

Appendix S1 Search strategy

Ovid-Medline 1946 to Jan Week 1 2018 Date: 2018.01.08		
	Searches	Results
1	Neck Pain/	6385
2	exp Brachial Plexus Neuropathies/	3563
3	cervical pain.mp.	961
4	neckache.mp.	20
5	cervicodynia.mp.	9
6	cervicalgia.mp.	114
7	brachialgia.mp.	165
8	brachial neuritis.mp.	174
9	brachial neuralgia.mp.	122
10	neck pain.mp.	14709
11	neck injur*.mp.	5953
12	brachial plexus neuropath*.mp.	2277
13	brachial plexus neuritis.mp.	1527
14	thoracic outlet syndrome/ or cervical rib syndrome/	2228
15	Torticollis/	3691
16	exp brachial plexus neuropathies/ or exp brachial plexus neuritis/	3563
17	cervico brachial neuralgia.ti,ab.	43
18	cervicobrachial neuralgia.ti,ab.	68
19	(monoradicul* or monoradickl*).tw.	143
20	or/1-19	33193
21	neck/	30018
22	neck muscles/	6076
23	exp cervical plexus/	8027
24	exp cervical vertebrae/	38618
25	atlanto axial joint	1767
26	atlanto occipital joint	3372
27	Cervical Atlas/	2539

28	spinal nerve roots/	10,825
29	exp brachial plexus/	24658
30	(odontoid* or cervical or occip* or atlant*).tw.	282283
31	axis/ or odontoid process/	1777
32	Thoracic Vertebrae/	20133
33	cervical vertebrae.mp.	35831
34	cervical plexus.mp.	1465
35	cervical spine.mp.	21326
36	(neck adj3 muscles).mp.	7410
37	(brachial adj3 plexus).mp.	13431
38	(thoracic adj3 vertebrae).mp.	21124
39	neck.mp.	244594
40	(thoracic adj3 spine).mp.	7024
41	(thoracic adj3 outlet).mp.	2763
42	trapezius.mp.	3985
43	or/21-42	566354
44	exp pain/	387369
45	exp injuries/	891764
46	pain.mp.	672242
47	ache.mp.	15382
48	sore.mp.	7757
49	stiff.mp.	9236
50	discomfort.mp.	42264
51	injur*.mp.	1050876
52	neuropath*.mp.	140510
53	or/44-52	2242467
54	43 and 53	135447
55	Radiculopathy/	4853
56	exp temporomandibular joint disorders/ or exp temporomandibular joint dysfunction syndrome/	16566

57	myofascial pain syndromes/	1627
58	exp "Sprains and Strains"/	18830
59	exp Spinal Osteophytosis/	4196
60	exp Neuritis/	7282
61	Polyradiculopathy/	2656
62	exp Arthritis/	259875
63	Fibromyalgia/	8641
64	spondylitis/ or discitis/	6486
65	spondylosis/ or spondylolysis/ or spondylolisthesis/	7014
66	radiculopathy.mp.	8529
67	radiculitis.mp.	821
68	temporomandibular.mp.	27614
69	myofascial pain syndrome*.mp.	1967
70	thoracic outlet syndrome*.mp.	2552
71	spinal osteophytosis.mp.	3575
72	neuritis.mp.	17471
73	spondylosis.mp.	4358
74	spondylitis.mp.	23814
75	spondylolisthesis.mp.	6178
76	or/55-75	361804
77	43 and 76	28356
78	exp neck/	30044
79	exp cervical vertebrae/	38618
80	Thoracic Vertebrae/	20133
81	neck.mp.	244594
82	(thoracic adj3 vertebrae).mp.	21124
83	(thoracic adj3 spine).mp.	7024
84	cervical spine.mp.	21326
85	or/78-84	302173
86	Intervertebral Disk/	13804
87	(disc or discs).mp.	99973
88	(disk or disks).mp.	53273

89	or/86-88	139200
90	85 and 89	9454
91	herniat*.mp.	21849
92	slipped.mp.	4540
93	prolapse*.mp.	32528
94	displace*.mp.	149806
95	degenerat*.mp.	237832
96	(bulge or bulged or bulging).mp.	9191
97	or/91-96	437364
98	90 and 97	6049
99	intervertebral disk degeneration/ or intervertebral disk displacement/	21747
100	intervertebral disk displacement.mp.	1741
101	intervertebral disc displacement.mp.	18641
102	intervertebral disk degeneration.mp.	152
103	intervertebral disc degeneration.mp.	4850
104	intervertebral disk hernia.mp.	222
105	or/99-104	22513
106	85 and 105	4166
107	20 or 54 or 77 or 98 or 106	156956
108	cupping.mp.	1754
109	ventouse.tw.	237
110	exp phlebotomy/	5704
111	bloodletting.mp.	2994
112	blood letting.mp.	349
113	bloodletting.mp.	2994
114	spilled blood.mp.	13
115	venesection.mp.	686
116	or/108-115	8424
117	107 and 116	86

