Supplementary Online Content

Vickers AJ, Cronin AM, Maschino AC, Lewith G, MacPherson H, Victor N, Foster NE, Sherman KJ, Witt CM, Linde K, for the Acupuncture Trialists' Collaboration. Acupuncture for chronic pain: individual patient data meta-analysis. *Arch Intern Med*. doi:10.1001/archinternmed.2012.3654.

eAppendix. MEDLINE Search Strategy, Trial-Level Information, Descriptions of Treatment in No-Acupuncture Trial Arms by Control Types, and References

This supplementary material has been provided by the authors to give readers additional information about their work.

MEDLINE Search Strategy

Acupuncture

acupuncture OR electro-acupuncture OR electroacupuncture

Back pain:

back pain OR backache OR Intervertebral disk OR lumbar* OR sciatica

Neck pain:

neck OR cervic* OR spinal OR torticollis OR whiplash

Shoulder pain:

shoulder OR rotator cuff OR bursitis OR tendinitis OR tendonitis OR adhesive capsulitis

OA Knee pain:

Knee OR Arthralgia* OR Arthriti* OR Osteoarthrit* OR Hip

Headache pain:

headache OR migrain* OR cephalgi* OR hemicrania

Randomized trials of acupuncture for pain

Pain with “Randomized Controlled Trial” as a limit

Trial level information.

Trials evaluating acupuncture for osteoarthritis pain (n=9).

Trial	Patient counts for those included in primary analysis	Primary outcome	Time point	Result reported by author	Drop out rate	Assessment of Blinding
Berman 2004[3]	**Total n=391** **Acupuncture n=142** **Sham** Both penetrating and non-penetrating needles **n=141** **No acupuncture control** Non-specific advice **n=108**	**WOMAC pain subscore**	**6 months**	**Mean (SE)** **Acupuncture:**-3.79 (0.33) **Sham:** - 2.92 (0.30) **No acupuncture:** -1.69 (0.33) **Difference between groups** **Acupuncture vs Sham:** 0.87 (95% CI 0.16, 1.58) p=0.003 **Acupuncture vs No acupuncture:** (not given)	**Total:** 391/570 (31%) **Acupuncture:** 142/190 (25%) **Sham:** 141/191 (26%) **Non-specific advice:** 108/189 (43%)	A
Vas 2004[15]	**Total n=88** **Acupuncture n=47** **Sham** Non-penetrating needle **n=41**	**WOMAC pain subscore**	**3 months**	**Mean (SD)** **Acupuncture:** 1.7 (2.6) **Sham:** 6.4 (5.8) **Difference between groups** **Acupuncture vs Sham:** 4.7 (95% CI 2.9, 6.5) p<0.001	**Total:** 88/97 (9%) **Acupuncture:** 47/48 (2%) **Sham:** 41/49 (16%)	A
Witt 2005[8]	**Total n=285** **Acupuncture n=145** **Sham** Penetrating needle **n=73** **No acupuncture control** Usual care **n=67**	**WOMAC Index**	**2 months**	**Mean (SE)** **Acupuncture:** 26.9 (1.4) **Sham:**35.8 (1.9) **No acupuncture:** 49.6 (2.0) **Difference between groups** **Acupuncture vs Sham:** 8.8 (95% CI 4.2, 13.5) p<0.001 **Acupuncture vs No acupuncture:** 22.7 (95% CI 17.9, 27.5) p<0.001	**Total:** 285/300 (5%) **Acupuncture:** 145/150 (3%) **Sham:** 73/76 (4%) **Usual Care:** 67/74 (9%)	A

