.820;0.953]  | Low**               | 0.785 [0.669;0.921]  | Low**               | 0.865 [0.808;0.926] | Low**               | 0.1878 |
| MA:WM      | 2 | 0.66 | 1.046 [0.962;1.137]  | Very low**†         | 1.057 [0.940;1.189]  | Very low**†         | 1.050 [0.981;1.124] | Very low**†         | 0.8849 |
|                  | k | prop | NMA (RR) | direct (RR) | indirect (RR) | p-value | Downgrading Reasons |
|------------------|---|------|----------|-------------|---------------|---------|---------------------|
| SA:UC            | 0 | 0    | -        | -           | 0.829 [0.441;1.558] | Very low**† | 0.829 [0.441;1.558] Very low**† - |
| SA:WA            | 0 | 0    | -        | -           | 0.654 [0.353;1.210] | Very low**† | 0.654 [0.353;1.210] Very low**† - |
| SA:WM            | 0 | 0    | -        | -           | 0.793 [0.429;1.467] | Very low**† | 0.793 [0.429;1.467] Very low**† - |
| UC:WA            | 0 | 0    | -        | -           | 0.789 [0.664;0.936] | Low**     | 0.789 [0.664;0.936] Low** - |
| UC:WM            | 0 | 0    | -        | -           | 0.957 [0.807;1.135] | Very low**† | 0.957 [0.807;1.135] Very low**† - |
| WA:WM            | 0 | 0    | -        | -           | 1.214 [1.104;1.335] | Low**     | 1.214 [1.104;1.335] Low** - |

Reasons for downgrading: †Imprecision (1 downgrade), ‡Severe imprecision (2 downgrades), *risk of bias (1 downgrade), **Severe risk of bias (2 downgrades). The p-value indicated that the findings between direct and indirect comparisons was not statistically significant and therefore no comparisons have been downgraded based on inconsistency. k: Number of studies providing direct evidence; prop: proportion of direct evidence; NMA (RR): estimated treatment effect (RR) in network meta-analysis; direct (RR): estimated treatment effect (RR) derived from direct evidence; indirect (RR): estimated treatment effect (RR) derived from indirect evidence; p: p-value of test for disagreement (difference between direct and indirect evidence).

ACE: acupoint catgut embedding; EA: electroacupuncture; FA: fire acupuncture; MA: manual acupuncture; NT: no treatment SA: sham acupuncture; UC: usual care; WA: warm acupuncture; WM: western medicine