	Searches	Results
1	Neck Pain/	18952
2	brachial plexus neuropathy/	1779
3	cervical pain.mp.	1285
4	neckache.mp.	23
5	cervicodynia.mp.	17
6	cervicalgia.mp.	176
7	brachialgia/	262
8	brachialgia.mp.	368
9	brachial neuritis.mp.	204
10	brachial neuralgia.mp.	67
11	neck pain.mp.	21299
12	neck injur*.mp.	7234
13	brachial plexus neuropath*.mp.	1944
14	brachial plexus neuritis.mp.	85
15	thoracic outlet syndrome/	2075
16	Torticollis/	4014
17	exp brachial plexus neuropathies/ or exp brachial plexus neuritis/	1779
18	cervico brachial neuralgia.ti,ab.	36
19	cervicobrachial neuralgia.ti,ab.	75
20	(monoradicul* or monoradicl*).tw.	150
21	or/1-20	37046
22	neck/	50115
23	neck muscles/	5295
24	cervical plexus/	1090
25	cervical spine/	31073
26	atlantoaxial joint/	1743
27	atlantooccipital joint/	2016
28	atlas/	1765
29	spinal root/	4655
30	brachial plexus/	7832
31	(odontoid* or cervical or occip* or atlant*).tw.	313982

32	odontoid process/	2481
33	cervical vertebra.mp.	3529
34	cervical vertebrae.mp.	3134
35	cervical plexus.mp.	1403
36	cervical spine.mp.	48597
37	(neck adj3 muscles).mp.	2581
38	(brachial adj3 plexus).mp.	17831
39	(thoracic adj3 vertebrae).mp.	2227
40	neck.mp.	300025
41	(thoracic adj3 spine).mp.	13953
42	(thoracic adj3 outlet).mp.	2435
43	trapezius.mp.	5264
44	or/22-43	622696
45	exp pain/	1091658
46	exp injuries/	66466
47	pain.mp.	1032154
48	ache.mp.	16783
49	sore.mp.	18614
50	stiff.mp.	11265
51	discomfort.mp.	64832
52	injur*.mp.	1377870
53	neuropath*.mp.	267008
54	or/45-53	2799546
55	44 and 54	151698
56	Radiculopathy/	8801
57	temporomandibular joint disorder/	11910
58	myofascial pain/	7225
59	spondylosis/ or cervical spondylosis/	6895
60	Neuritis/	5803
61	exp Arthritis/	395884
62	Fibromyalgia/	17215
63	exp spondylitis/	34738

64	diskitis/	2171
65	spondylolisthesis/	7164
66	radiculopathy.mp.	11998
67	radiculitis.mp.	1260
68	temporomandibular.mp.	25840
69	myofascial pain syndrome*.mp.	1158
70	spinal osteophytosis.mp.	36
71	neuritis.mp.	19219
72	spondylosis.mp.	8026
73	spondylitis.mp.	35047
74	spondylolisthesis.mp.	7954
75	or/56-74	476180
76	44 and 75	27829
77	neck/	50115
78	cervical spine/	31073
79	neck.mp.	300025
80	(thoracic adj3 vertebrae).mp.	2227
81	(thoracic adj3 spine).mp.	13953
82	cervical spine.mp.	48597
83	or/77-82	348878
84	Intervertebral Disk/	11331
85	(disc or discs).mp.	85296
86	(disk or disks).mp.	97488
87	or/84-86	146518
88	83 and 87	9652
89	herniat*.mp.	25041
90	slipped.mp.	3710
91	prolapse*.mp.	41853
92	displace*.mp.	127797
93	degenerat*.mp.	321664
94	(bulge or bulged or bulging).mp.	10599
95	or/89-94	520028

96	88 and 95	5203
97	intervertebral disk hernia/	15253
98	intervertebral disk degeneration/	8780
99	intervertebral disk displacement.mp.	533
100	intervertebral disc displacement.mp.	131
101	intervertebral disk degeneration.mp.	8836
102	intervertebral disc degeneration.mp.	1880
103	or/97-102	23812
104	83 and 103	4121
105	21 or 55 or 76 or 96 or 104	169900
106	cupping.mp.	1908
107	ventouse.tw.	411
108	exp phlebotomy/	9427
109	bloodletting.mp.	672
110	blood letting.mp.	315
111	blood-letting.mp.	315
112	spilled blood.mp.	14
113	venesection.mp.	743
114	106 or 107 or 108 or 109 or 110 or 111 or 112 or 113	12343
115	105 and 114	137