Scharf 2006[12]	**Total n=985**[b] **Acupuncture n=318** **Sham** Penetrating needle **n=360** **No acupuncture control** Ancillary care **n=307**	**WOMAC pain subscore**	**6 months**	**Mean (95% CI)** **Acupuncture:** 2.9 (2.65, 3.17) **Sham:** 3.2 (2.93, 3.43) **No acupuncture:** 4.0 (3.69, 4.22) **Difference between groups** **Acupuncture vs Sham:** 0.3 (95% CI -0.05, 0.59) (no p value given) **Acupuncture vs No acupuncture:** 1.0 (95% CI 0.71, 1.38) (no p value given)	**Total:** 985/1039 (5%) **Acupuncture:** 318/330 (4%) **Sham:** 360/367 (2%) **Usual Care:** 307/342 (10%)	A
Witt 2006[21]	**Total n=579**[b] **Acupuncture n=300** **No acupuncture control** Usual care **n=279**	**WOMAC Index**	**3 months**	**Mean (SEM)** **Acupuncture:** 30.5 (1.0) **No acupuncture:** 47.3 (1.0) **Difference between groups** **Acupuncture vs No acupuncture:** 16.7 (SEM 1.4) p<0.001	**Total:** 579/712 (19%) **Acupuncture:** 300/357 (16%) **Usual Care:** 279/355 (21%)	n/a
Foster 2007[24]	**Total n=325** **Acupuncture n=108** **Sham** Non-penetrating needle **n=112** **No acupuncture control** Ancillary care **n=105**	**WOMAC pain subscore**	**6 months**	**Mean (SD)** **Acupuncture:** 7.07 (4.4) **Sham:** 6.50 (4.8) **No acupuncture:** 6.78 (4.5) **Difference between groups** **Acupuncture vs Sham:** (not given) **Acupuncture vs No acupuncture:** 0.08 (95% CI −1.0, 0.9) p= 0.9	**Total:** 325/352 (8%) **Acupuncture:** 108/117 (8%) **Sham:** 112/119 (6%) **Usual Care:** 105/116 (9%)	A

Trials evaluating acupuncture for chronic headache pain (n=7).

Pain Type	Trial	Patient counts for those included in primary analysis	Primary outcome	Time point	Result reported by author	Drop out rate	Assessment of Blinding
Migraine n=2	Linde 2005[10]	**Total n=272** **Acupuncture n=132** **Sham** Penetrating needle **n=76** **No acupuncture control** Usual care **n=64**	**Moderate to severe pain days**	**3 months**	**Mean (SD)** **Acupuncture:** 2.8 (2.3) **Sham:** 2.6 (2.4) **No acupuncture:** 4.3 (2.2) **Difference between groups** **Acupuncture vs Sham:** 0.0 (95% CI -0.7, 0.7) p>0.9 **Acupuncture vs No acupuncture:** 1.4 (95% CI 0.8, 2.1) p<0.001	**Total:** 272/302 (10%) **Acupuncture:** 132/145 (9%) **Sham:** 76/81 (6%) **Usual Care:** 64/76 (16%)	A
	Diener 2006[31]	**Total n=794**[a] **Acupuncture n=290** **Sham** Penetrating needle **n=317** **No acupuncture control** Guidelined care **n=187**	**Migraine days**	**6 months**	**Change from baseline, mean (SD)** **Acupuncture:** −2.8 (3.8) **Sham:** −2.0 (3.9) **No acupuncture**: −2.7 (4.2) **Difference between groups** **Acupuncture vs Sham:** 0.57 (0.09, 1.05) p=0.021 **Acupuncture vs No acupuncture:** 0.50 (95% CI -0.06, 1.05) p=0.4	**Total:** 794/960 (7%) **Acupuncture:** 290/313 (7%) **Sham:** 317/339 (6%) **Guidelined care:** 187/308 (39%)	B
Tension-type headache n=3	Coeytaux 2005[81]	**Total n=71** **Acupuncture n=34** **No acupuncture control** Ancillary care **n=37**	**Headache Impact Test**	**1 month**	**Change from baseline, mean (95% CI)** **Acupuncture:** −3.9 (−6.5, −1.2) **No acupuncture:** −0.4 (−1.8, 1.0) **Difference between groups** **Acupuncture vs No acupuncture:** 3.0 (95% CI 1.0, 4.9) (no p-value given)	**Total:** 71/74 (4%) **Acupuncture:** 34/35 (3%) **Usual Care:** 37/39 (5%)	n/a
	Melchart 2005[11]	**Total n=238** **Acupuncture n=118** **Sham** Penetrating needle **n=57** **No acupuncture control** Usual care **n=63**	**Migraine days**	**3 months**	**Mean (SD)** **Acupuncture:** 9.9 (8.7) **Sham:** 10.8 (8.3) **No acupuncture:** 16.3 (7.4) **Difference between groups** **Acupuncture vs Sham:** 0.06 (-1.2, 2.4) p=0.5 **Acupuncture vs No acupuncture:** 5.8 (95% CI 4.0, 7.6) p<0.001	**Total:** 238/270 (12%) **Acupuncture:** 118/132 (11%) **Sham:** 57/63 (10%) **Usual Care:** 63/75 (16%)	A
	Endres 2007[14]	**Total n=398** **Acupuncture n=204** **Sham** Penetrating needle **n=194**	**Headache days**	**6 months**	**Mean (SD)** **Acupuncture:** 6.0 (6.2) **Sham:** 8.4 (7.9) **Difference between groups** **Acupuncture vs Sham:** 1.94 (95% CI 0.69, 3.18) p=0.002	**Total:** 398/413 (3%) **Acupuncture:** 204/209 (2%) **Sham:** 194/200 (3%)	A