Ovid-AMED 1985 to December 2017		Date: 2018.01.08.
Searches		Results
1	Neck Pain/	1031
2	exp Brachial plexus/	282
3	cervical pain.mp.	75
4	neckache.mp.	0
5	cervicodynia.mp.	2
6	cervicalgia.mp.	13
7	brachialgia.mp.	6
8	brachial neuritis.mp.	1

9	brachial neuralgia.mp.	5
10	neck pain.mp.	1380
11	neck injur*.mp.	139
12	brachial plexus neuropath*.mp.	8
13	brachial plexus neuritis.mp.	1
14	thoracic outlet syndrome/ or cervical rib syndrome/	43
15	Torticollis/	70
16	cervico brachial neuralgia.ti,ab.	0
17	cervicobrachial neuralgia.ti,ab.	2
18	(monoradicul* or monoradickl*).tw.	0
19	or/1-18	1941
20	neck/	663
21	neck muscles/	150
22	exp cervical plexus/	30
23	exp cervical vertebrae/	1647
24	Atlanto axial joint/	32
25	Atlanto occipital joint/	17
26	spinal nerve roots/	92
27	(odontoid* or cervical or occip* or atlant*).tw.	3929
28	Axis/	9
29	Odontoid process/	8
30	Thoracic Vertebrae/	302
31	cervical vertebrae.mp.	1678
32	cervical plexus.mp.	11
33	cervical spine.mp.	1163
34	(neck adj3 muscles).mp.	311
35	(brachial adj3 plexus).mp.	203
36	(thoracic adj3 vertebrae).mp.	331
37	neck.mp.	3781
38	(thoracic adj3 spine).mp.	355
39	(thoracic adj3 outlet).mp.	83
40	trapezius.mp.	502
41	or/20-40	7636

42	exp pain/	20488
43	exp injuries/	3007
44	pain.mp.	29672
45	ache.mp.	124
46	sore.mp.	167
47	stiff.mp.	228
48	discomfort.mp.	991
49	injur*.mp.	28051
50	neuropath*.mp.	1781
51	or/42-50	57325
52	41 and 51	4097
53	myofascial pain syndromes/	352
54	exp "Sprains and Strains"/	949
55	exp Spinal Osteophytosis/	35
56	exp Neuritis/	62
57	exp Arthritis/	5513
58	Fibromyalgia/	1647
59	spondylitis/ or discitis/	77
60	spondylosis/ or spondylolysis/ or spondylolisthesis/	140
61	radiculopathy.mp.	285
62	radiculitis.mp.	10
63	temporomandibular.mp.	582
64	myofascial pain syndrome*.mp.	424
65	thoracic outlet syndrome*.mp.	80
66	spinal osteophytosis.mp.	41
67	neuritis.mp.	78
68	spondylosis.mp.	130
69	spondylitis.mp.	358
70	spondylolisthesis.mp.	154
71	or/53-70	9763
72	41 and 71	794
73	exp neck/	710

74	exp cervical vertebrae/	1647
75	Thoracic Vertebrae/	302
76	neck.mp.	3781
77	(thoracic adj3 vertebrae).mp.	331
78	(thoracic adj3 spine).mp.	355
79	cervical spine.mp.	1163
80	or/73-79	5755
81	Intervertebral Disk/	327
82	(disc or discs).mp.	1209
83	(disk or disks).mp.	985
84	or/81-83	1693
85	80 and 84	225
86	herniat*.mp.	390
87	slipped.mp.	27
88	prolapse*.mp.	122
89	displace*.mp.	2548
90	degenerat*.mp.	1676
91	(bulge or bulged or bulging).mp.	63
92	or/86-91	4467
93	85 and 92	141
94	intervertebral disk degeneration/ or intervertebral disk displacement/	342
95	intervertebral disk displacement.mp.	376
96	intervertebral disc displacement.mp.	1
97	intervertebral disk degeneration.mp.	29
98	intervertebral disc degeneration.mp.	22
99	intervertebral disk hernia/	0
100	or/94-99	414
101	80 and 100	54
102	19 or 52 or 72 or 93 or 101	4732
103	cupping.mp.	173
104	ventouse.tw.	2
105	exp Bloodletting/	43

106	exp Cupping/	101
107	bloodletting.mp.	69
108	blood letting.mp.	30
109	bloodletting.mp.	69
110	spilled blood.mp.	0
111	venesection.mp.	0
112	or/103-111	235
113	102 and 112	19

Cochrane Library		Date: 2018.01.09
Searches	Results	
1	[mh ^"Neck pain"]	845
2	[mh "Brachial Plexus Neuropathies"]	53
3	cervical pain:ti,ab,kw	3071
4	neckache:ti,ab,kw	1
5	cervicodynia:ti,ab,kw	1
6	cervicalgia:ti,ab,kw	11
7	brachialgia:ti,ab,kw	12
8	brachial neuritis:ti,ab,kw	28
9	brachial neuralgia:ti,ab,kw	17
10	neck pain:ti,ab,kw	4667
11	neck injur*:ti,ab,kw	1417
12	brachial plexus neuropath*:ti,ab,kw	75
13	brachial plexus neuritis:ti,ab,kw	28
14	[mh ^"thoracic outlet syndrome"]	18
15	[mh ^"cervical rib syndrome"]	1
16	[mh ^Torticollis]	98
17	[mh "brachial plexus neuropathies"]	53
18	[mh "brachial plexus neuritis"]	25
19	cervico brachial neuralgia:ti,ab,kw	5
20	cervicobrachial neuralgia:ti,ab,kw	115

21	monoradicul* or monoradickl*;ti,ab,kw	26
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	7525
23	[mh ^neck]	486
24	[mh ^"neck muscles"]	216
25	[mh "cervical plexus"]	111
26	[mh "cervical vertebrae"]	994
27	[mh ^"atlanto-axial joint"]	23
28	[mh ^"atlanto-occipital joint"]	8
29	[mh ^"Cervical Atlas"]	4
30	[mh ^"spinal nerve roots"]	150
31	[mh "brachial plexus"]	949
32	odontoid* or cervical or occip* or atlant*:ti,ab,kw	16822
33	[mh ^"odontoid process"]	11
34	[mh ^"Thoracic Vertebrae"]	469
35	cervical vertebrae:ti,ab,kw	1086
36	cervical plexus:ti,ab,kw	217
37	cervical spine:ti,ab,kw	1609
38	neck muscles:ti,ab,kw	704
39	brachial plexus:ti,ab,kw	1237
40	thoracic vertebrae:ti,ab,kw	584
41	neck:ti,ab,kw	15234
42	thoracic spine:ti,ab,kw	741
43	thoracic outlet:ti,ab,kw	41
44	trapezius:ti,ab,kw	530
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	33047
46	[mh pain]	39333
47	[mh injuries]	19901
48	pain:ti,ab,kw	107702
49	ache:ti,ab,kw	298
50	sore:ti,ab,kw	2106
51	stiff:ti,ab,kw	296

52	discomfort:ti,ab,kw	9125
53	injur*:ti,ab,kw	39318
54	neuropath*:ti,ab,kw	8396
55	#46 or #47 or #48 or #49 or #50 or #51 or #52 or #53 or #54	161760
56	#45 and #55	10128
57	[mh ^Radiculopathy]	293
58	[mh "temporomandibular joint disorders"]	614
59	[mh "temporomandibular joint dysfunction syndrome"]	179
60	[mh "myofascial pain syndromes"]	451
61	[mh "Sprains and Strains"]	999
62	[mh "Spinal Osteophytosis"]	91
63	[mh Neuritis]	70
64	[mh ^polyradiculopathy]	13
65	[mh arthritis]	10946
66	[mh ^Fibromyalgia]	842
67	[mh ^spondylitis]	20
68	[mh ^discitis]	9
69	[mh ^spondylosis]	126
70	[mh ^spondylolysis]	11
71	[mh ^spondylolisthesis]	155
72	radiculopathy:ti,ab,kw	725
73	radiculitis:ti,ab,kw	38
74	temporomandibular:ti,ab,kw	1111
75	myofascial pain syndrome*:ti,ab,kw	569
76	thoracic outlet syndrome*:ti,ab,kw	35
77	spinal osteophytosis:ti,ab,kw	95
78	neuritis:ti,ab,kw	550
79	spondylosis:ti,ab,kw	411
80	spondylitis:ti,ab,kw	1395
81	spondylolisthesis:ti,ab,kw	460
82	#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	17164