Both n=2	Vickers 2004[4]	**Total n=301** **Acupuncture n=161** **No acupuncture control** Usual care **n=140**	**Severity score**	**12 months**	**Mean (SD)** **Acupuncture:** 16.2 (13.7) **No acupuncture:** 22.3 (17.0) **Difference between groups** **Acupuncture vs No acupuncture:** 4.6 (95% CI 2.2, 7.0) p=0.0002	**Total:** 301/401 (25%) **Acupuncture:** 161/205 (21%) **Usual Care:** 140/196 (29%)	n/a
	Jena 2008[20]	**Total n=2871**[b] **Acupuncture n=1447** **No acupuncture control** Usual care **n=1424**	**Headache days**	**3 months**	**Percent reduction, mean (95% CI)** **Acupuncture:** 43.0 (41.0, 45.1) **No acupuncture:** 15.2 (13.3, 17.0) **Difference between groups** **Acupuncture vs No acupuncture:** 27.9 (95% CI 25.1, 30.6) p<0.001	**Total:** 2871/3404 (16%) **Acupuncture:** 1447/1711 (15%) **Usual Care:** 1424/1693 (16%)	n/a

Trials evaluating acupuncture for non-specific musculoskeletal pain (n=15).

Pain Type	Trial	Patient counts for those included in primary analysis	Primary outcome	Time point	Result reported by author	Drop out rate	Assessment of Blinding
Back n=10	Carlsson 2001[27]	**Total n=27** **Acupuncture n=21** **Sham** Non-needle **n=6**	**Pain VAS**	**6 months**	**Mean weekly VAS in percent of baseline, mean (SD)**[g] **Acupuncture** Morning VAS: 75% (33) Night VAS: 68% (31) **Sham** Morning VAS: 132% (76) Night VAS: 101% (48) **Difference between groups** **Acupuncture vs Sham:** Morning VAS: p=0.13 (no estimate given) Night VAS: p=0.056 (no estimate given)	**Total:** 27/50 (46%) **Acupuncture:** 21/34 (38%) **Sham:** 6/16 (63%)	B
	Cherkin 2001[6]	**Total n=249**[d] **Acupuncture n=89** **No acupuncture control** Non-specific advice **n=83** **Massage n=77 (not analyzed)**	**Roland Morris Disability Questionnaire**	**2 months**	**Mean (95% CI)** **Acupuncture:** 7.9 (6.5, 9.3) **No acupuncture:** 8.8 (7.4, 10.2) **Difference between groups** **Acupuncture vs No acupuncture:** adjusted p=0.75 (no estimate given)	**Total:** 249/262 (7%) **Acupuncture:** 89/94 (5%) **Usual Care:** 83/90 (8%) **Massage:** 77/78 (1%)	n/a

	Kerr 2003[29]	**Total n=46** **Acupuncture n=26** **Sham** Non-needle **n=20**	**Pain VAS**	**1 month**	**Mean (SD)** **Acupuncture:** 51.3 (22.4) **Sham:** 61.7 (30.6) **Difference between groups** **Acupuncture vs Sham:** p=0.2 (no estimate given)	**Total:** 46/60 (23%) **Acupuncture:** 26/30 (13%) **Sham:** 20/30 (33%)	B
	Brinkhaus 2006[9]	**Total n=284** **Acupuncture n=140** **Sham** Penetrating needle **n=70** **No acupuncture control** Usual care **n=74**	**Pain VAS**	**2 months**	**Mean change from baseline (SD)** **Acupuncture:** 28.7 (30.3) **Sham:** 23.6 (31.0) **No acupuncture** 6.9 (22.0) **Difference between groups** **Acupuncture vs Sham:** 5.1 (95% CI −3.7, 13.9) p=0.3 **Acupuncture vs No acupuncture:** 21.7 (95% CI 13.9, 30.0) p<0.001	**Total:** 284/301 (6%) **Acupuncture:** 140/147 (5%) **Sham:** 70/75 (7%) **Usual Care:** 74/79 (6%)	A
	Thomas 2006[5]	**Total n=182** **Acupuncture n=123** **No acupuncture control** Usual care **n=59**	**SF36 Bodily pain**	**24 months**	**Mean (SD)** **Acupuncture:** 67.8 (24.1) **No acupuncture:** 59.5 (23.4) **Difference between groups** **Acupuncture vs No acupuncture:** 8.0 (95% CI 2.8, 13.2) p=0.003	**Total:** 182/241 (24%) **Acupuncture:** 123/160 (23%) **Usual Care:** 59/81 (27%)	n/a
	Witt 2006[18]	**Total n=2594**[b] **Acupuncture n=1350** **No acupuncture control** Usual care **n=1244**	**Back Function measured with the Hannover Functional Ability Questionnaire**	**3 months**	**Mean (SE)** **Acupuncture:** 12.1 (0.4) **No acupuncture:** 2.7 (0.4) **Difference between groups** **Acupuncture vs No acupuncture:** 9.4 (95% CI 8.3, 10.5) p<0.001	**Total:** 2594/3093 (16%) **Acupuncture:** 1350/1549 (13%) **Usual Care:** 1244/1544 (19%)	A

Trials evaluating acupuncture for non-specific musculoskeletal pain (n=15), cont.

Pain Type	Trial	Patient counts for those included in primary analysis	Primary outcome	Time point	Result reported by author	Drop out rate	Assessment of Blinding

Back n=10 (cont.)	Haake 2007[13]	**Total n=1117**[e] **Acupuncture n=377** **Sham** Penetrating needle **n=376** **No acupuncture control** Guidelined care **n=364**	**Von Korff Chronic Pain Scale**	**6 months**	**Mean (SD) of Von Korff Chronic Pain Scale** **Acupuncture:** 40.2 (22.5) **Sham** 43.3 (23.0) **No acupuncture:** 52.3 (21.2) **Difference between groups in treatment success** [h] **Acupuncture vs No acupuncture:** 20.2% (95% CI 13.4%, 26.7%) p<.001 **Acupuncture vs Sham:** 3.4% (95% CI −3.7%, 10.3%) p=0.4	**Total:** 1117/1162 (4%) **Acupuncture:** 377/387 (3%) **Sham:** 376/387 (3%) **Usual Care:** 364/388 (6%)	A
	Molsberger 2002[82]	**Total n=124** **Acupuncture n=47** **Sham** Penetrating needle **n=41** **No acupuncture control** Ancillary care **n=36**	**Pain VAS**	**3 months**	**Mean (SD)** **Acupuncture:** 23 (20) **Sham:** 43 (23) **No acupuncture control:** 52 (19) **Difference between groups** [i] **Acupuncture vs Sham:** p<0.001 (no estimate given) **Acupuncture vs No acupuncture control:** p<0.001 (no estimate given)	**Total:** 124/186 (33%) **Acupuncture:** 47/65 (28%) **Sham:** 41/61 (33%) **Usual Care:** 36/60 (40%)	(not evaluated)
	Kennedy 2008[30]	**Total n=40** **Acupuncture n=22** **Sham** Needle, non-penetrating **n=18**	**Roland Morris Disability Questionnaire**	**3 months**	**Mean (SEM)** **Acupuncture:** 5.0 ± 1.0 **Sham:** 7.7 ± 1.5 **Difference between groups** **Acupuncture vs Sham:** 2.6 (95% CI −0.7, 5.9) p= 0.12	**Total:** 40/48 (17%) **Acupuncture:** 22/24 (8%) **Sham:** 18/24 (25%)	A
	Cherkin 2009[83]	**Total n=606** **Acupuncture n=299** [j] Individualized **n=147** Standardized **n=152** **Sham** Non-needle **n=159** **No acupuncture control** Usual care **n=148**	**Roland Morris Disability Questionnaire**	**2 months**	**Mean (SD)** **Individualized Acupuncture:** 6.4 (5.3) **Standardized Acupuncture:** 6.3 (5.7) **Sham:** 5.4 (4.9) **No acupuncture:** 8.9 (6.0) **Difference between groups** **Individualized vs standardized**: 0.16 (95% CI −0.90 to 1.22) p≥0.05 **Individualized vs Sham:** 0.45 (95% CI −0.61 to 1.50) p≥0.05 **Individualized vs No acupuncture:**−2.47 (95% CI −3.53, −1.40) p<0.05	**Total:** 606/638 (5%) **Acupuncture:** Individualized: 147/157 (6%) Standardized: 152/158 (4%) **Sham:** 159/162 (2%) **Usual Care:** 148/161 (8%)	(not evaluated)
Neck n=5	Irnich 2001[7]	**Total n=108** **Acupuncture n=51** **Sham** Non-needle **n=57** **Massage n=57 (not analyzed)**	**Pain VAS**	**1 month**	**Change from baseline, Mean (95% CI)** **Acupuncture:** 24.22 (16.5, 31.9) **Sham:** 17.28 (10.0, 24.6) **Difference between groups** **Acupuncture vs Sham:** 6.9 (-5.0, 18.9) p=0.3	**Total:** 165/177 (8%) **Acupuncture:** 51/56 (9%) **Sham:** 57/61 (7%) **Massage**: 57/60 (5%)	**B**