83	#45 and #82	1519
84	[mh neck]	486
85	[mh "cervical vertebrae"]	994
86	[mh ^"thoracic vertebrae"]	469
87	neck:ti,ab,kw	15234
88	thoracic vertebrae:ti,ab,kw	584
89	thoracic spine:ti,ab,kw	741
90	cervical spine:ti,ab,kw	1609
91	#84 or #85 or #86 or #87 or #88 or #89 or #90	14188
92	[mh ^"Intervertebral Disk"]	271
93	disc\$:ti,ab,kw	3867
94	#92 or #93	3867
95	#91 and #94	541
96	herniat*:ti,ab,kw	1225
97	slipped:ti,ab,kw	49
98	prolapse*:ti,ab,kw	1996
99	displace*:ti,ab,kw	4124
100	degenerat*:ti,ab,kw	5989
101	bulge or bulged or bulging:ti,ab,kw	279
102	#96 or #97 or #98 or #99 or #100 or #101	12784
103	#95 and #102	372
104	[mh ^"intervertebral disk degeneration"]	205
105	[mh ^"intervertebral disk displacement"]	746
106	intervertebral disk displacement:ti,ab,kw	247
107	intervertebral disc displacement:ti,ab,kw	812
108	intervertebral disk degeneration:ti,ab,kw	238
109	intervertebral disc degeneration:ti,ab,kw	416
110	intervertebral disk hernia	419
111	#104 or #105 or #106 or #107 or #108 or #109 or #110	1529
112	#91 and #111	277
113	#112 or #103 or #83 or #56 or #22	11540
114	cupping:ti,ab,kw	340
115	ventouse:ti,ab,kw	56

116	MeSH descriptor: [Bloodletting] explode all trees	100
117	bloodletting:ti,ab,kw	159
118	blood letting:ti,ab,kw	77
119	blood-letting:ti,ab,kw	72
120	spilled blood:ti,ab,kw	6
121	venesection:ti,ab,kw	60
122	#114 or #115 or #116 or #117 or #118 or #119 or #120 or #121	596
123	#113 and #122	43

CHINA Academic Journals Full-text Database

(SU='颈痛' OR SU='颈肩痛' OR SU='颈椎病' OR SU='颈肩部' OR SU='颈椎间盘突出症' OR SU='颈部' OR SU='神经根型颈椎病') AND (SU='罐' OR SU='cupping') AND (SU='随机' or SU='对照') 193

颈痛 : neck pain in Chinese / 颈肩痛 : neck pain in Chinese / 颈椎病 : cervical spondylosis in Chinese / 颈肩部 : neck in Chinese / 颈椎间盘突出症 : cervical disc herniation in Chinese / 颈部 : neck in Chinese / 神经根型颈椎病 : cervical radiculopathy in Chinese / 罐 : cupping in Chinese / 随机 : random in Chinese / 对照 : controlled in Chinese

Korean databases

KoreaMed (Date : 2018.01.11)		
1	경항통 and 부항	0
2	neck pain and cupping	0
3	頸項痛 and 罐	0

KMBASE (Date : 2018.01.11)		
1	경항통 and 부항	0
2	neck pain and cupping	0
3	頸項痛 and 罐	0

OASIS (Date : 2018.01.11)		
1	경항통 and 부항	0
2	neck pain and cupping	0
3	頸項痛 and 罐	0

NDSL (Date : 2018.1.11)		
1	경항통 and 부항	0
2	neck pain and cupping	37
3	頸項痛 and 罐	0

KISS (Date : 2018. 01. 11)		
1	경항통 and 부항	0
2	neck pain and cupping	5
3	頸項痛 and 罐	5

경항통 : neck pain in Korean / 부항 : cupping in Korean / 頸項痛 : neck pain in Chinese / 罐 :

cupping in Chinese

Japan database

J-stage (Date : 2018. 01. 11)		
1	neck pain cupping	15

医学中央雑誌刊行会(Ichushi)(Date : 2018. 01. 11)		
#1	(頸椎症性脊髄症/TH or 頸椎症/AL)	10,553
#2	頸椎椎間板ヘルニア/AL	1077
#3	((@頸椎/TH and @脊椎損傷/TH and @捻挫/TH) or 頸椎捻挫/AL)	327
#4	(頸部痛/TH or 頸部疼痛/AL)	2188
#6	頸肩部痛/AL	64
#7	#1 or #2 or #3 or #4 or #5 or #6	13698
#8	cupping/AL	38
#9	吸角/AL	30
#10	#8 or #9	66
#11	#7 AND #10	1

頸椎症 : cervical spondylosis in Japanese / 頸椎椎間板ヘルニア: cervical disc herniation in Japanese /

頸椎 : cervical vertebrae in Japanese / 脊椎損傷 : vertebral injury in Japanese / 捻挫 : sprain in

Japanese / 頸椎捻挫 : sprain of cervical spine in Japanese / 頸部痛 : neck pain in Japanese / 頸部疼

痛 : neck pain in Japanese / 頸肩部痛 : neck pain in Japanese / 吸角 : cupping in Japanese