	White 2004[22]	**Total n=124** [f] **Acupuncture n=63** **Sham** Non-needle **n=61**	**Pain VAS**	**1 month**	**Mean (SD)** **Acupuncture:** 20.39 (20.26) **Sham:** 30.69 (22.00) **Difference between groups** **Acupuncture vs Sham:** 6.3 (95% CI 1.4, 11.3) p =0.012	**Total:** 124/135 (8%) **Acupuncture:** 63/70 (10%) **Sham:** 61/65 (6%)	A

Trials evaluating acupuncture for non-specific musculoskeletal pain (n=15), cont.

Pain Type	Trial	Patient counts for those included in primary analysis	Primary outcome	Time point	Result reported by author	Drop out rate	Assessment of Blinding
Neck n=5 (cont.)	Salter 2006[26]	**Total n=21** **Acupuncture n=9** **No acupuncture control** Usual care **n=12**	**Northwick Park Neck Pain Questionnaire**	**3 months**	**Mean (SD)** **Acupuncture:** 22.73 (18.64) **No acupuncture:** 25.72 (16.29) **Difference between groups** **Acupuncture vs No acupuncture:** 1.75 (no confidence interval given) p = 0.8	**Total:** 21/24 (13%) **Acupuncture:** 9/10 (10%) **Usual Care:** 12/14 (14%)	n/a
	Vas 2006[16]	**Total n=123** [c] **Acupuncture n=61** **Sham** Non-needle **n=62**	**Pain VAS**	**1 month**	**Change from baseline, Mean (SD)** **Acupuncture:** 42.1 (21.1) **Sham:** 14.0 (15.7) **Difference between groups** **Acupuncture vs Sham:** 28.1 (95% CI 21.4, 34.7) p<0.001	**Total:** 115/123 (7%) **Acupuncture:** 58/61 (5%) **Sham:** 57/62 (8%)	A
	Witt 2006[19]	**Total n=3162** [b] **Acupuncture n=1618** **No acupuncture control** Usual care **n=1544**	**Neck Pain and Disability Scale**	**3 months**	**Change from baseline, Mean (SE)** **Acupuncture:** 16.2 (0.4) **No acupuncture:** 3.9 (0.4) **Difference between groups** **Acupuncture vs No acupuncture:** 12.3 (95% CI 11.3, 13.3) p < 0.001	**Total:** 3162/3766 (16%) **Acupuncture:** 1618/1880 (14%) **Usual Care:** 1544/1886 (18%)	n/a

Trials evaluating acupuncture for osteoarthritis pain (n=9), cont.

Trial	Patient counts for those included in primary analysis	Primary outcome	Time point	Result reported by author	Drop out rate	Assessment of Blinding
Williamson 2007[23]	**Total n=181**[c] **Acupuncture n=60** **No acupuncture control** Non-specific advice **n=61** **Physiotherapy n=60 (not analyzed)**	**Oxford Knee Score**	**2 months**	**Mean (SD)** **Acupuncture:** 36.8 (7.20) **No acupuncture:** 40.3 (8.48) **Difference between groups** **Acupuncture vs No acupuncture**: 3.5 (95% CI 0.66, 6.33) Bonferroni p=0.016	**Total:** 161/181 (11%) **Acupuncture:** 59/60 (2%) **Usual Care:** 49/61 (20%) **Physiotherapy:** 53/60 (12%)	n/a
Lansdown 2009[84]	**Total n=30** **Acupuncture n=15** **No acupuncture control** Usual care **n=15**	**WOMAC pain subscore**	**3 months**	**Mean (SD)** **Acupuncture:** 3.6 (2.92) **No acupuncture:** 6.57 (4.54) **Difference between groups** **Acupuncture vs No acupuncture**:-2.62 (95% CI -0.77, -4.47) p= 0.007	**Total:** 28/30 (7%) **Acupuncture:** 14/15 (7%) **Usual Care:** 14/15 (7%)	(not evaluated)
Suarez-Almazor 2010[85]	**Total n=496** **Acupuncture n=139** **Sham** Penetrating needle **n=283** **No acupuncture control** Ancillary care **n=72**	**WOMAC pain subscore**	**3 months**	**Mean (SD)** **Acupuncture:** 30.8 (17.9) **Sham:** 31.0 (19.1) **No acupuncture:** 42.4 (16.8) **Difference between groups** **Acupuncture vs No acupuncture**: p=0.0002 (no estimate given) **Acupuncture vs Sham:** p>0.20 (no estimate given)	**Acupuncture:** (9%) **Sham:** (6%) **Usual Care**: (0%)	(not evaluated)

Trials evaluating acupuncture for specific shoulder pain (n=4).

Trial	Patient counts for those included in primary analysis	Primary outcome	Time point	Result reported by author	Drop out rate	Assessment of Blinding
Kleinhenz 1999[25]	**Total n=45** **Acupuncture n=22** **Sham** Non-penetrating needle **n=23**	**Constant-Murley-score**	**1 month**	**Mean change from baseline (SD)** **Acupuncture:** 19.2 (16.1) **Sham:** 8.4 (14.6) **Difference between groups** **Acupuncture vs Sham:** (no estimate given) (95% CI 2.3, 19.4) p=0.001	**Total:** 45/52 (13%) **Acupuncture:** 22/25 (12%) **Sham:** 23/27 (15%)	A
Guerra de Hoyos 2004[28]	**Total n=110** **Acupuncture n=55** **Sham** Non-penetrating needle **n=55**	**Pain VAS**	**6 months**	**Mean (SD)** **Acupuncture:** 3.5 (3.0) **Sham:** 1.2 (1.9) **Difference between groups** **Acupuncture vs Sham:** 2.0 (95% CI 1.2, 2.9) p<0.0005	**Total:** 110/130 (15%) **Acupuncture:** 55/65 (15%) **Sham:** 55/65 (15%)	A
Vas 2008[17]	**Total n=425**[c] **Acupuncture n=205** **Sham** Non-needle **n=220**	**Constant-Murley-score**	**1 month**	**Mean change from baseline (SD)** **Acupuncture:** 16.6 (15.6) **Sham:** 10.6 (13.5) **Difference between groups** **Acupuncture vs Sham:**6.0 (95% CI 3.2, 8.8) p<0.001	**Total:** 409/425 (4%) **Acupuncture:** 202/205 (1%) **Sham:** 207/220 (6%)	A
Molsberger 2010[86]	**Total n=308** **Acupuncture n=128** **Sham** Non-penetrating needle **n=74** **No acupuncture control** Usual care **n=106**	**VAS**	**6 months**	**Mean (SD)** **Acupuncture:** 19 (23.3) **Sham:** 33 (29.6) **No acupuncture:** 33 (26.6) **Difference between groups** **Acupuncture vs Sham:** 14 (95% CI 7.87–20.13) p<0.001 **Acupuncture vs No acupuncture:** 14 (95% CI 8.22–19.78) p<0.001	**Total:** 308/424 (27%) **Acupuncture:** 128/154 (17%) **Sham:** 74/135 (45%) **Usual Care:** 106/135 (21%)	(not evaluated)

Notes
Ancillary care: Programme of care received by both acupuncture and non-acupuncture groups (e.g. trial comparing physiotherapy plus acupuncture to physiotherapy alone).
Usual Care: Protocol did not specify treatments received in control group (e.g. trials with "waiting list controls"). Non-specific advice: Patients in control group receive general advice and support ("attention control").
Guidelined care: Patients in control group received care according to national guidelines

a These differ from the patient counts in the forest plot. Authors confirmed this was an error on their part and have published an *erratum*.
b Patient counts lower in the forest plots due to missing baseline scores for some patients.
c Patient counts lower in the forest plots as number reported in paper includes imputed data.
d One person in the no acupuncture control group was missing Roland Morris Disability Questionnaire data but this was not reported in the paper
e Lower patient counts in our analyses are due to missing randomization stratification variables: baseline Von Korff, chronification, fear avoidance belief, levels of activity, patient expectations, or trial center.
f We averaged weeks 4, 5, & 6 to get a 1 month score.
g These numbers were taken from data provided, can only be estimated from what is given in the paper
h Values are given as percentage of patients (95% confidence interval). Success was defined as 33% improvement or better on 3 pain-related items on the CPGS.
i Pain relief >= 50%
j We combine the individualized and standardized acupuncture estimates in our analyses

Descriptions of Treatment in No Acupuncture Trial Arms by Control Type

Ancillary Care: Programme of care received by both acupuncture and non-acupuncture groups (e.g. trial comparing physiotherapy plus acupuncture to physiotherapy alone)

Trialist	Pain Type	Short Description	Quotation from Published Manuscript
Coeytaux 2005[81]	Headache	Medical management as provided by their personal healthcare providers	We randomly allocated study patients to receive either medical management only or medical management plus a series of 10 acupuncture treatments during a 6-week intervention period. All patients received medical management as provided by their personal healthcare providers and by a neurologist at the headache clinic at UNC Hospitals.
Molsberger 2002[82]	Low back pain	Conventional orthopedic therapy	a) nil + COT (conventional orthopedic therapy exclusively). These patients received the conventional conservative orthopedic treatment only. On a standardized, daily basis they received physiotherapy, physical exercise, back school, mud packs, infrared heat therapy. On demand they received 50 mg diclofenac up to three times a day. Injections or cortisone application of any kind were not allowed. Other than that, information and handling of these patients was identical to those of the other two groups.
Scharf 2006[12]	Osteoarthritis	Conservative therapy (medication, 6 physiotherapy sessions)	Conservative therapy involved 10 visits to practitioners with consultation and a prescription for diclofenac, up to 150 mg/d, or rofecoxib, 25 mg/d, as needed until week 23. The protocol permitted 5 additional visits in weeks 7 to 13 if patients were graded as having a "partially successful" result (10% to 50% reduction in pain after 6 weeks based on the von Korff pain intensity scale) during a telephone interview. Each of the 3 treatment groups had up to 6 physiotherapy sessions. Corticosteroids and other analgesics besides diclofenac and rofecoxib were explicitly excluded for all patients.
Foster 2007[24]	Osteoarthritis	Advice and exercise group	Participants allocated to the advice and exercise group received advice supplemented by a leaflet modeled on the Arthritis Research Campaign leaflet on knee osteoarthritis (www.arc.org.uk). Participants who were receiving non-steroidal anti-inflammatory drugs were permitted to continue with their stable dose. The advice and exercise package was developed from reviews of best evidence, clinical guidelines, a survey of physiotherapy practice for knee pain, and a consensus workshop. Exercises were individualized using PhysioTools (www.physiotools.net), oriented towards lower limb strengthening, stretching, and balance. This could include concentric, eccentric, and isometric exercise; non-weight bearing exercise; and weight bearing exercise plus a home exercise programme. Intensity was progressed, when appropriate, at each supervised exercise session. The package consisted of up to six sessions of 30 minutes (including the pre-randomisation session) over six weeks. Data on participants' self reported adherence to exercise were collected.

Usual Care: Protocol did not specify treatments received in control group (e.g. trials with "waiting list controls").

Trialist	Pain Type	Short Description	Quotation from Published Manuscript
Linde 2005[10]	Migraine	Waiting list; no prophylactic treatment	Patients in the waiting list control group did not receive any prophylactic treatment for their headaches for a period of 12 weeks after randomization. After that period they received 12 sessions of the acupuncture treatment described above.
Melchart 2005[11]	TTH	Waiting list; no prophylactic treatment	Patients in the waiting list control group did not receive any prophylactic treatment for their headaches for a period of 12 weeks after randomisation. After that time, they received 12 sessions of the acupuncture treatment described above. All patients were allowed to treat acute headaches as needed.
Thomas 2006[5]	Low back pain	Usual GP care	All patients remained under the care of their general practitioner. Patients in the usual care group received NHS treatment according to their general practitioner's assessment of need. We collected information from patients at 3, 12, and 24 months on treatments received for low back pain.
Salter 2006[26]	Neck	Usual GP care	Usual GP care was available to both groups, and at three months patients were asked to record all treatments they had received.
Vickers 2004[4]	Headache	Usual GP care	Patients randomised to "avoid acupuncture" received usual care from their general practitioner but were not referred to acupuncture.
Witt 2005[8]	Osteoarthritis	Waiting list group (oral non-steroidal anti-inflammatory drugs if necessary)	Patients in the waiting list group did not receive acupuncture treatment for 8 weeks after randomisation; from week 9 they received 12 sessions of the acupuncture treatment described above. In all treatment groups, patients were allowed to treat osteoarthritis knee pain with oral non-steroidal anti-inflammatory drugs if necessary. The use of other pain treatments, such as drugs acting through the central nervous system, or corticosteroids, was not allowed.
Witt 2006[19]	Neck	Usual care (additional conventional treatments as needed)	The control group was not allowed to use any kind of acupuncture during the first three months. In all three treatment groups, the patients were allowed to use any additional conventional treatments as needed.
Witt 2006[21]	Osteoarthritis	Usual care (additional conventional treatments as needed)	The control group was not allowed to receive any kind of acupuncture during the first 3 months. In all 3 treatment groups, the patients were permitted to receive any additional conventional treatments as needed.
Jena 2008[20]	Headache	Usual care (additional conventional treatments as needed)	The control group was not allowed to use any kind of acupuncture during the first 3 months. In all three treatment groups, patients were allowed to use any additional conventional treatments as needed.
Witt 2006[18]	Low back pain	Usual care (additional conventional treatments as needed)	In all three treatment groups, the patients were allowed to use additional conventional treatments as needed.
Brinkhaus 2006[9]	Low back pain	Waiting list group (oral non-steroidal anti-inflammatory drugs if necessary)	Patients in the waiting list group did not receive acupuncture treatment for 8 weeks after randomization. After that period, they received 12 sessions of the acupuncture treatment previously described. Patients were allowed to treat chronic low back pain with oral nonsteroidal anti-inflammatory drugs, if required. The use of corticosteroids or pain-relieving drugs that act through the central nervous system was prohibited.
Suarez-Almazor 2010[85]	Osteoarthritis	Waiting list	No description
Molsberger 2010[86]	Shoulder	Conservative orthopaedic treatment (COT)	The patients received conventional orthopaedic therapy with 50 mg diclofenac daily. Additionally 15 treatment sessions were individually selected from physiotherapy, physical exercise, heat or cold therapy, ultra-sonic treatment and TENS. Injections or cortisone applications of any kind were not allowed. Other than that management of these patients and information provided to them was identical to that in the other two groups.
Cherkin 2009[83]	Low back pain	Usual GP care	Participants in the usual care group received no study-related care—just the care, if any, they and their physicians chose (mostly medications, primary care, and physical therapy visits). All participants received a self-care book with information on managing flare-ups, exercise, and lifestyle modifications.[18]

Lansdown 2009[84]	Osteoarthritis	Usual care (from any health provider)	Both groups received 'usual care', which included any appointments, medications (prescribed or over the counter) and interventions sought by participants from any health practitioner. Data on all usual care treatments received by both groups were collected using follow-up postal questionnaires at 3 and 12 months.

Non-specific support and advice: Controls were given educational materials and general advice in an effort to equalize experimental contact across groups ("attention control")

Trialist	Pain Type	Short Description	Quotation from Published Manuscript
Berman 2004[3]	Osteoarthritis	Education Control	Education Control The education–attention control consisted of 6 two hour group sessions based on the Arthritis Self-Management Program (24) and taught by an experienced, Arthritis Foundation–trained patient education specialist. In addition, we periodically mailed educational materials to the education group in an attempt to equalize the amount of experimental contact in all groups.
Cherkin 2001[6]	Low back pain	Self-care Education	Self-care Education Patients allocated to usual care alone might believe that they had been denied useful therapies, resulting in dissatisfaction and worse outcomes. Therefore, this comparison group received high-quality and relatively inexpensive educational materials designed for persons with chronic back pain: a book[8] and 2 professionally produced videotapes[9]: a 40- minute videotape on self-management of back pain and a 25-minute videotape demonstrating exercises. These unpublished materials included information about back pain and its treatment, techniques for controlling and preventing pain and for improving quality of life, and suggestions for coping with the emotional and interpersonal problems often accompanying chronic illness. The content of the book has been published in a slightly modified form.
Williamson 2007[23]	Osteoarthritis	Exercise and advice leaflet	The control group received an exercise and advice leaflet, which had been designed by consensus between the physiotherapy, rheumatology and orthopaedic departments. In this way, we standardized the advice received by the control group to reflect best current practice. At enrolment, patients were told that they were in the 'home exercise group'.

Guidelined care: Patients in control group received care according to national guidelines

Trialist	Pain Type	Short Description	Quotation from Published Manuscript
Haake 2007[13]	Low back pain	Conventional therapy (10 sessions physiotherapy, exercise, and such plus medication)	Patients in the conventional therapy group received a multimodal treatment program according to German guidelines.[11] The guidelines provide the treating physician with recommendations about the treatment algorithm and assess the various therapy forms according to the degree of evidence based on a literature search and recommendations of the specialist associations. Conventional therapy included 10 sessions with personal contact with a physician or physiotherapist who administered physiotherapy, exercise, and such. Physiotherapies were supported by nonsteroidal antiinflammatory drugs or pain medication up to the maximum daily dose during the therapy period. Rescue medication was identical to that for the acupuncture groups.
Diener 2006[31]	Migraine	Standard migraine prophylactic treatment with medication	Standard migraine prophylactic treatment in the third study group was undertaken according to the guidelines of the German Migraine and Headache Society.[8] Following these guidelines, the use of beta blockers was the first choice, flunarizine the second, and valproic acid the third. Between six and seven contacts between the investigator and the patient were allowed during the trial to establish the standard treatment.

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